



## ICOPA 2018 14TH INTERNATIONAL CONGRESS OF PARASITOLOGY 19<sup>5</sup> 24<sup>FI</sup> AUGUST 2018 EXCO, DAEGU, KOREA www.icopg2018.org





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Health Promotion Programs



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Parasite Museum

## **Program at a Glance**

Time	August 19 (Sun)	August 20 (Mon)		August 21 (Tue)		August 22 (Wed)		August 23 (Thu)		August 24 (Fri)
08:00		Registration		Registration		Registration		Registration		Registration
08:30		PL2 Prof. Alan F. Cowman		PL6 Prof. Marcelo Jacobs-Lorena		PL9 Prof. Carlos Lanusse		PL 11 Prof. Dwight D. Bowman		
09:00		PL 3 Prof. Jong-Yil Chai		PL7 Prof. Keeseon S. Eom		PL 10 Prof. Rebecca J. Traub		PL 12 Prof. Simonetta Mattiucci		Parallal Oral Samian 11
09:30		Opening Ceremony		Break		Break		Break		
10:00		Break								
10:30				Parallal Oral Sossian 4		Parallal Oral Specian 7		Parallal Aral Session 9		Break
11:00		Parallal Oral Samian 2		Parallel Ural Session 4		Parallel Ural Session /		Faldliel Uldi Sessiuli o		PL 15 Prof. Marcel Tanner
11:30		Falallel Olai Session Z								PL 16 Dr. Alan Fenwick
12:00								Lunch		Closing Ceremony
12:30				Lunch		Lunch		Lanon		
13:00		Lunch	-		-		_	PL13 Dr. Xiao-Nong Zhou		
13:30			oster	PL8 Prof. Margaret Gayapong	oster		oster	PL 14 Prof. Banchob Sripa	oster	
14:00	Degistration	PL 4 Prof. Patricia J. Johnson	Viewir	Break	Viewir	Viewing & Ex	Viewin	Break	Viewin	
14:30	negistration	PL5 Prof. Tomoyoshi Nozaki	ig & Ex	g & Exhibition Parallel Oral Session 5	ig & Ex			ig & Ex		
15:00		Break	hibitio		hibitio	Parallel Oral Session 9	hibitio			
15:30			ſ		Prook				5	
16:00	Parallol Oral Sossion 1	Parallol Aral Sossion 3					Break			
16:30				Diedk		Offical Tour				
17:00						Unicariour				
17:30	Break			Parallel Oral Session 6				Parallel Oral Session 10		
18:00	PL1 Prof. Maria Yazdanbakhsh									
18:30										
19:00				Poster Session				Poster Session		
19:30	Welcome Reception									
20:00								Gala Dinner		

<sup>2018</sup> IC **РА** 



# ICOPA 2018 14TH INTERNATIONAL CONGRESS OF PARASITOLOGY 19<sup>SUN</sup> 24<sup>FI</sup> AUGUST 2018 EXCO, DAEGU, KOREA WWW.icopg2018.org

Organizer: ICOPA 2018 Korean Organizing Committee Co-hosts: The Korean Society for Parasitology and Tropical Medicine, World Federation of Parasitologists

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## **Welcome Message**

## **Greetings from Korea!**

#### \_\_\_\_

This is Jong-Yil Chai, President of the 14<sup>th</sup> ICOPA, Professor Emeritus of Seoul National University College of Medicine.

On behalf of the organizing committee of the ICOPA 2018, I'm very happy to invite all of you to EXCO Convention Center Daegu, South Korea.

We, Korean parasitologists, are putting in lots of efforts with a great passion for developing the research field ranging from all related areas. This Congress is expected to serve as a hot debating space for parasitology around the world and to address some crucial issues, coming up with solutions. To this end, we are collaborating with the central and local governments, and related organizations of Korea to make this event substantial.

Daegu is a cultural city located in the south eastern part of South Korea and famous with beautiful environment and kind and nice people. Nearby Daegu is located an ancient city named Gyeongju built 3,000 years ago. You can see and feel atmosphere of the unique Korean culture. We strongly hope the 14<sup>th</sup> ICOPA a most fruitful, wonderful and enjoyable international meeting.

For this, we will try our best. Thank you.

> Jong-Yil Chai President of ICOPA 2018



## **Greetings from Korea!**

On behalf of the Organizing Committee, I am pleased to cordially invite you to Daegu, the venue for the 14<sup>th</sup> International Congress of Parasitology in 2018.

The congress is expected to attract delegates all over the world to exchange latest scientific knowledge on parasitology and related sciences, and will provide exciting opportunities for sponsors and exhibitors to network, display their products and services and communication opportunities.

Parasitology is not a science that belongs to the past, but is being developed by new concepts and technologies that are more interesting and beneficial to humankind. Parasitology is made up of a variety of disciplines. During the 14<sup>th</sup> International Congress of Parasitology, there will not be even a second to feel boredom. Under the main theme "Parasite: Harms & Benefits to Animals and Humans", the congress is filled with 22 sub themes, which will fulfill participant's needs and expectations. The congress will consist of various scientific programs, such as plenary sessions, symposium, oral / poster presentations and workshops. As for social programs, for example, official tour programs are supported for delegate's interest.

Korea is a unique country in East Asia with beautiful nature, long history and culture. Recently, the Korean Wave has received worldwide attention. I would like to invite you to visit Korea and share your academic achievements and enjoyable cultural experiences together.

I very much look forward to seeing you in Daegu. Thank you.

> Tai-Soon Yong Chair of Organizing Committee



## Welcome to the 14<sup>th</sup> International Congress of Parasitology in Daegu.

Dear parasitologists, dear colleagues from medicine, veterinary medicine and sciences with an interest in parasites, dear students.

I cannot say how much I look forward to meeting you all in Daegu for our next ICOPA. ICOPA is one of the highlights in parasitology where we meet friends and colleagues, forge new friendships and collaborations, and get inspired to continue our research and practice in parasitology. It is so much more than being updated scientifically. Last year I was invited to Daegu by the Local Organising Committee, where I met with the local government and visited the congress centre and some of the cultural heritage sites in the area. There is a strong support of the ICOPA in the society and the congress facilities and surroundings are perfect. More importantly, the LOC has formed a local programme committee and teamed up with a strong international scientific board in order to give us an excellent programme. What we need now to make the congress a success is your participation, your presentations, and your support to inspire colleagues and students to join.

Let us all meet in Daegu 19-24 August 2018 – and my advice: Set aside a few extra days to enjoy the fascinating country.

Jørgen Kurtzhals President of World Federation of Parasitologists



#### Dear participants, ladies and gentlemen.

I am Park Neunghoo, Minister of Health and Welfare.

I extend my sincere congratulations on the hosting of the 14<sup>th</sup> International Congress of Parasitology in South Korea.

I would like to thank The Korean Society for Parasitology and Tropical Medicine for sparing no effort to successfully host the International Congress of Parasitology in Korea.

I also express my gratitude to the Korea Association of Health Promotion for its continuous efforts in promoting public health and preventing parasitic diseases since the 1960s.

Dear participants, only 50 years ago, parasite infection rates in South Korea reached nearly 80%. However, parasites are almost eradicated in the country thanks to policies by relevant ministries, such as the health and education ministries, along with efforts and cooperation from the Korea Association of Health Promotion and the private sector.

However, there are still countries and regions in the world that suffer from parasitic diseases. In particular, diseases like malaria and schistosomiasis, which cause major headaches for the global health community, can also impact other countries at any time and therefore need common responses across countries. We should pay more attention to the fight against parasitic diseases, preventive care, and investment in research.

In recent years, the WHO has emphasized One Health principles to improve public health by promoting various cooperation on regional, national, and international levels.

The Korean government is also aware of the need for a comprehensive approach to different health risks including parasites in an effort to improve public safety and health. As a member of the Asia Pacific Malaria Elimination Network (APMEN), we are actively engaging in efforts to eradicate malaria in the world. We also plan an international cooperation project with Southeast Asian countries, including Cambodia and Vietnam, to fight against drug-resistant malaria and *Clonorchis sinensis*.

This congress is the largest of its kind, where some 2,000 people from 60 countries and 100 academic societies will have diverse discussions about 17 topics and 120 sessions. I hope that this will be a productive and fruitful occasion where experts exchange research results and discuss future directions for the eradication and prevention of parasitic diseases.

Once again, I offer my gratitude to the organizers who exerted tremendous efforts for this congress as well as to many experts who came from afar to join this event.

I hope that you will spend a meaningful time here in Daegu and South Korea and take good memories with you. Thank you.

Neunghoo Park Minister of Health and Welfare

- ICOPA 2018

## **Congress Overview**

The congress provides a unique opportunity for knowledge sharing and networking opportunities for companies and individuals working in Asia and globally.

## **General Information of ICOPA 2018**

Name	14 <sup>th</sup> International Congress of Parasitology
Date	19 (Sun) - 24 (Fri) August, 2018 / 6 days
Venue	EXCO, Daegu, Korea
Organizer	ICOPA 2018 Organizing Committee
Co-hosts	The Korean Society for Parasitology and Tropical Medicine (KSPTM) World Federation of Parasitologists (WFP)
Theme	Parasites : Harms and Benefits to Animals and Humans

### International Congress of Parasitology (ICOPA)

The International congress of parasitology is held every four years in different locations. Any member society of the World Federation of Parasitologists may make an application to hold the next meeting in its own country. Submissions should be made in writing to the secretary of the executive board of the WFP, well in advance of the next meeting of ICOPA. During each congress the board of the WFP will consider the applications, and the council will decide where the next ICOPA will be held (see Constitution). The application may be prepared by a congress centre or by a professional congress organizer, but must be supported by a member society of the WFP.

It has taken place in the following locations:

ICOPA 2014	Mexico City, Mexico
ICOPA 2010	Melbourne, Australia
ICOPA 2006	Glasgow, UK
ICOPA 2002	Vancouver, Canada
ICOPA 1998	Chiba, Japan
ICOPA 1994	Izmir, Turkey
ICOPA 1990	Paris, France

ICOPA 1986Brisbane, AustraliaICOPA 1982Toronto, CanadaICOPA 1978Warsaw, PolandICOPA 1974Manich, GermanyICOPA 1970Washington DC, USAICOPA 1964Rome, Italy



## Korean Society for Parasitology and Tropical Medicine (KSPTM)

#### What is the Korean Society for Parasitology and Tropical Medicine?

The Korean Society for Parasitology and Tropical Medicine (KSPTM) was founded in 1959 at the faculty meeting room of Seoul National University College of Medicine, and became a member of the World Federation of Parasitologists (WFP) in 1974. It started with only 59 members in 1959, which now has about 400 members including the members from foreign countries, and it is expanding the circle to become a world-wide society. The society pursues the improvement of knowledge on parasites and parasitic diseases, publication activities, consultation on parasitic diseases, fostering close relationship among the society members, and exchange of scientific discovery with international scientist. The website of KSPTM is http://parasitol.or.kr/.

The KSPTM has been publishing "The Korean Journal of Parasitology" (KJP) since 1963 (Vo1. 56 in 2018) and the development of the KJP during the last 10 years has been most remarkable. Today, it is an international journal published every 2 months (6 times a year). Articles published in KJP are indexed by SCI, PubMed, Medline, SCOPUS, Google Scholar, CABI, EMBASE, and many other indexing services. About a half of the published articles in KJP are authored by international researchers. Members of the society meet biannually for the exchange of the findings, ideas, and information from their scientific works.

The society welcomes any person who has interests on parasites and parasitic diseases not only from Korea, but also from all over the world.

#### What does the Korean Society for Parasitology and Tropical Medicine do?

Members of the KSPTM (about 400 members which include professors, researchers, graduate students, etc.) are currently conducting research projects related to parasites in the views of molecular biology, genetics, phylogeny, immunology, epidemiology, host-parasite relationship, and paleoparasitology. Some of them are prominent researchers in the fields of food-borne trematodes and cestodes, amoebae, toxoplasmosis, cryptosporidiosis, malaria, and zoonotic helminth infections. Significant progress has been made by Korean parasitologists in aspects of epidemiology of malaria, ascariasis, enterobiasis, and lympharic filariasis, host-parasite relationships of liver, lung, and intestinal fluke infections, and chemotherapy of trematode and cestode infections.

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# World Federation of Parasitologists (WFP)

## What is the World Federation of Parasitologists?

The World Federation of Parasitologists (WFP) exists to unite those engaged in the study of parasites and to present forums for international exchange of information and ideas. We bring together the National Societies of Parasitology worldwide and provide contacts and insights to benefit students, research scientists, national and international agencies, health control specialists and others keen to learn about parasitology and its importance globally.

## What does the World Federation of Parasitologists do?

The WFP promotes the study of parasitology globally and provides a forum for international exchange by sponsoring of The International Congress of Parasitology (ICOPA) meeting every four years. The next Congress, ICOPA XIV, will be held in Korea in 2018 and will provide a valuable opportunity to bring together the world's parasitology experts to learn, network and develop ideas that will assist in understanding parasites of the world.

## Local Organizing Committee

Han-Jong Rim Honorary President, The Korean Society for Parasitolgy and Tropical Medicine, Korea Jong-Yil Chai President of Congress, Seoul National University College of Medicine, Korea Keeseon S Eom Vice-president of Congress, Chungbuk National University School, Korea Tai-Soon Yong Chair of Local Organizing Committee, Yonsei University College of Medicine, Korea Young-Ha Lee Secretary General, Chungnam National University School of Medicine, Korea Myeong Heon Shin Chair of Financial Committee, Yonsei University College of Medicine, Korea Min-Ho Choi Chair of Scientific Committee, Seoul National University College of Medicine, Korea Sung-Shik Shin Chair of Publicity, Chonnam National University College of Veterinary Medicine, Korea Hyun-Hee Kong Chair of Publication Committee, Dong-A University College of Medicine, Korea Hyun Park Chair of Planning Committee, Wonkwang University School of Medicine, Korea Sun Huh Chair of Information Committee, Hallym University College of Medicine, Korea Eun-Hee Shin Director General of Association on Domestic Cooperation Affairs, Seoul National University College of Medicine, Korea Young-An Bae Director General of Association on Domestic Cooperation Affairs, Gachon University College of Medicine, Korea

## **Scientific Program Committee**

Eun-Taek Han	Kangwon National University School of Medicine, Korea
Hyun Beom Song	Seoul National University College of Medicine, Korea
Yeonchul Hong	Kyungpook National University School of Medicine, Korea
Hak Sun Yu	Pusan National University School of Medicine, Korea
Guang-Ho Cha	Chungnam National University School of Medicine, Korea
Hyeong-Kyu Jeon	Chungbuk National University College of Medicine, Korea
Hye-Sook Kim	Okayama University, Japan
Fu Shi Quan	KyungHee University School of Medicine, Korea
Dong-Mi Kwak	Kyungpook National University College of Veterinary Medicine, Korea
Karl Reinhard	University of Nebraska-Lincoln, USA
Russell Stothard	Liverpool School of Tropical Medicine, UK
Pascal Boireau	ANSES-Head of Animal health, DIM1HEALTH coordinator, France

## **International Advisory Board**

Ana Flisser	National Autonomous University of Mexico, Mexico
Antonio Osuna	University of Granada, Spain
Banchob Sripa	Khon Kaen University, Thailand
Dante S. Zarlenga	Animal Parasitic Diseases Lab, USDA, USA
David Rollinson	The Natural History Museum of London, UK
Felipe Guhl Nannetti	Universidad de los Andes, Colombia
Jeurg Utzinger	Swiss Tropical and Public Health Institute, Switzerland
Jean Dupouy-Camet	Hopital Cochin-Universite Paris Decartes, France
Jørgen Kurtzhals	President of World Federation of Parasitologists, Denmark
K. Darwin Murrell	University of Copenhagen, Denmark
M. Guadalupe Ortega-Pierres	Cinvestav, Mexico
Malcolm Jones	University of Queensland, Australia
MB Rokni	Teheran University of Medical Sciences, Iran
Nadira D. Karunaweera	University of Colombo, Sri Lanka
Philip LoVerde	San Antonio University of Texas Health Science Center, USA
Pierre Dorny	Institute of Tropical Medicine, Belgium
Santiago Mas-Coma	University of Valencia, Spain
Shigeyuki Kano	National Center for Global Health and Medicine, Japan
Veena Tandon	North-Eastern Hill University, India
Xiao-Nong Zhou	National Institute of Parasitic Diseases, China
Xing-Quan Zhu	Chinese Academy of Agricultural Sciences, China
Zhongdao Wu	Sun Yat-Sen University, China

## **Honorary Committee**

Dong Chan Kim	The Korean Society for Parasitology and Tropical Medicine (Honorary Member)
Duk Young Min	Eulji University College of Medicine (Chair Professor)
Hong Ki Min	Ewha Womens University College of Medicine (Honorary Professor)
Dae Whan Shin	Chungnam National University College of Medicine (Honorary Professor)
Yong-Suk Ryang	Yonsei University, Department of Clinical Pathology at the University of Health and Science (Honorary Professor)
Soon Hyung Lee	Inje University and Paik Hospitals (Chairman Board of Trustees)
Jae Ku Rhee	Chonbuk National University College of Veterinary Medicine (Honorary Professor)
Jun Sang Lee	Korea University College of Medicine (Honorary Professor)
Han-II Ree	Yonsei University College of Medicine, Department of Environmental Medical Biology (Honorary Professor)
Kyung-II Im	Yonsei University College of Medicine (Honorary Professor)
Pyung-Rim Chung	Former Inha University School of Medicine (Honorary Professor)
Seung-Yull Cho	National Academy of Medicine of Korea
You Jung Cho	KyungHee University College of Medicine (Honorary Professor)
Chong Yoon Joo	Keimyung University College of Medicine (Honorary Professor)
Jong Phil Chu	KyungHee University College of Medicine (Honorary Professor)
Won Young Choi	The Catholic of Korea College of Medicine (Honorary Professor)
Kyoung-Hwan Joo	Korea University College of Medicine (Honorary Professor)
Myoung-Hee Ahn	Hanyang University College of Medicine (Honorary Professor)
Isao Tada	Kyushu University, Japan (Honorary Professor)
Yoshiki Aoki	Nagasaki University, Japan (Honorary Professor)

## **Financial Committee**

Myeong Heon Shin	Chair of Financial Committee, Yonsei University College of Medicine
Seo-Bo Sim	Konkuk University Department of Medicine
Yun Kyu Park	Inha University School of Medicine

## **Publicity Committee**

Sung-Shik Shin	Chair of Publicity, Chonnam National University College of Veterinary Medicine
Hye-Sook Kim	Okayama University
Gab-Man Park	Catholic Kwandong University College of Medicine
Hyoung-Pyo Kim	Yonsei University College of Medicine
Byoung-Kuk Na	Gyeongsang National University Graduate School of Medicine
Eun-Hee Shin	Seoul National University College of Medicine
Hyun-Jong Yang	Ewha Womans University School of Medicine

## **Publication Committee**

Hyun-Hee Kong	Chair of Publication Committee, Dong-A University College of Medicine
Ho-Joon Shin	Ajou University School of Medicine
Young-Mee Bae	Seoul National University College of Medicine
Soon-Jung Park	Yonsei University College of Medicine
Young-An Bae	Gachon University College of Medicine

## **Planning Committee**

Hyun Park	Chair of Planning Committee, Wonkwang University School of Medicine
Min Seo	Dankook University College of Medicine
Seok-Ryul Jeong	Namseoul University Biomedical Laboratory Science
Hee-Jae Cha	Kosin University College of Medicine

## **Information Committee**

Sun Huh Jong-Hyun Kim Weon-Gyu Kho

Chair of Information Committee, Hallym University College of Medicine Gyeongsang National University College of Veterinary Medicine Inje University College of Medicine

## **Advisory Committee**

Sung-Tae Hong	Seoul National University College of Medicine
Sung-Jong Hong	Chungang College of Medicine
Myoung-Hee Ahn	Hanyang University College of Medical School
Woon-Mok Sohn	Gyeongsang National University Graduate School of Medicine
Jae-Sook Ryu	Hanyang University College of Medical School
Mee Sun Ock	Kosin University College of Medicine
Hee Jeong Youn	Seoul National University College of Veterinary Medicine

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## Registration

Before attending the sessions participants have to register in person at the registration desk (at Lobby, 3F) to collect a congress bag and their name badge. The badge needs to be worn in order to admit to all sessions and social events.

#### **Registration desk**

\* Location | Lobby, 3F, EXCO \* Operating hours

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
(Sunday)	(Monday)	(Tuesday)	(Wednesday)	(Thursday)	(Friday)
13:30 - 20:00	08:00-17:30	08:00 - 19:30	08:00-12:00	08:00 - 19:30	08:00 - 12:00

## **Social Program**

## Welcome Reception

\* Date & Time | Sunday (Aug. 19), 19:00 - 21:00\* Venue | Grand Ballroom, 3F, EXCO

#### **Opening Ceremony**

 \* Date & Time
 Monday (Aug. 20), 09:30 - 10:00

 \* Venue
 Auditorium, 5F, EXCO

#### Gala Dinner

\* Date & Time | Thursday (Aug. 23), 19:30 - 21:00
\* Venue | Convention Hall, 2F, Hotel Inter-Burgo Daegu
\* Cost | USD 75
\* Shuttle buses bounce to Gala Dinner venue departs at 19:00.

#### **Closing Ceremony**

\* Date & Time | Friday (Aug. 24), 12:00 - 12:30 \* Venue | Room 325, 3F, EXCO

## Lunch

Registration fees do not cover lunch. If you need the restaurant information around the venue, please check out mobile application at general information pages and "useful information" on this program book.

#### Lunch boxes

The organizing committee provides lunch box for sale at the limited quantity to delegates. You may purchase both special dietary and general type at the exhibition area, 3F during the lunch time periods. Price USD 10 (KRW 12,000)

## **Wireless Lan**

You can access the wireless internet with the network name (EXCO\_Free). Please note that you will be asked to re-log in every hour.

## **Photography Policy**

Taking photos or videos of presentations during the congress is strictly prohibited. Photographs will be taken throughout ICOPA 2018 by official photographers and may be used during and after the congress. By the virtue of your attendance, you agree to release your photographs taken at the congress.

## **Volunteer Services**

Please do not hesitate to ask any questions to our staff members. You can find them wearing staff name tags and blue shirts with a printed ICOPA 2018 emblem on the backside.

## Daegu

Daegu Metropolitan City is located in the middle of South Korea. With the fine transportation network linked in all directions, it is a point leading to numerous cultural heritages and tourist attractions to well display Korean culture. So, it has been the center of history, administration, education, and culture of Korea.

## Venue

EXCO, the official congress venue for ICOPA 2018, launched as the first regional exhibition and convention center in April 2001, has hosted various exhibitions and convention events.

\* Address | 90, Yutongdanji-ro, Buk-gu, Daegu 41515, Korea \* Tel | +82-53-601-5037, 5071

## Accommodation

#### Hotel Inter-Burgo DAEGU

### Eldis Regent Hotel

\* Address | 57-19, Manchon-dong, Suseong-gu, Daegu
\* Tel | +82-53-602-7173
\* Distance from the venue | 7.17 km (17 min. by car)

#### Hotel Inter-Burgo EXCO

\* Address | B2 611, Gukchaebosang-ro, Jung-gu, Daegu \* Tel | +82-53-380-0114 \* Distance from the venue | 395 m (2 min. on foot)

#### **Novotel Ambassador Daegu**

\* Address | 1674, Sangyeok 2-Dong, Buk-gu, Daegu
\* Tel | +82-53-664-1101
\* Distance from the venue | 5.5 km (20 min. by car)

#### **The Grand Hotel**

\* Address | 305, Dongdaegu-ro, Suseong-gu, Daegu
\* Tel | +82-53-742-0001
\* Distance from the venue | 8.86 km (20 min. by car)

\* Address | 2033, Dalgubeol-daero, Jung-gu, Daegu
\* Tel | +82-53-253-7711
\* Distance from the venue | 8.8 km (20 min. by car)

## Queen Vell Hotel

\* Address | 200 Dongchon-ro, Dong-gu, Daegu \* Tel | +82-53-282-1000 \* Distance from the venue | 8.43 km (20 min. by car)

#### **Union Tourist Hotel Daegu**

 \* Address | 117 Taepyeong-ro, Taepyeongno 2-ga, Jung-gu, Daegu
 \* Tel | +82-53-252-2221
 \* Distance from the venue | 5.8 km (17 min. by car)

## **Shuttle Bus Service**

Shuttle bus service between the hotels listed and the congress venue available during the ICOPA 2018 periods. Please check out congress website and mobile application for detailed schedule.

## Time

Korea standard time is nine hours ahead of Greenwich Mean Time (GMT+9).

## Climate

Daegu, situated in a temperate zone, has four distinct seasons. The daily average temperature range in August is from  $25^{\circ}$ C to  $36^{\circ}$ C.

## Electricity

Korea uses a 220-volt AC, 60 Hz electrical current.

## Currency

The unit of Korean currency is won (₩). \* Coins | ₩10, ₩50, ₩100, and ₩500 \* Bills | ₩1,000, ₩5,000, ₩10,000 and ₩50,000

## **Emergency Call**

**112** Police **119** Rescue & Hospital Services / Emergencies for Fire

## Tip & Tax

Tipping is not a regular practice in Korea. Service charges are included in your bill for rooms, meals, and other services at hotels and upscale restaurants. Koreans occasionally do tip when they are especially pleased with the service they receive.

Value-added tax (VAT) is levied on most goods and services at a standard rate of 10% and is included in the retail price. In tourist hotels, this 10% tax applies to rooms, meals, and other services, and is included in the bill.

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## Local Transportation

- The fare is calculated from both the distance traveled and the time takes. Fares increase \* Taxi 20% between midnight and 4 AM. Fares start from KRW 2,800. Tips are not required.
- \* Subway | Daegu has 3 lines of metro; line 1 (red), line 2 (green) and line 3 (yellow). The first train of the day starts at 5:30 AM from the departure station, and the last one at around 11:00 PM.

Restaurant Information (For more information, check out mobile app.)

#### **Restaurants inside EXCO**



Korean Food Court



Hotdogs and Drinks

#### **Restaurants inside Hotel Inter-Burgo EXCO**



All-day Dining Restaurant



Korean Traditional Cuisine («Recommended for Vegetarians)



Chinese Cuisine

#### **Restaurants near EXCO**



Korean Style Napa Wraps with Pork

Buyong

Chinese Cuisine

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## **Official Tour Program**

Here's a chance to explore Korea's heritage in Daegu. In recent years, Korea's balance of old traditions and contemporary culture has made it a popular destination with visitors around the world. Daegu in particular has a special place in Korean history. The city's current name dates back to the 8<sup>th</sup> century, and it has been a prominent center for Buddhism and Confucianism through several different dynasties. Highlights of its heritage include UNESCO World Heritage sites and must-see attractions like the oriental medicine market that has been trading internationally for over 350 years.

Korea, the venue of ICOPA 2018 has a lot of valuable culture and sightseeing. Participants will join various tour programs to exchange culture. You can see all details about tour program below.

Date & Time	Wednesday, August 22 (13:30-21:00)				
Notice	- Check out tour program ticket on the name badges and you are required to keep this coupon for attending tour.				
	- On-site application on official tour program is not allowed.				
	<ul> <li>You may apply for daily tour program at the tour desk which will be placed at the exhibition area.</li> </ul>				
	- Please note that the courses are subject to change due to the weather conditions.				



Daegu Colorful City Tour - Pathway from Past to Present Times



Samsung Creative Campus Tour I Hyangchon Cultural Center Daegu Modern Historical Alleyway Oriental Medicine Museum Seomun Night Market



Daegu Colorful City Tour - All about Daegu's Nature & Tradition (CANCELED)



Daegu Colorful City Tour - Introduction of Traditional Places & Technology



DTC, Daegu Textile Complex Bangjja Brassware Museum : Traditional Korean Hand-forged Bronzeware Donghwasa Temple



Daegu Colorful City Tour - Discover Various Shopping



Daegu Modern Historical Alleyway → Oriental Medicine Museum → Dongsungro Street shopping → E-World Daegu Tower

## Andong Traditional Folk Village Tour



Andong Hahoe Folk Village Tour "Village Enveloped by Water" > Hahoe Mask Museum > Andong Folk Museum & Wolyeonggyo Tour



#### Gyeongju Historical Tour



Bulguksa Temple Tour I Gyeongju National Museum I Cheonmachong Ancient Tomb I Donggung and Wolji



Cheongsong Global Geopark Tour



Songso House → Juwang Mountain / Daejeon Temple → Hanok Folk Arts Village (Flower Stone Museum / Cheongsong White Porcelain Exhibition hall)



Daegaya Museum → Theme Park of the Tripitaka Koreana Tour → Haeinsa Temple Cultural Tour

# UNESCO designated World Heritage Sites and Geo Park are located near Daegu.

- Andong Hahoe Folk Village
- Gyeongju Seokkuram and Bulguksa
- Cheongsong UNESCO Geo Park

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T2 Cheongsong T4 T4 T1 T5 Daegu Hapcheon

## **Scientific Information**

## Access to abstracts (Proceedings)

Abstracts are available on the mobile application.



## **Guideline for Session Presenters**

## **Oral Presentation**

- Official language is English; no other languages will be allowed.
- The length of presentation time for each presenter is different according to the session (15-40 min.). Each presentation time includes Q&A.
- Presentation with computer
  - The presentation materials should be in Microsoft PowerPoint or Portal Document Format (PDF) file type to avoid technical problems.
  - In case of using a personal Apple computer, be sure to bring a VGA adaptor and test it before the session starts during the break time at the meeting room. Technical staff will assist you.
- O Submission of your presentation materials
  - You should arrive at Preview room (Room 334) and submit the presentation materials at least 2 hours prior to your session begins.
  - If you are going to use your own laptop, please inform to the staff.

## **Poster Presentation**

• The official language is English, no other languages will be allowed for the presentation.

2 Each poster should include the title (preferably at the top), as well as the names and affiliations of the authors.

O Posters must not exceed the following dimensions (AO Size) : 841 mm (width) × 1189 mm (height)

Oster Session Schedule

Poster Session	<b>Presentation Time</b>	Mounting	Dismounting
Poster Session 1	August 21 (Tue), 18:45 ~19:45	August 20	August 23
Poster Session 2	August 23 (Thu), 18:45 ~19:45	08:00~08:30	20:00~20:30

\*\* Presenters should be present at their poster area for discussion on your research at the designated presentation time.
\*\* Please note that all posters that have not been removed by noticed dismounting time on each day will be automatically taken down and discarded.



## **Poster Presentation Award**

Best poster presentation winners will be selected by participants using the congress app. voting system. The award winners will be announced and awarded during the closing ceremony scheduled on Friday, Aug. 24. - Voting periods | Monday (Aug. 20) ~ Thursday (Aug. 23)

> **ICOPA 2018** 29

# Scientific Program

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» Plenary Speakers» Oral Sessions» Poster Sessions» Satellite Meetings

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# Plenary Speakers





## **Sunday** (Aug. 19)

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PI 1		Plenary Se	ession 1
	18:00~18:30	Room Auditorium	Session Chair   Hajime Hisaeda



Prof. **Maria Yazdanbakhsh** Leiden University Medical Center, the Netherlands

Professor Maria Yazdanbakhsh heads Parasitology at Leiden University Medical Center, in the Netherlands, where medical specialists, (inter)national medically qualified PhD students and scientists work together in a setting with a strong scientific track to 1) develop of effective vaccines against neglected and poverty-related parasitic diseases and 2) identify parasite-derived immune modulatory molecules to control hyperinflammatory diseases. She is involved in the assessment of vaccines that are developed to combat malaria, schistosomiasis and hookworm infections. At the same time, she has a long track record in the area of immune modulatory molecules that parasites use to evade the host immune system, which have the potential to cure inflammatory diseases.

As an immunologist Maria Yazdanbakhsh is interested in how the immune system is influenced by parasites and her research is characterized by the interplay between laboratory studies at the LUMC and field studies with collaborative centers in Indonesia, Gabon and Ghana. As part of her activities in developing countries, she puts much emphasis on capacity building. This is largely through training clinicians and scientists to perform biomedical research at a high standard. As part of this, fifteen students from Indonesia, Gabon and Ghana have already obtained their PhD degrees under supervision of Maria Yazdanbakhsh. She holds honorary professorships at two universities in Indonesia (University of Indonesia and University of Hasanuddin).

In terms of professional activities beyond research and teaching, Maria Yazdanbakhsh is the president of Dutch Society for Parasitology and she is on executive committee of European Journal of Immunology as well as editorial boards of Parasite Immunology, PLOS Neglected Tropical Diseases and Journal of Infectious Diseases. She is a member of the following scientific boards: 1) LUMC scientific advisory board, 2) advisory committee of Zon-Mw TOP grants, and 3) the board of NWO-WOTRO for global development.

Abstract

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## "The good or the bad?" What helminths are teaching us

Maria Yazdanbakhsh

Department of Parasitology, Leiden University Medical Center, Leiden, the Netherlands

Parasitic helminths exert strong influences on the immune system. Strong type 2 immune responses as well as regulatory cells are induced upon helminth infections as shown by comparing infected with uninfected individuals as well as by randomised trials that show removal or reduction in helminth infections leads to a decrease in these responses. The consequences of such modulated immune system in areas where these infections are prevalent can be twofold. One is the beneficial effect that helminth infections seem to have on diseases such as allergies and type 2 diabetes and the other is their possible detrimental effect on responses to vaccines in areas where they are very much needed. Currently models of controlled human infections with some helminths are providing opportunities to understand the mechanisms behind their beneficial and detrimental effects.

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PI 2		Plenary Se	ession 2	
	08:30~09:00	Room Auditorium	Session Chair   Jorgen A. Kurtzhals	



Prof. Alan F. Cowman Walter and Eliza Hall Institute of Medical Research, Australia

Professor Alan Cowman FAA FRS is Deputy Director of Science Strategy at the Walter and Eliza Hall Institute of Medical Research and Head of the Division of Infection and Immunity. He is a visiting Professor at the Harvard T. H. Chan School of Public Health, Harvard University and held that position since 2006.

He did his undergraduate and honours degrees in science at Griffith University in Queensland, Australia. He then moved to the Walter and Fliza Hall Institute of Medical Research in Melbourne where he obtained his PhD in the laboratory of Professor David Kemp through the University of Melbourne. He was awarded a C. J. Martin Fellowship from the National Health and Medical Research Council for postdoctoral work at the University of California – Berkeley in the laboratory of Dr Gerry Rubin studying Drosophila eye function and development. He then returned to Australia and took up a position at the Walter and Eliza Hall Institute of Medical Research and has developed a laboratory that studies malaria. Currently, he has a Senior Principal Research Fellowship from the NHMRC and held an Australia Fellowship from 2007-2012.

He was elected as a Fellow of the Royal Society in 2011 and the Australian Academy of Sciences in 2001. He has received a number of awards including the Glaxo Award for Advanced Research in Infectious Diseases, Gottschalk Medal for Medical Science and Biology from the Australian Academy of Sciences, Boehringer-Mannheim Medal, Glaxo-Wellcome Australia Medal and the Howard Taylor Ricketts Medal from the University of Chicago. He has also received the Victoria Prize from the Victorian Government as well as the Mahathir Science Prize from the Mahathir Science Award Foundation

His work is aimed at understanding the function of proteins in Plasmodium falciparum, the causative agent of the most severe form of malaria in humans and to use this information for the development of vaccines and drug targets against this parasitic disease.

## Infection and development of malaria parasites in human erythrocytes and potential vaccine candidates

Abstract

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Alan F. Cowman

Infection and Immunity Division, Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia

In humans the most severe form of malaria is caused by Plasmodium falciparum and at least a third of the world's population is at risk of infection, with over three hundred million people developing clinical disease each year and over 460,000 deaths. Entry of this parasite into the human erythrocyte involves a complex cascade of protein-protein interactions using several specific ligand-receptor interactions. Once inside the erythrocyte the parasite initiates a remarkable process of remodelling that converts a specialized terminally differentiated host cell into one in which the parasite can harvest the essential nutrients for growth as well as provide a protected niche allowing escape from host responses. To establish infection in the host, malaria parasites export hundreds of remodelling and virulence proteins into the erythrocyte. These proteins must traverse a series of membranes including the parasite, parasitophorous vacuole and erythrocyte membrane and they play key roles in evasion of immune responses and remodelling of the host erythrocyte. Understanding the function of the proteins involved in parasite invasion and host cell remodelling is important for the development of a vaccine and new treatments required to treat and control this disease. We have used functional approaches to credential antigens to prioritize candidates as potential vaccine targets and also identify potential drug targets for development of new antimalarials.

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PI 3		Plenary Se	ssion 2	
	09:00~09:30	Room   Auditorium	Session Chair	Malcolm J



Emeritus Prof. **Jong-Yil Chai** Institute of Parasitic Diseases, Korea Association of Health Promotion, Korea Seoul National University, Korea

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Prof. Jong-Yil Chai graduated from Seoul National University College of Medicine (M. D.) in 1976 and obtained Ph.D. in 1984 majoring medical parasitology at the same university. He is now Emeritus Professor at the Department of Parasitology and Tropical Medicine, Seoul, Korea since 2016 and the President of Korea Association of Health Promotion since 2016. He has been investigating the diseases caused by intestinal parasites, in particular intestinal flukes (heterophyids, echinostomes, neodiplostomes, and gymnophallids), roundworms, and protozoans for over 40 years in Korea. He has also been working in other Asian countries, including China, Lao PDR, Cambodia, Vietnam, Myanmar, and Tanzania. He published 10 books and more than 530 original research papers on parasitology. He has been serving as the Editor of The Korean Journal of Parasitology since 2006. He is the 1st Vice President of World Federation of Parasitologists since 2010 and the Treasurer of International Federation for Tropical Medicine since 2012. Now he is serving as the President of ICOPA 2018.

## → Abstract

## Foodborne helminthiases: Status and issues

#### Jong-Yil Chai

Institute of Parasitic Diseases, Korea Association of Health Promotion, Seoul, Korea Department of Parasitology and Tropical Medicine, Seoul National University College of Medicine, Seoul, Korea

Foodborne helminthiases are emerging and reemerging problems in both developing and developed countries. Nematode parasites transmitted by food include *Gnathostoma spinigerum* and other *Gnathostoma* spp., anisakids (Anisakis simplex, A. pegreffii, A. physeteris, and Pseudoterranova decipiens), Trichinella spiralis and other Trichinella spp., Capillaria philippinensis, and Angiostrongylus cantonensis. Cestodes transmitted by food include Diphyllobothrium latum, D. nihonkaiense and other Diphyllobothrium spp., Taenia solium, T. saginata and T. asiatica, and spargana of Spirometra erinaceieuropaei and S. decipiens. In foodborne trematodes, more than 100 species have been reported which can be grouped into liver, lung, and intestinal flukes (including Clinostomum and Eurytrema) depending on their habitat in the definitive host. The liver flukes include Opisthorchis viverrini, Opisthorchis felineus, Clonorchis sinensis, Metorchis conjunctus, Metorchis bilis, Metorchis orientalis, Fasciola hepatica, Fasciola gigantica, and Dicrocoelium dendriticum, and Dicrocoelium hospes. The lung flukes include Paragonimus westermani, Paragonimus heterotremus, Paragonimus skrjabini, Paragonimus miyazakii, Paragonimus kellicotti, Paragonimus mexicanus, Paragonimus africanus, and Paragonimus uterobilateralis. The intestinal flukes are the biggest group which includes heterophyids (Centrocestus, Haplorchis, Heterophyes, Heterophyopsis, Metagonimus, Procerovum, Pygidiopsis, Stellantchasmus, and Stictodora), echinostomes (Acanthoparyphium, Artyfechinostomum, Echinochasmus, Echinoparyphium, Echinostoma, Episthmium, Euparyphium, Hypoderaeum, and Isthmiophora), fasciolids (Fasciolopsis), lecithodendriids (Phaneropsolus and Prosthodendrium), gastrodiscids (Gastrodiscoides), gymnophallids (Gymnophalloides), microphallids (Spelotrema), and neodiplostomes (Neodiplostomum). For taxonomic purposes, molecular studies have been done using sequence analysis of parasite rDNA (ITS1, ITS2) and mitochondrial DNA (CO1, ND1). Various types of foods are involved as the source of foodborne parasitic infections. They include meat (beef, pork, and chicken), various types of fish (freshwater, brackish water, and marine), mollusks (freshwater and brackish water snails and clams, including the ovster), amphibians, reptiles (including terrestrial snakes), aquatic insects, and aquatic plants. The reservoir hosts include various species of mammals and birds. Clinical aspects of each parasite infection are generally well known but need more clarification in some parasite species. Differential diagnosis by fecal or sputum examination is frequently problematic because of morphological similarity of eqgs. ELISA is often a good alternative for the diagnosis. Albendazole and mebendazole are effective against nematode infections but refractory to anisakid infections. Praziguantel is effective for most foodborne trematode and cestode infections except for fascioliasis (triclabendazole is recommended) and sparganosis (no available chemotherapy). Continued efforts to understand epidemiological significance of each parasite infection are required.

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Prof. Patricia J. Johnson University of California, USA

Dr. Patricia J. Johnson is a Professor in the Department of Microbiology, Immunology and Molecular Genetics at the University of California, Los Angeles (UCLA). Professor Johnson received her Ph.D. in Biological Sciences from The University of Michigan. She conducted postdoctoral research in the laboratories of Piet Borst at The Netherlands Cancer Institute in Amsterdam, and Christian de Duve at The Rockefeller University in New York City, before becoming a faculty member at UCLA.

Professor Johnson is the recipient of The Helen Hay Whitney Postdoctoral Award, The National Foundation for Infectious Diseases Young Investigator Award, New Investigator Award in Molecular Parasitology and a Scholar Award in Molecular Parasitology from The Burroughs-Wellcome Fund. Professor Johnson has also received a MERIT Award from National Institute of Health and is an elected member of the American Academy of Microbiology

Professor Johnson's laboratory studies the cellular biology and pathogenesis of the sexually-transmitted parasite Trichomonas vaginalis, which is responsible for ~1/4 billion infections worldwide annually. Past and current research has focused on organelle biogenesis and evolution, drug resistance, regulation of gene expression, genomics and host:parasite interactions. The major focus of current research is to identify parasite cell surface molecules and secreted factors that play critical roles in establishing infection and in the lysis of human host cells. The cellular mechanisms necessary for parasite killing by 5-nitroimidiazoles, as well as host factors that influence infection outcomes, are also being investigated.

## Trogocytosis: A novel mechanism neutrophils use to kill a large, motile extracellular parasite

Abstract

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Patricia J. Johnson<sup>1, 2</sup> Frances Mercer<sup>1</sup>, Shek Hang Ng<sup>1</sup>, Taylor M. Brown<sup>1, 2</sup>, and Grace Boatman<sup>3</sup>

<sup>1</sup>Department of Microbiology, Immunology & Molecular Genetics, University of California, Los Angeles, USA <sup>2</sup>Molecular Biology Institute, University of California, Los Angeles, USA <sup>3</sup>Psychology and neuroscience departments, Pomona College, Los Angeles, USA

Trichomonas vaginalis, a human-infective parasite, causes the most common, non-viral, sexually transmitted infection worldwide and contributes to adverse inflammatory disorders. The immune response to T. vaginalis is poorly understood. Neutrophils are the major immune cell present at the site of infection and are thought to clear T. vaginalis. However, it has not been directly demonstrated that neutrophils clear T. vaginalis and nothing is known regarding the mechanism that might be used to kill the parasite. We have demonstrated that human neutrophils rapidly kill T. vaginalis in a contact-dependent and a NETosis-independent manner. We found that neutrophils do not phagocytose the parasite, but instead take "bites" of T. vaginalis prior to parasite death, using trogocytosis to achieve pathogen killing. Both trogocytosis and parasite killing are dependent on the presence of neutrophil serine proteases and human serum factors, consistent with a model that opsonins mediate initial tight contact, and that serine protease activity mediate parasite "nibbling." Trogocytosis has previously been described as a way for immune cells to exchange membrane proteins, as a mechanism to spread intracellular bacteria from one cell to another and for *E. histolytica* to injure or kill host cells. Our analyses are the first to demonstrate the use of trogocytosis by a mammalian phagocyte for pathogen clearance and reveal a novel mechanism used by neutrophils to kill a large, highly motile parasite.

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PL 5		Plenary Se	ession 3
	14:30~15:00	Room Auditorium	Session Chair   Shinjiro Hamano



Prof. Tomoyoshi Nozaki The University of Tokyo, Japan

Prof. Tomo Nozaki, M.D., Ph.D. graduated from Keio University School of Medicine in 1987. He spent seven years of post-doctoral training on Molecular Parasitology at NIH and the Rockefeller University. During his post-doctoral training, he worked on genome plasticity, drug resistance, and virulence mechanisms of *Trypanosoma cruzi*, an etiological agent of Chagas' disease (American trypanosomiasis) and *T. brucei*, responsible for African sleeping sickness. When he moved back to Japan in 1996, he started to work on the virulence mechanisms of the enteric protoan *Entamoeba histolytica* and its unique sulfur-containing amino acid metabolisms, at Keio University. In 1999, he moved to National Institute of Infectious Diseases as a laboratory head, and in 2004, to Gunma University as Full Professor. In 2008, he returned to National Institute of Infectious Diseases as Director of Department of Parasitology. He was also Professor of University of Tsukuba and Waseda University. In 2017, he was newly appointed as Professor of Graduate School of Medicine, The University of Tokyo. He is also currently serving as President of Japanese Society of Parasitology.

Last 20 years he has been mainly working on two aspects of infections caused by Entamoeba histolytica. He has been nicely dissecting the virulence mechanisms at the molecular level, mainly focusing on vesicular trafficking, trogocytosis, phagocytosis, and secretion of cytolytic factors. He is interested in drug development against parasitic diseases and has been working on metabolisms of essential biomolecules such as sulfur-containing amino acids and coenzyme A in this parasite, which led to identification of a few lines of new chemotherapeutics against amebic infection. He is also working on the unique evolution of the mitochondrion-related organelles, "mitosomes" in Entamoeba.

# Protein and lipid trafficking in the pathogenesis of *Entamoeba histolytica*

Abstract

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Tomoyoshi Nozaki

Department of Biomedical Chemistry, The University of Tokyo, Tokyo, Japan

The enteric protozoan *Entamoeba histolytica* reveals vigorous motility suggestive of apparent pathogenic activities. Trogo(meaning "nibble" or "chew")cytosis of live mammalian cells and contact-dependent induction of apoptosis in them, as well as transport of a variety of lysosomal hydrolytic factors necessary of degradation of ingested target cells, are the hallmark of amebic pathogenesis. All of these biological processes require elaborate tempo-spacial regulation of membrane and lipid traffic in the cell. *E. histolytica* relies on the organellar-specific vesicular traffic with >100 Rab small GTPases being involved. Active cytoskeletal changes and phosphoinositide signaling have been shown to be involved in the process. *E. histolytica* utilizes a dozen of kinases and calcium-binding proteins including lineage-specific AGC kinases and CaBPs for the initiation and progression of trogo(and phago)-cytosis. It also exploits lineage-specific receptor-mediated transport mechanisms for the delivery of lysosomal hydrolases for degradation of internalized preys. While protein transport machinery needed for the pathogenic processes is relatively well described, lipid transport mechanisms remain elusive. The *E. histolytica* genome encodes a dozen of START domain-containing proteins, at least a few of which we demonstrated play specific and essential roles in both endocytic (pino-, trogo-, and phagocytic) and exocytic (biosynthetic) pathways. In summary, protein and lipid transport plays a pivotal role in the pathogenesis and pathophysiology of amebiasis.



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PI 6		Plenary Se	ssion 4
	08:30~09:00	Room Auditorium	Session Chair   Tai-Soon Yong



Prof. Marcelo Jacobs-Lorena Johns Hopkins Bloomberg School of Public Health, USA

Dr. Marcelo Jacobs-Lorena received the BSc degree from the São Paulo University, Brazil, the MSc degree from the Osaka University, Japan and the PhD degree from the Massachusetts Institute of Technology, USA. He then trained as a postdoctoral fellow at the University of Geneva, Switzerland. From 1977 to 2003 Dr. Jacobs-Lorena was a faculty in the Department of Genetics at Case Western Reserve University in Cleveland, Ohio. It was during this time that he initiated molecular studies on the interaction of the malaria parasite with its vector mosquito. These studies have led to the generation of the first genetically engineered mosquito refractory to the malaria parasite. Since 2003 Dr. Jacobs-Lorena has been a Professor at the Johns Hopkins School of Public Health and Malaria Research Institute in Baltimore, Maryland. Here his research continues to explore the molecular events driving the development of the malaria parasite in his mosquito and mammalian hosts.

His research focuses on the life cycle of the malaria parasite in its obligate mosquito vector. His laboratory was the first to produce a genetically engineered mosquito that is refractory to the parasite. Presently we are exploring an alternative strategy by engineering bacteria that live in the mosquito gut to produce antimalarial compounds. Other projects in the lab investigate mechanisms of parasite fertilization in the mosquito, mechanisms of sporozoite liver invasion and role of the mammalian fibrinolytic assist Plasmodium in its cycle in the vertebrate and invertebrate hosts.

Dr. Jacobs-Lorena has over 150 publications in peer reviewed journals, has chaired for 6 years the World Health Organization Committee on Molecular Entomology and is on the editorial board of three scientific journals. In 2009 he was elected Fellow of the American Association for Advancement of Science (AAAS) and in 2016 elected Fellow of the American Academy of Microbiology.

# The fibrinolytic system is essential for *Plasmodium* infection of its mosquito vector and its mammalian host

Abstract

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Marcelo Jacobs-Lorena<sup>1</sup> Sibao Wang<sup>2</sup>, Wei Huang<sup>1</sup>

<sup>1</sup>Department of Molecular Microbiology and Immunology, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA <sup>2</sup>Institute of Plant Physiology & Ecology, Chinese Academy of Sciences, Shanghai, China

Mosquitoes are the obligatory vectors of major human pathogens, including the malaria parasite. The most vulnerable stages of the malaria parasite development in the mosquito occur in the midgut, side-by-side with the gut microbiota. Previously, we have shown that engineering specific gut bacteria to secrete anti-malarial compounds (paratransgenesis) is a highly effective strategy to thwart the ability of the mosquito to transmit the parasite. We have also shown that a bacterium isolate – *Serratia* AS1 –can be transmitted vertically from female mosquitoes to progeny and sexually from males to females, thus being able to spread into mosquito populations. However, a major concern of regulators for the release of such engineered bacteria into nature is that there is no option for "recall" in case something goes wrong. To address this concern, we show that *Serratia* AS1 loses plasmids as it replicates, reverting to wild type. Moreover, we show that horizontal transfer of the plasmid from *Serratia* AS1 to other bacteria is extremely rare, as this was undetectable in our experiments. Our results suggest that initial field trials could make use of this reversible system whereby released recombinant bacteria expressing anti-malarial compounds from a plasmid revert to wild type at a predictable rate.

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## Tuesday (Aug. 21)

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PI 7		Plenary So	Plenary Session 4		
	09:00~09:30	Room Auditorium	Session Chair   Ana Flisse		



Prof. Keeseon S. Eom Chungbuk National University School of Medicine, Korea

Director at Parasite Resource Bank funded by National Research Foundation (NFF) and Ministry of Science, ICT and Future Planning of Korea; Leader of Taenia asiatica Research Group International; Faculty of Medicine, Chungbuk National University School of Medicine, Department of Parasitology, Medical Research Institute (1987-) and Parasite Research Center (2017-). Tel: 82-43-261-2849. Email : kseom@chundbuk.ac.kr

Professor Keeseon EOM is a member and the former president of Korean Society for Parasitology and Tropical Medicine; Vice President of Local Organizing Committee for 14th International Congress of Parasitology (2018); Korean Representative for World Federation of Parasitologists; Former Secretary General of Local Organizing Committee-17<sup>th</sup> International Congress for Tropical Medicine and Malaria (2008).

He graduated and took a doctorate from Seoul National University School of Veterinary Medicine (1991), Research Professor at Korea University School of Medicine. Post-Doctoral training at Systematic Parasitology Laboratory, Immunology and Disease Resistance, U.S.A. In 1993, he described a new parasite Taenia asiatica from humans with his teacher Prof. Han-Jong Rim and organized Taenia asiatica Research Group International (2011): Founded Parasite Resource Bank of Korea National Research Resource Center (2005) & Biodiversity-Tanzania Wildlife Research Resource Unit of Tanzania (2013).

As a parasitologist, he published an Online Web Atlas of Medical Parasitology-www.atlas.or.kr (2003) and participated an editorial board of Korean Journal of Parasitology and Tropical Parasitology (Academya Publishing Co., Korea), Animal Systematics, Evolution and Diversity (Korean Society of Systematic Zoology) and editorial board of Tropical Parasitology (Wolters Kluwer-Medknow).

## Cysticercosis and taeniasis with a historical review on Taenia asiatica

Abstract

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#### Keeseon S. Eom

Chungbuk National University School of Medicine, Parasite Research Center, Parasite Resource Bank and Medical Research Institute, Cheongiu, Chungbuk, Republic of Korea

Taenia solium, T. saginata and T. asiatica are three zoonotic tapeworms that cause human infections through pigs and cattle as intermediate hosts. Taeniasis and cysticercosis remain a significant public health problem in regions of Asia, Africa, Eastern Europe, and Central and South America. Information on the distribution and prevalence of taeniasis and cysticercosis is quite abundant except for the last found T. asiatica. Previously known T. saginata endemic areas are now shared by T. asiatica in Asian regions-Taiwan, Indonesia, Korea (South), China, Philippines, Thailand, Vietnam, Japan, Nepal, India with suspected countries, i.e., Myanmar, Lao PDR and Malaysia-and in some areas it's rather the most common species. The sequence difference in the full mitochondrial genome between T. saginata and T. asiatica is 4.6%, while T. solium differed by 11%. The size of the protein-coding genes of the three human Taenia tapeworms did not vary, except for Taenia solium nad1 (891 aa) and nad4 (1212 aa) and Taenia asiatica cox2 (576 aa). The whole mitochondrial genomes of the 3 tapeworms contain 12 protein-coding genes, two ribosomal RNAs (rRNAs, a small and a large subunit), and 22 transfer RNAs (tRNAs). It does not encode the atp8 gene. Differential diagnosis with multiplex PCR is available and frequently used nowadays. Human cysticercosis by T. asiatica metacestodes is not known yet but T. asiatica cysticerci show clear liver tropism in pigs which indicates that T. asiatica may mainly cause hepatic cysticercosis in humans. Phylogenetic position of Taenia asiatica which is most close morphologically and genetically to Taenia saginata is another interesting point to compare with T. solium and other Taenia species tapeworms. Historically, Taenia asiatica (Eom and Rim, 1993) was first recognized by Dr. Yokogawa S (1935) who described on the mysterious life cycle of *Taenia* tapeworms in Taiwan suspecting the wild boars as intermediate host of the worm. Park and Chyu (1963) brought the enigmatic phenomenon up regarding the inconsistent food versus worm ratios in Korea. Erhard Hinz (1985) described it as 'Taenia saginata-like tapeworm' in the Philippines where it seemed not following the known life cycle, "man-Bovidae-man". In 1988, Dr. Fan PC found Lanyu pigs as natural intermediate host of this tapeworm in Orchid Island of Yami aborigins in Taiwan. The taxonomic position could not reach a consensus between parasitologists due to a notorious similarity of its adult morphology to T. saginata, it was called then Taiwan Taenia or Asian Taenia saginata. In 1993, it was described as a novel species-collected from a Korean patient-T. asiatica by Eom KS and Rim. Morphologically they are resembled overwhelmingly but the scolex has rostellum unlike T. saginata; and the larval tapeworm was much smaller (2-3 mm in diameter) than that of T. saginata. In 2005 and 2007 the first complete sequences of *T. asiatica* mitochondrial genome and that of *T saginata* were published in order and the genetic comparisons between the 3 human Taenia species further supported to its taxonomic status as a new species.

## Tuesday (Aug. 21)

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PI 8		Plenary Se	ssion 5	
	13:30~14:00	Room Auditorium	Session Chair	Russell Stothar



Prof. **Margaret Gayapong** University of Health and Allied Sciences, Ghana

Prof. Margaret Gyapong is Director of the Centre for Health Policy and implementation research at the University of Health and Allied Sciences in Ghana. Prior to that she worked as Deputy Director for Research and Development in the Ghana Health service and was the foundation Director of the Dodowa Health Research Centre. She is visiting professor and preceptor to students in International Global health at the Georgetown University.

A medical Anthropologist by training with a PhD in Cultural Epidemiology from the Swiss Tropical and public Health institute, she specialized in Cultural Epidemiology a discipline that focuses on the descriptive account of illness meaning and behavior and the cultural determinants of disease occurrence, course and outcome.

Over the last 25 years, she has worked at the intersection of research and policy, ensuring that her work on Neglected Tropical Diseases, malaria, maternal and child health and Demographic Surveillance Systems influences policy formulation and program implementation. She has served and continues to serve as a member, chair and co chair on a number of local and international committees and task forces. Key amongst them is chair of the lymphatic Filariasis Guidelines review group in 2017.

She is reviewer and editor on several peer reviewed journals, was instrumental in the development of the recently launched WHO/TDR toolkit. In 2017, she was one of 12 recipients across the world of the Heroines of Health award at a ceremony held during the 2017 World Health Assembly in Geneva.

## Understanding the context complexities in some lymphatic filariasis hotspot districts in Ghana

Abstract

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#### Margaret Gyapong<sup>1</sup>,

Vida Kukula<sup>2</sup>, Irene Tsey<sup>2</sup>, Eleanor Macpherson<sup>3</sup>, Russ Stothard<sup>3</sup>, Sally Theobold<sup>3</sup>

<sup>1</sup>Centre for Health Policy and Implementation, University of Health and Allied Sciences, Ho, Ghana <sup>2</sup>Dodowa Health Research Centre, Ghana Health Service, Accra, Ghana <sup>3</sup>Department of Parasitology, Liverpool School of Tropical Medicine, Liverpool, UK

Implementation of the Ghana Lymphatic Filariasis (LF) program to eliminate LF started in 2001, with annual mass administration of lvermectin and Albendazole as the main strategy.

The Ghana LF program has made significant progress towards the 2020 elimination goal (Biritwum et al, 2017). After 10 years of the program 76 out of 98 districts achieved interruption of transmission by 2015. Twenty-two districts remain LF "hot spots".

Conducted in the Northern and Western Regions of Ghana, the objectives of the study were to explore factors that affect community participation in the MDA process and identify, design and test strategies for effective implementation of MDA with continuous monitoring. A qualitative methodology which included FGDs with Seasonal Calendar a simple participatory tool which allows visualization of patterns and can help to show transformation over a period of time. The tools provided us with an opportunity to explore the effect of population livelihood activities, seasonality and migration on MDA as experienced by participants.

Key findings from the research highlighted that high levels of mobility, migration, socio-cultural activities and seasonality impacted on community members access to the MDA. Timing for MDAs often coincides with the wet rainy season which may hinder reaching some target populations. This was further shaped by the mechanism for delivery of the drugs. Community members frequently discussed how they were missed because the CDDs only came to their houses once.

There is a need for participatory processes and engagement with communities in developing more responsive and context appropriate MDA strategies.

## →>> Wednesday (Aug. 22)





Prof. Carlos Lanusse National Scientific and Technical Research Council (CONICET), Argentina

Carlos E. Lanusse received his Veterinary degree from the Universidad Nacional del Centro de la Pcia. de Buenos Aires (Tandil, Argentina) (1982). He completed a first Doctoral degree at the Universidad Nacional de La Plata (La Plata, Argentina) (1986) and his Ph.D. program at McGill University (Montreal, Canada) (1991). He is Full Professor of Veterinary Pharmacology (since 1997), Director of the Center of Veterinary Research and Director of the Science and Technology Center from the Argentina National Council of Research (CONICET) at Tandil. Since 1992 he acted as Scientific Director of the research program on "Pharmacology of antiparasitic drugs in ruminants", which has received financial support from several national/international agencies. An important number of Ph.D. students and Fellowship recipients have received their formation in Veterinary Pharmacology and Parasitology under Dr. Lanusse's supervision.

Professor Lanusse is internationally recognized for his outstanding scientific contribution to the integrated understanding of the plasma disposition kinetics, tissue distribution, biotransformation in the animal host and patterns of parasite influx/efflux/metabolism for different antiparasitic compounds in livestock animals. This pharmaco-parasitological knowledge applied to optimise parasite control in the presence of drug resistance, has been worldwide disseminated in over 230 peer-reviewed publications (and Book Chapters) in the most reputed Parasitology/Pharmacology Journals. Bibliometric indicators in Scopus: 4077 citations, h index: 35; Google Scholar: 5254 citations, h index: 41. Professor Lanusse has received numerous scientific awards throughout his career. He was the 2015 WAAVP-Bayer Award recipient for Excellence in Research in Veterinary Parasitology.

## Pharmacology of anthelmintic drugs: Challenges to optimize parasite control in resistant populations

Abstract

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#### **Carlos Lanusse**

Center of Investigation Veterinaria Tandil, National Scientific and Technical Research Council (CONICET), Tandil, Argentina

The plenary lecture to be presented at the 2018 ICOPA Congress will emphasize on how the use of pharmacology-based information may be critical to achieve sustainable parasite control. The inadequate use of anthelmitics has led to therapeutic failures and to the dramatic widespread development of parasite resistance in livestock animals, which has been spreading in prevalence and severity. The accumulated scientific knowledge on the pharmacology of anthelminitics has been relevant to design strategies for parasite control in ruminants. The assessment of the drug disposition in the host and the comprehension of the mechanisms of drug influx/efflux/detoxification in different target helminths, has signified a relevant progress on the understanding/optimization of drug activity. Different approaches to enhance parasite exposure and the use of combination of drugs from different chemical families have been proposed as valid strategies to delay the development of anthelmintic resistance. However, further research is required to identify the advantages/ disadvantages of the use of combined drug preparations. There is urgent need for new drugs which will not share mechanisms of resistance with existing molecules. The emergence of novel anthelmintic molecules into the veterinary pharmaceutical market reinforces the need for deeper understanding of their pharmacological properties to prolong their lifespan. The progress made on the knowledge of the pharmacological basis of drug activity has not been sufficient to delay the widespread development of resistance. Could all the scientific knowledge that emerged from research in livestock animals be useful in optimising control and delay resistance development in soil-transmitted helminths in humans? There is a need to strengthen the pharmacoparasitological research linkage both in Veterinary and Human Medicine, which seems to be a key issue for the future of chemically-based parasite control.

## →>> Wednesday (Aug. 22)

PI 10		Plenary S	ession 6
	09:00~09:30	Room Auditorium	Session Chair   Xing-Quan Zhu



Prof. **Rebecca J. Traub** *The University of Melbourne, Australia* 

Prof. Traub is a Professor of Veterinary Parasitology at the Faculty of Veterinary and Agricultural Sciences, The University of Melbourne and Founding Director and Secretary of the Tropical Council for Companion Animal Parasites (TroCCAP©).

She graduated from Murdoch University with a Bachelor's Degree in Veterinary Medicine and Surgery in 1997 and subsequently worked as a veterinary clinician in Western Australia. In 2004, she completed her PhD (Murdoch University) on canine parasitic zoonoses in tea-growing communities of northeast India, for which she was awarded the John Adrian Sprent Prize by the Australian Society for Parasitology. She was subsequently awarded an Australian Research Council Postdoctoral Fellowship to continue her work on the diagnosis and epidemiology of canine and fish-borne trematode zoonoses in Thailand. Rebecca gained employment teaching Veterinary Public Health at the School of Veterinary Sciences at the University of Queensland in 2006 and in 2014, moved to the Faculty of Veterinary and Agricultural Sciences at the University of Melbourne as an Associate Professor in Veterinary Parasitology.

Prof. Traub's research continues to cover the field of veterinary public health, with a focus on the diagnosis, epidemiology and control of neglected tropical diseases, with emphasis on soil transmitted helminth infections and canine parasitic and rickettsial zoonoses. Much of her research work has been based in the Asia Pacific and aims to engage veterinarians, medical practitioners, scientists and policy makers in government, non-for profit organisations and industry, to form a group with core interests relating to One Health.

Rebecca's research expertise has been formally recognized through consultations for the World Health Organization, Food and Agricultural Organisation, The Gates Foundation, the Veterinary Pharmaceutical Industry, and not-for-profit organisations.

## Emerging canine zoonoses in Australasia: Challenging the dogmas

Abstract

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Rebecca J. Traub

Department of Veterinary Biosciences, The University of Melbourne, Parkville, Victoria, Australia

Endoparasites and vector-borne diseases are not only a significant cause of morbidity and mortality in dogs, but many are also responsible for some of the most important and well recognized zoonotic diseases transmitted to humans. In the past decade, our understanding of the role of domestic dogs as reservoirs for these established, as well as novel and emerging zoonotic agents has in some cases, turned up 'unexpected' findings that have challenged established dogmas in the medical community, with regards to their distribution, methods for diagnosis and approaches to control. An example of such an emerging zoonoses in the Australasian region includes ancylostomiasis caused by Ancylostoma ceylanicum. Over the past decade, the application of PCR-based diagnostics has facilitated the discovery of A. ceylanicum as a significant emerging zoonosis, with natural human infections reported in almost all geographical areas in which infection is endemic in dogs. Although its contribution to human morbidity has not been studied, sporadic case reports suggest that like anthroponotic hookworms, A. cevlanicum can produce symptoms of abdominal pain, diarrhoea and melena in acute infections, and anaemia in chronic infections. The World Health Organization's 2020 Roadmap for eliminating the morbidity associated with soil transmitted helminth infections (STH) has resulted in significant scaling up of global mass drug administration programs in the Asia Pacific. With the growing recognition of A. ceylanicum as the second most common hookworm of humans in this region, the importance of appropriate diagnosis and implementation of concurrent dog health programs, will prove vital in ensuring this emerging zoonosis remains sustainably controlled.

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## Thursday (Aug. 23)

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PL11	Plenary Session 7				
	08:30~09:00	Room	Auditorium	Session Chair	David Rollinson



Prof. **Dwight D. Bowman** Cornell University College of Veterinary Medicine, USA

Joined the faculty of the College of Veterinary Medicine at Cornell University in 1987 and currently a Professor in Parasitology teaching in the veterinary, graduate, and undergraduate curricula; Director MPS Program in Veterinary Parasitology. Graduation with honors in Biology from Hiram, College in 1974, MS and PHD degrees in parasitology from Tulane University in New Orleans, in 1976 and 1983, and a postdoctoral scientist/lecturer at the School of Veterinary Medicine of the University of Wisconsin Madison from 1984-1987.

Awards : 2008: Distinguished Veterinary Parasitologist Award by AAVP; 2009: Chancellor's Award for Excellence in Teaching from the State University of New York, and Cornell University's College of Veterinary Medicine's Community Service Award; 2010: Kaplan Family Distinguished Faculty Fellowship in Service-Learning; 2014: Academic Service Award CVM, Cornell; 2018: Water Environment Federation Pioneer Award in Disinfection and Public Health. Honorary Member Delta Omega Public Heath Fraternity; Honorary Diplomate in the Parasitology section of the American College of Veterinary Microbiologists. Past president of the AAVP and a founding member and past president of the CAPC.

*Toxocara*, the most common helminth parasite of humans on the planet.... Do we care?

Abstract

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Dwight D. Bowman

Department of Microbiology & Immunology, Cornell University College of Veterinary Medicine, New York, USA

Toxocara larvae very likely represent the most common parasitic helminth infection of people throughout the world. In human seroprevalence studies, the level of infection with *Toxocara* is often near that or greater than that of Toxoplasma gondii. Toxocara canis larvae persist in the tissues of orally infected primates for at least 9 years. Toxocara seroprevalence in people remains high with age, suggesting life-long infections or regular reinfection, and increased seroprevalence rates are associated with familial poverty. A small percentage of people, mainly children, develop severe larval toxocariasis or visceral larval migrans, but the majority of infected individuals have what is known as "covert toxocariasis." A great deal of work on the potential effects of these "covert" infections has occurred, but specific outcomes of larvae being present in human tissues have never been found to be routinely associated with specific physical or immunologic syndromes. On the other hand, the presence of specific antibodies to these infections, indicate that very large numbers of people are infected, and unlike Toxoplasma where ingestion of raw meat is a known source of infection, the majority of these infections likely occur from the accidental ingestion of infective eggs from soil. Currently there is no means of preventing cats from shedding Toxoplasma oocysts, but excellent means for removing Toxocara from dogs and cats, the major sources of the offending eggs. Thus, the targeting of control to these hosts should impact the human infection rate as has occurred during the success of targeted canine treatment in the reduction or eradication of cystic hydatid disease. The control and virtual eradication of human toxocariasis is likely an achievable outcome, but the question remains as to how to establish a sustainable Toxocara control program in communities that will support an infrastructure of overall improved healthcare for people and their companion animals.

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## **Thursday** (Aug. 23)

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PL 12	Plenary Session 7				
	09:00 ~ 09:30	Room Auditorium	Session Chair	David Rollinson	



Prof. Simonetta Mattiucci Sapienza University of Rome, Italy

Simonetta Mattiucci. PhD in "Epidemiology and Microbiology" at "Sapienza-University of Rome". Aggregate Professor at the "Department of Public Health and Infectious Diseases" of "Sapienza-University of Rome". Head of the "Human parasitological diagnosis" at the University Hospital "Policlinico Umberto I" in Rome. She is Lecturer of: Parasitology, at Faculty of Pharmacy and Medicine of "Sapienza-University of Rome"; and "Marine Parasitology" at "Tuscia University in Viterbo", Italy. President (2007-2011) of Fish Parasitologists World Association.

Research on general parasitology, molecular systematics, population genetics, phylogeny of parasites, and host-parasite co-evolutionary aspects. Her main field of research: parasites of aquatic organisms. Particular interest for fish parasites and fish-borne zoonosis, mainly concerning anisakid nematodes, also etiological agents of human anisakidosis. She has deep experience in diagnosis of parasitological diseases in humans, investigated by different methodological approaches. She is also carrying out research on the molecular genotyping of Blastocystis spp. isolates from humans.

Abstract

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## Anisakis and anisakiasis: Facts and trends

Simonetta Mattiucci

Department of Public Health and Infectious Diseases. Sapienza University of Rome, Rome, Italy

Biodiversity, biology, distribution, ecology, epidemiology, of the so far known species of Anisakis, both in their natural hosts and in human accidental host populations, worldwide, will be presented. The key aspects of the Anisakis species' biology and genetics are highlighted, as main driving forces behind which most of the research in this field has been carried out over the past decade.

From a public health perspective, the human disease caused by Anisakis species (i.e. anisakiasis) appears to be underreported and underestimated in many countries or regions, around the globe. Indeed, when considering the importance of marine fish species as part of the everyday diet in many coastal communities around the globe, there still exist significant knowledge gaps as to local epidemiological, and ecological drivers of the transmission of Anisakis spp. to humans.

Some recent key knowledge in the epidemiology of anisakiasis in humans, and some key knowledge gaps, related to Anisakis infection in accidental host (humans), to be filled in light of new 'omic' technologies yet to be fully developed, will be also shown.

The use of a 'holistic' approach, by integrating, as much as possible, genetic, ecological, immunobiological, and environmental factors, will be presented. This approach would allow a proper assessment and monitoring of the epidemiology of Anisakis spp. in their natural hosts, in human populations, and in the marine ecosystem, in both space and time.

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## Thursday (Aug. 23)

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PL13	Plenary Session 8				
	13:00~13:30	Room Auditorium	Session Chair   Philip Loverde		



Dr. Xiao-Nong Zhou National Institute of Parasitic Diseases at China CDC, China

Dr. Xiao-Nong Zhou is Director of the National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention (2009 -), and Director of the WHO Collaborating Center for Tropical Diseases (2009-), based in Shanghai, China. He is serving as the Vice Chair of the Expert Committee on Disease Control and Chair for the Sub-group of Parasitic Diseases and Schistosomiasis, National Health and Family Planning Commission of China (2006-), as well as Chairman of Sub-Association of Medical Parasitology under Chinese Preventive Medicine Association (2015-), and Vice Chairman of Sub-Association of Global Health under Chinese Preventive Medicine (2016-). He is a leading expert in the research and control of schistosomiasis and other tropical diseases, with over 30 years' experience in the field. He obtained his PhD in Biology at University of Copenhagen, Denmark in 1994, Dr. Zhou established a career in parasitic disease research across the fields of ecology, population biology, epidemiology, spatial health, and medical malacology, and worked as a Professor at the Jiangsu Institute of Parasitic Diseases (1982-2001) and at the National Institute of Parasitic Diseases (2001-present). Since 2000. Dr. Xiao-Nong Zhou has actively engaged in global health in collaboration with WHO both on research project and serving as members in some international expert committee, for instance, Chair of the WHO West Pacific Regional Programme Review Group on Neglected Tropical Diseases (2014-), member of the WHO S&T Advisory Committee of NTD (2010-2016), member of the S&T Advisory Committee for WHO/TDR (2014-), and member of Scientific Advisory Group for Malaria Eradication (2016-). He is acting as Editor-in-Chief of "Infectious Diseases of Poverty", and Associated Editor of 'PLoS Neglected Tropical Diseases', board member of "Parasites and Vectors" since launching of the journals. He has published more than 200 papers in the international journals, including New England Journal of Medicine, Lancet, Lancet Infectious Diseases, etc., and published more than 6 professional books.

Abstract

## Driving force for schistosomiasis elimination in China

Xiao-Nong Zhou Jing Xu, Shi-Zhu Li National Institute of Parasitic Diseases at China CDC, Shanghai, China

Schistososmiasis remains one of the world's most prevalent diseases. The serious status of schistosomiasis in old time of China was written in the poem titled "Farewell to the God of Plague" by Mr. Mao Zedong, the first Chairman of the People's Republic of China in 1958. Following Mr. Mao's call, arduous efforts have been made in the last 6 decades to control and eliminate schistosomiasis in China using various control strategies, such as snail control to reduce the intensity of the disease transmission, morbidity control to reduce disease prevalence, and integrated control strategies to block the disease transmission, supported by governments at different levels.

In spite of complexity in the nature of the zoonotic disease as well as social and environment factors, great achievements have been made with the reduction of schistosomiasis prevalence in endemic areas. Of the 12 endemic provinces, five provinces including Shanghai, Guangdong, Fujian, Guangxi and Zhejiang had achieved the criteria of schisotosomiasis elimination, Sichuan province achieved the criteria of transmission interruption, and four other provinces including Jiangsu, Anhui, Jiangxi, Hubei and Hunan achieved the criteria of transmission controlled with human prevalence rate less than 1% by the end of 2017. Among 450 endemic counties in the country in the end of 2017, schistosomiasis elimination and transmission interruption have been achieved in 229 and 139 counties, respectively. The remaining 82 counties have attained the status of transmission controlled with prevalence less than 1%. In 2014, State Council called for the elimination of schistosomiasis in China by 2030 to achieve the goal of the Healthy China Strategy.

We expected Chinese working experiences on national schistosomiasis elimination programme will provide adequate knowledge and working experience for infectious disease control to meet the challenges in achieving the United Nation's sustainable development goals by 2030.

**ICOPA 2018** 

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## Thursday (Aug. 23)

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PI 14		Plenary Ses	Plenary Session 8		
	13:30~14:00	Room   Auditorium	Session Chair   Philip Loverde		



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## Advances in Asian liver flukes: From bench to community

Abstract

Banchob Sripa Department of Pathology, Khon Kaen University, Khon Kaen, Thailand



WHO Collaborating Centre for Research and Control of Opisthorchiasis (Southeast Asian Liver Fluke Disease) – Tropical Disease Research Laboratory, Department of Pathology, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002, Thailand. Tel : +66-43-3-202024, Fax : +66-43-204359, E-mail : banchob@kku.ac.th

Dr. Banchob Sripa is a professor and chair of Tropical Medicine Graduate Program, and the Head of the WHO Collaborating Centre for Research and Control of Opisthorchiasis (Southeast Asian Liver Fluke Disease), the Tropical Disease Research Laboratory, Department of Pathology, Faculty of Medicine, Khon Kaen University, Thailand. He got a doctoral degree in Tropical Health from the University of Queensland (Australia) and experienced several post-graduate trainings in pathology and global health. He has been working for > 30vears and his research focus is mainly on liver fluke and cholangiocarcinoma (CCA), the bile duct cancer. Dr. Sripa is a world expert in pathology, pathogenesis and control of liver fluke infection and CCA. His integrated liver fluke control program named "Lawa model" is one of the two showcases with success helminth control of WHO/NZD4 (2015). Dr. Sripa has > 200 research articles, viewpoints, editorials and reviews in peer reviewed international journals and book chapters recently in Nature Genetics, Lancet Oncology, Lancet Infectious Diseases, Trends Parasitology, Cancer Science, Hepatology, Proteomics, PLoS Pathogens, Science Reports and elsewhere with high citation index (h = 38, SCOPUS). He sits on the Deputy Editor of PLoS Neglected Tropical Diseases and the editorial board of Infectious Diseases of Poverty (BMC Journal), J. Helminthology (Cambridge) and Current Tropical Medicine Reports (Springer). He is a Chief Guest Editor for 4 Special Issues on liver flukes in Acta Tropica (2003), Parasitology International (2012), Parasitology International (2017), and Advances in Parasitology (to be launched in 2018). He has received several scientific research awards, most prestige the Outstanding Scientist Award of Thailand from the Foundation for the Promotion of Science and Technology under the Patronage of H.M. the King -the King Award (2013) and the Thailand Research Fund Senior Research Scholar (2013). Dr. Sripa is a panel member of the WHO's International Agency for Research on Cancer (IARC) panel of experts for biological agents of cancer, Disease Reference Group on Helminths (DRG), Foodborne Disease Burden Epidemiology Reference Group (FERG), and ex-President of the Regional Network of Asian Schistosomiasis and Other Helminth Zoonoses (RNAS+).

Liver fluke infections caused by Clonorchis sinensis and Opisthorchis viverrini are major foodborne parasitic zoonotic diseases with over 30 million people infected in Asia. The infections are associated with several hepatobiliary diseases including cholangiocarcinoma (CCA), a fatal bile duct cancer. The rates of CCA in regions where the parasite is endemic are unprecedented. Lao PDR. Thailand, Vietnam and Cambodia are among the top 10 countries with the highest incidence of this primary liver cancer in the world (GLOBOCAN2012). Khon Kaen province in Northeast Thailand where O. viverrini is endemic has reported the highest incidence of CCA in the world. Extensive research on various aspects of the liver flukes including epidemiology, immunology, pathology, carcinogenesis and control has been carried out in recent decades and will be discussed in this plenary talk. However, current status of the liver fluke infections in some countries is approaching 85% prevalence even after over 30 years of control program in a country like Thailand. Its complex life cycle which involves several hosts/environments makes it difficult to control by conventional methods. Therefore, a new control strategy using the EcoHealth/One Health approach was introduced into the Lawa Lake area in Khon Kaen province, Thailand. This program has been carried out for over 6 years using chemotherapy, novel intensive health education methods both in the communities and in schools, ecosystem monitoring and active community participation. As a result, the infection rate in > 10 villages surrounding the lake has declined to less than 10% of the average of 60% as estimated by a baseline survey. Strikingly, the Cyprinid fish species, which are the intermediate host, now show less than 1% prevalence compared to a maximum of 70% at the baseline. This liver fluke control program, now named "Lawa model." has become recognized nationally and internationally.

ICOPA 2018

## →>> Friday (Aug. 24)

PL15	Plenary Session 9			
	11:00~11:30	Room	325	Session Chair   Santiago Mas-Coma



#### Prof. Marcel Tanner

Swiss Academy of Sciences and Swiss Tropical and Public Health Institute, Switzerland University of Basel, Switzerland

Marcel Tanner obtained a PhD in medical biology from the University of Basel and a MPH from the University of London. He was Director of the Swiss Tropical and Public Health Institute from 1997 to 2015 and chair of Epidemiology and Medical Parasitology at the University of Basel and at the Federal Institute of Technology. Since 2016, he is President of the Swiss Academy of Sciences.

Since 1977, his research ranges from basic research on the cell biology and immunology on malaria, schistosomiasis, trypanosomiasis and filariasis to epidemiological and public health research on risk assessment, vulnerability, health impact and district health planning. His research, teaching and health planning expertise are based on substantial long term experience from working in rural and urban areas in Africa (mainly Tanzania, Chad, Burkina Faso and Côte d'Ivoire) and Asia (China, Thailand, Lao PDR).In addition to research, capacity building and establishment of North-South partnerships were main interests, as reflected in the development of the Ifakara Health Institute in Tanzania. He has published extensively in the many fields (>600 original papers). He also acted and acts as advisor on communicable diseases research and control, health systems strengthening and capacity building in various national and international agencies/bodies and in boards/committees.

Global health challenges and the elimination of parasitic diseases: Chances or contradictions?!

Abstract

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**Marcel Tanner** 

Swiss Academy of Sciences and Swiss Tropical and Public Health Institute, Basel, Switzerland University of Basel, Basel, Switzerland

The presentation of the World Health Organization (WHO)'s Roadmap for neglected tropical diseases (NTDs) in January 2012 as well as the respective updates raise great optimism that many NTDs and thus also many of the major parasitic diseases can indeed be eliminated.

To make elimination happen, the endemic, often low-income countries with still heavy NTD / parasitic diseases burdens are challenged to strengthen their health systems particularly with regards to surveillance. In particular, they need not only to apply validated, highly sensitive diagnostic tools and sustainable effective and integrated control approaches for treatment and transmission control, but also to participate in the development and use of surveillance-response schemes to ensure that progress made also is consolidated and sustained. Surveillance followed-up by public health actions consisting of validated response packages tailored to interruption of transmission in different settings will help to effectively achieve the disease elimination goals by 2020, as anticipated by the WHO Roadmap. Risk-mapping geared at near real-time detection of transmission pockets by means of geospatial and other dynamic approaches facilitates decision-making at the technical as well as the political level. Surveillance should thus be conceived and developed as an intervention approach and at the same time function as an early warning system for (i) the elimination of disease in persisting transmission pockets, (ii) the potential re-emergence of endemic infections as well as for (iii) new, rapidly spread epidemics and pandemics. Pursuing surveillance-response-approaches, i.e. surveillance as intervention, within given health and social systems will make elimination of NTDs and major parasitic infections a reality.

## →>> Friday (Aug. 24)

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PI 16	Plenary Session 9			
	11:30~12:00	Room 325	Session Chair   Shigeyuki Kano	



Dr. Alan Fenwick Imperial College London, UK

Professor Alan Fenwick is currently Professor of Tropical Parasitology at Imperial College. Prior to his appointment at Imperial College, he worked on schistosomiasis research and control for almost 40 years. He was resident in Tanzania (5 years from 1966) conducting research into schistosomiasis epidemiology and snail control funded by the British Government. In Sudan (17 years from 1971 - 1988) he was a Wellcome Trust Fellow and a senior staff member of the Blue Nile Health Project which tackled schistosomiasis and malaria in the Gezira Irrigation Area. Finally he served in Egypt (from 1998 - 2002) where he was the Chief of Party for the Schistosomiasis Research Project funded by the USAID. For his work in Sudan he was awarded the OBE in 1988.

In 2002 he founded the Schistosomiasis Control Initiative (SCI) which he directed until the end of 2016. To launch SCI Professor Fenwick was awarded a 5 year start up grant by the Bill and Melinda Gates Foundation, and later SCI was funded by DFID to deliver 202 million schistosomiasis treatments in 10 countries in Africa. SCI has been recognised as a top 3 cost effective charity by charity evaluators "Givewell", (www.givewell.org ) and by other similar organisations. As a result of these recommendations SCI is proud to receive donations from Effective Altruists throughout the world, and promises that for every £1 donated three children will receive a treatment against schistosomiasis.

During his leadership of SCI Professor Fenwick has travelled extensively in Africa visiting the countries in which SCI is and has supported the governments to control schistosomiasis and other NTDs, and he has been actively supporting at least 16 national control programmes. He has been awarded a number of accolades during the last 16 years including the McKay medal and the Christophers medal from the Royal Society of Tropical Medicine and Hygiene, The Mike Fisher award from St Georges University, and made "Chevalier" in both Burkina Faso and Niger in 2006. SCI was awarded the Queens Anniversary Prize for research in 2008 for which presentation he and his team visited Buckingham Palace and met the Queen and the Duke of Edinburgh.

## Abstract

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## **Towards the elimination of Neglected Tropical Diseases**

Alan Fenwick

Faculty of Medicine, School of Public Health, Imperial College London, London, UK

In 2000 there was minimal treatment for Neglected Tropical Diseases with the exception of Mass Drug Administration of Mectizan to control Onchocerciasis and prevent blindness. By 2017 the control of 7 NTDs - namely Onchocerciasis (River Blindness), Lymphatic Filariasis (Elephantiasis), Trachoma, Schistosomiasis (Bilharzia) and three Intestinal helminths (Hookworm, Round Worm and Whipworm) has reached 1 billion people annually. The medications used (Mectizan, Albendazole, Zithromax, Praziquantel and Mebendazole) are now donated by the pharmaceutical companies Merck (USA), GSK, Pfizer, Merck KGaA (Germany) and Johnson and Johnson respectively. By distribution of these medicines the main symptoms due to these parasitic infections have been controlled in many countries, but is there a chance of elimination to the levels that have been reached with polio and Guinea Worm? What is meant by elimination and can elimination be achieved by 2020 or even 2030? What additional tools are required if elimination is to be realised?

ICOPA 2018



**ICOPA 2018 Oral Sessions** 

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» Sunday (Aug. 19)
» Tuesday (Aug. 21)
» Wednesday (Aug. 22)
» Thursday (Aug. 23)
» Friday (Aug. 24)
	Parallel Oral Session 1
101 Room 325A	New insights into malaria immunology and pathogenesis: Lessons from experimental malaria models (1) Session Chairs   Mamoru Niikura, Cevayir Coban
1101-1 15:30~16:00 Keynote	Learning from mouse models: How to understand and treat tissue specific immunopathology during malaria infection? Cevayir Coban (Osaka University, IFReC, Japan)
<b>1101-2</b> 16:00~16:15	Pathophysiology of rodent malaria during pregnancy Mamoru Niikura (Kyorin University School of Medicine, Japan)
<b>1101-3</b> 16:15~16:30	Isolation of piperaquine-resistant rodent malaria parasite from malaria mutator Makoto Hirai (Juntendo University, Japan)
<b>1101-4</b> 16:30~16:45	Development of a primate model for hypnozoite-induced relapse infections using Japanese macaque ( <i>Macaca fuscata</i> ) experimentally infected with <i>Plasmodium cynomolgi</i> Satoru Kawai (Dokkyo Medical University, Japan)
<b>1101-5</b> 16:45~17:00	Insights into the molecular machinery involved in regulating <i>Plasmodium</i> liver-stage proliferation Takeshi Annoura (National Institute of Infectious Diseases, Japan)
102 Room 325B	Epidemiology, diagnosis and control of malaria Session Chairs   Sukmawati Basuki, Haruki Uemura
<b>1102-1</b> 15:30~15:45	Ethiopia: Assessment of malaria transmission dynamics using multiplex serological assay Bahita Ashenafi Assefa (Addis Ababa University, Ethiopia)
<b>1102-2</b> 15:45~16:00	Development of a novel malaria antibody assay utilizing antigens from all 5 human pathogenic <i>Plasmodium</i> species Andreas Latz (NovaTec Immundiagnostica GmbH, Germany)
<b>1102-3</b> 16:00~16:15	Prevalence of malaria and loiasis co-infection in Egbuoma town, Oguta local government area Imo-state Nigeria Nkeiruka Orji (Chukwuemeka Odumegwu Ojukwu University, Nigeria)
<b>1102-4</b> 16:15~16:30	Polymorphism in drug resistant genes of <i>Plasmodium falciparum</i> after introduction of artemisin combination therapy in East Kalimantan, Indonesia Sukmawati Basuki (Universitas Airlangga, Indonesia)
<b>1102-5</b> 16:30~16:45	Genetic variants of sulfadoxine-pyrimethamine-resistance in <i>Plasmodium falciparum</i> isolates in Indonesia Haruki Uemura (Nagasaki University, Japan)
<b>1102-6</b> 16:45~17:00	Preventing malaria by adjusting amino acid-intake Erisha Saiki (Jikei University School of Medicine, Japan)
<b>1102-7</b> 17:00~17:15	Assessment and impact of the new intermittent preventive treatment of malaria in pregnancy (IPTp) implementation strategy on maternal, fetus and neonatal outcome in Ghana Bernard Tornyigah (University Paris Descartes, France)



1103 Room 320A	Revitalising cutaneous leishmaniasis control, surveillance and capacity building Session Chair   Hyun Park
1103-1 15:30~16:00 Keynote	Revitalizing cutaneous leishmaniasis surveillance and capacity building: A WHO perspective (Cancelled) Jose Antonio Ruiz-Postigo (WHO, Switzerland)
<b>1103-2</b> 16:00~16:15	Implicating vectors of cutaneous leishmaniasis (CL) in Ghana (Cancelled) Daniel Boakye (Noguchi Memorial Institute for Medical Research, Ghana)
<b>1103-3</b> 16:15~16:30	Syrian's influence on leishmaniasis in Turkey and Middle East countries Yusuf Ozbel (Ege University, Turkey)
<b>1103-4</b> 16:30~16:45	Efficacy and safety of thermotherapy by hand-held exothermic crystallization thermotherapy for cutaneous leishmaniasis device compared to ThermoMed Device, for treatment of cutaneous leishmaniasis showing poor response to intralesional sodium stibogluconate in Sri Lanka – A randomized controlled pilot study Nadira Karunaweera (University of Colombo, Sri Lanka)
1104 Room 320B	Biology and interaction of host /cell and <i>Toxoplasma gondii</i> infection Session Chairs   Zhao-Rong Lun, Masahiro Yamamoto
1104-1 15:30~16:00 Keynote	Host cell-intrinsic host defense and counter defenses againt <i>Toxoplasma</i> Masahiro Yamamoto (Osaka University, Japan)
<b>1104-2</b> 16:00~16:15	High frequency of infection of lung cancer patients with the parasite, <i>Toxoplasma gondii</i> Geoff Hide (University of Salford, UK)
<b>1104-3</b> 16:15~16:30	Encephalitis is mediated by ROP18 of <i>Toxoplasma gondii</i> , a severe pathogen in AIDS patients Jian Du (Anhui Medical University, China)
<b>1104-4</b> 16:30~16:45	Relationship of serum free thyroxine (fT4) and thyroid stimulating hormone (TSH) with anti- <i>Toxoplasma gondii</i> IgG among women Mohammad Taghi Ahady (Islamic Azad University, Iran)
<b>1104-5</b> 16:45~17:00	TgMNK-L1 is a <i>Toxoplasma gondii</i> kinase critical for cell division Klemens Engelberg (Boston College, USA)
<b>1104-6</b> 17:00~17:15	Identification and characterization of <i>Letm1</i> gene in <i>Toxoplasma gondii</i> Jianhua Li (Jilin University, China)

1105 Room 321A	Free-living amoebae and other opportunistic protozoa: Emerging pathogens under the radar Session Chairs   Jacob Lorenzo Morales, Ho-Joon Shin
1105-1 15:30~16:00 Keynote	Free-living amoebae in South Korea Ho-Joon Shin (Ajou University, Korea)
<b>1105-2</b> 16:00~16:15	Isolation and molecular identification of free living amoeba strains from agricultural soils of Fuerteventura Island, Spain Jacob Lorenzo-Morales (University of La Laguna, Spain)
<b>1105-3</b> 16:15~16:30	Isolation and molecular identification of free living amoeba from dishcloths Jacob Lorenzo-Morales (University of La Laguna, Spain)
<b>1105-4</b> 16:30~16:45	Emerging human pathogenic microsporidia in built-up environments: A public health concern? Haafizah Hoosen (De Montfort University, UK)
<b>1105-5</b> 16:45~17:00	Gene cloning of <i>Naegleria fowleri</i> profilin upregulated in cyst assayed by the RNA-Seq approach Hae Jin Sohn (Ajou University, Korea)
1106 Room 321B	Parasites and Immunity Session Chair   Samson Mukaratirwa
<b>1106-1</b> 15:30~15:45	Baculovirus-induced innate immunity confers complete protection against <i>Plasmodium</i> pre-erythrocytic stage parasites Talha Bin Emran (Kanazawa University, Japan)
<b>1106-2</b> 15:45~16:00	<i>Mesocestoides vogae</i> penetrates host intestinal tissue wall while expressing potential suppressor of host inflammation Kei Hayashi (Okayama University of Science, Japan)
<b>1106-3</b> 16:00~16:15	Group 2 innate lymphoid cells exacerbate severe amebic liver abscess by IFN-γ independent manner in mice Risa Nakamura (Nagasaki University, Japan)

107 Room 322A	Animal models for research into schistosomiasis control Session Chairs   Malcolm Jones, Michael Hsieh
1107-1 15:30~16:00 Keynote	Mouse models of urogenital schistosomiasis: Mimicking the great mimic Michael Hsieh (Schistosomiasis Resource Centre, USA)
<b>1107-2</b> 16:00~16:15	Models for research into hepatic-intestinal schistosomiasis Malcolm Jones (University of Queensland, Australia)
<b>1107-3</b> 16:15~16:30	Co-dispersal of the blood fluke <i>Schistosoma japonicum</i> and <i>Homo sapiens</i> in the Neolithic age Wei Hu (Fudan University, China)
<b>1107-4</b> 16:30~16:45	Comparative analysis on differential expression of <i>Schistosoma japonicum</i> based on proteomic and transcriptomic levels Yamei Jin (Chinese Academy of Agricultural Sciences, China)
<b>1107-5</b> 16:45~17:00	The functional analysis of female-biased miRNAs, miR-Bantam, in the extracellular vesicles of <i>Schistosoma japonicum</i> using the Tough-decoy miRNA blocking system Takashi Kumagai (Tokyo Medical and Dental University, Japan)
<b>1107-6</b> 17:00~17:15	Stem cell-driven development of schistosome host-parasite interfaces Jayhun Lee (Morgridge Institute for Research, USA)
08 Room 322B	The international impact of HERACLES collaborative project on cystic echinococcosis Session Chairs   Adriano Casulli, Paul Torgerson
1108-1 15:30~16:00 Keynote	The socio-economic burden of echinococcosis: Update on global trends Paul Torgerson (University of Zürich, Switzerland)
<b>1108-2</b> 16:00~16:15	The international impact of HERACLES collaborative project on cystic echinococcosis Adirano Casulli (Istituto Superiore di Sanita', Italy)
<b>1108-3</b> 16:15~16:30	The prevalence of abdominal cystic echinococcosis in rural Bulgaria, Romania and Turkey A cross-sectional, ultrasound-based, population study (HERACLES project) Adriano Casulli (Istituto Superiore di Sanita', Italy)
<b>1108-4</b> 16:30~16:45	The European register of cystic echinococcosis (ERCE): Where are we and where to go (HERACLES project) Patrizia Rossi (Italian National Institute of Health, Italy)
<b>1108-5</b> 16:45~17:00	Allocation of Romanian patients to the appropriate treatment in the context of HERACLES project Carmen Michaela Cretu (Carol Davila University of Medicine and Pharmacy, Rumania)
<b>1108-6</b> 17:00~17:15	Impact of the Echino-Biobank (HERACLES project): Bridging the gap in cystic echinococcosis management Mar Siles-Lucas (IRNASA-CSIC, Spain)
<b>1108-7</b> 17:15~17:30	Proteomic investigation of exosomes from patients with cystic echinococcosis (HERACLES project) Mar Siles-Lucas (IRNASA-CSIC, Spain)

109 Room 323A	Parasites of fish and marine animals Session Chairs   Nathan Bott, Cecile Reed
<b>1109-1</b> 15:30~15:45	Parasites as biotags in Southern African applied marine research Cecile Reed (University of Cape Town, South Africa)
<b>1109-2</b> 15:45~16:00	New record of <i>Argulus indicus</i> (Crustacea: Branchiura) infestation on red tilapia ( <i>Oreochromis niloticus</i> x <i>Oreochromis mosambicus</i> ) in Thailand Supamas Sriwongpuk (Rajamangala University of Technology Thanyaburi, Thailand)
<b>1109-3</b> 16:00~16:15	Natural infestation and description of <i>Argulus indicus</i> parasitic on the skin of some freshwater fishes from Chiang Mai province, Thailand Worawit Maneepitaksanti (Chiang Mai University, Thailand)
<b>1109-4</b> 16:15~16:30	The use of DNA-based methods to detect <i>Miamiensis avidus</i> in biofouling from Southern bluefin tuna ranched off Port Lincoln, Australia Nathan Bott (RMIT University, Australia)
<b>1109-5</b> 16:30~16:45	Parasites of <i>Paracentrotus lividus</i> (Echinodermata: Parechinidae) off northwest Portugal, northeast Atlantic waters: A problem to be taken into account in culturing systems? Maria João Santos (Porto University, Portugal)
<b>1109-6</b> 16:45~17:00	Helminths of <i>Antimora</i> Günther, 1878 (Gadiformes: Moridae) in different parts of the habita Ilya Gordeev (Russian Federal Research Institute of Fisheries and Oceanography, Russia)
<b>1109-7</b> 17:00~17:15	Distributions of fish acanthocephalans within the Baikal rift zone Darima Baldanova (Institute of General and Experimental Biology SB RAS, Darima Baldanova)
<b>1109-8</b> 17:15~17:30	A gold mine: A suite of monorchiid species infecting the golden trevally, <i>Gnathanodon speciosus</i> (Forsskål) Nicholas Wee (University of Queensland, Australia)
10 Room 323B	Parasites and microbiome Session Chairs   Tai-Soon Yong, Bong-Soo Kim
1110-1 15:30~16:00 Keynote	Metagenomic studies on the human microbiome Bong-Soo Kim (Hallym University, Korea)
<b>1110-2</b> 16:00~16:15	Host protective immunity against gastrointestinal nematode infection is associated with modulation of the ileum microbiome by Type 2 innate lymphoid cells (ILC2) Robert Li (USDA, USA)
<b>1110-3</b> 16:15~16:30	Comparison of the microbiome of cultivated house dust mites, <i>Dermatophagoides farinae</i> , <i>Dermatophagoides pteronyssinus</i> and <i>Tyrophagus putrescentiae</i> Jinyoung Lee (Yonsei University, Korea)
<b>1110-4</b> 16:30~16:45	Fecal microbiome in healthy subjects and patients with <i>Schistosoma japonicum</i> infection Yanyan Jiang (Chinese Center for Disease Control and Prevention, China)
<b>1110-5</b> 16:45~17:00	Altered gut microbiota composition in <i>Plasmodium falciparum</i> patients in Uganda Tomoyo Taniguchi (Gunma University, Japan)
<b>1110-6</b> 17:00~17:15	The impact of scabies parasites on the healthy human skin microbiota Katja Fischer (QIMR Berghofer Medical Research Institute, Australia)

111 Room 324A	Ecology, evolution and biodiversity of parasites Session Chairs   Masahito Asada, Louis Du Preez
<b>1111-1</b> 15:30~15:45	Community structure of parasites of the invasive alien hosts: The amphibian cases Hsuan-Wien Chen (National Chiayi University, Chinese Taipei)
<b>1111-2</b> 15:45~16:00	Morphology and functioning of attachment organs of the Polystomatidae (Monogenea) Louis Du Preez (North-West University, South Africa)
<b>1111-3</b> 16:00~16:15	New host and record of <i>Deladenus uteropinusus</i> (Tylenchida: Neotylenchidae) from economical Norfolk Island Pine ( <i>Araucaria heterophylla</i> ) in Suthep Pui mountain, Chiang Mai province, Thailand Krannipa Chairat (Chiang Mai University, Thailand)
1111-4 16:15~16:30	Genetic homogeneity of goat malaria parasites in Asia and Africa suggests their expansion with domestic goat host Masahito Asada (Nagasaki University, Japan)
<b>1111-5</b> 16:30~16:45	Imperfect collections, taxonomic detective work, and a potential case of mistaken identity in the genus <i>Koseiria</i> (Digenea: Enenteridae) from Australian Marine waters Daniel Huston (The University of Queensland, Australia)
12 Room 324B	Scientific Writing and finding the best journal for papers on Medical Parasitology Session Chair   Mohammad Bagher Rokni
<b>1112-1</b> 15:30~16:30	Scientific writing and finding the best journal for papers on medical parasitology MB Rokni (Tehran University, Iran)
<b>1112-2</b> 16:30~16:45	Critical points to please an editor to increase the chance of accepting a manuscript Xiao-Nong Zhou (National Institute of Parasitic Diseases at China CDC, China)
<b>1112-3</b> 16:45~17:00	Critical points on writing an abstract Sung-Tae Hong (Seoul National University, Korea)

		Plenary Lecture
PL-01	Room Auditorium	The Good or the bad? What helminths are teaching us
	18:00~18:30	Session Chair   Prof. Hajime Hisaeda

Room **GBR** | 19:00~21:00

Welcome Reception

Day 2 Monday (Aug. 20)

	Plenary Lecture
<b>Room Auditor</b> 08:30~09:00	rium Prof. Alan Cowman (The Walter & Eliza Hall Institute of Medical Research, Australia) Session Chair   Jorgen A. Kurtzhals
-03 Room Auditor 09:00~09:30	rium Foodborne helminthiases: Status and issues Prof. Jong-Yil Chai (Korea Association of Health Promotion, Korea) Session Chair   Malcolm Jones
Room Auditorium	Opening Ceremony
Room <b>GBR</b>   10:00-	~10:30 Coffee Break
	Parallel Oral Session 2
01 Room 325A	Malaria: Understanding host cell biology Session Chairs   Peter Preizer, Matthias Marti
2101-1 10:30~11:00 Keynote	Malaria parasites in the bone marrow niche: Biology and translation Matthias Marti (University of Glasgow, UK)
<b>2101-2</b> 11:00~11:15	Reticulocyte biochemical profiling reveals potential host determinants for <i>Plasmodium</i> infectivity Rajesh Chandramohanadas (SUTD, Singapore)
<b>2101-3</b> 11:15~11:30	<b>CD98 is a host receptor during</b> <i>Plasmodium vivax</i> invasion of human reticulocytes Benoit Malleret (National University of Singapore, Singapore)
<b>2101-4</b> 11:30~11:45	Delayed death in the malaria parasite: Prenylation dependant disruption of intracellular trafficking Kit Kennedy (The University of Melbourne, Australia)
<b>2101-5</b> 11:45~12:00	Export to malaria-infected RBC cytosol of PTP5, a PEXEL protein, is dependent on its C-terminus interaction with PfPV1 derived from merozoite dense granule Masayuki Morita (Ehime University, Japan)
<b>2101-6</b> 12:00~12:15	Comparative mapping of <i>Plasmodium</i> proteomes provides new insights into erythrocyte remodeling Peter Preiser (Nanyang Technological University, Singapore)
02 Room 325B	<b>Pyramax a new fixed-dose ACT to fight against</b> <i>P. falciparum</i> and <i>P. vivax</i> malaria Session Chairs   Jean Bosco, Éric Mukomena Sompwe
2102-1 10:30~11:10 Keynote	TBA Éric Mukomena Sompwe (Ministry of Health, Congo)
<b>2102-2</b> 11:10~11:50	Safety and efficacy of retreatment of acute uncomplicated <i>Plasmodium</i> malaria with pyronaridine-artesunate compared to first line drugs over a two-year period in children and adult patients in West Africa Jean-Bosco Ouedraogo (Institut de Recherche en Sciences de la Santé, Burkina Faso)

2103 Room 320A	Leishmania donovani-induced leishmaniasis: Clinical disease, pathology and pathogenesis Session Chairs   Nadira Karunaweera, Shyam Sundar
2103-1 10:30~11:00 Keynote	Determinants for progression from asymptomatic infection to symptomatic visceral leishmaniasis: A cohort study Shyam Sundar (Banaras Hindu University, India)
<b>2103-2</b> 11:00~11:15	Vector-borne parasitic disease trends in Sri Lanka: Successes and challenges Nadira Karunaweera (University of Colombo, Sri Lanka)
<b>2103-3</b> 11:15~11:30	Combating visceral leishmaniasis: Immunomodulation and disease suppression by homeopathic drug – An experimental study Sukhbir Kaur (Parasitology Laboratory, India)
<b>2103-4</b> 11:30~11:45	Current situation of kala-azar elimination in India and challenges ahead with particular reference to northeastern states Abdul Mabood Khan (ICMR-RMRC, India)
<b>2103-5</b> 11:45~12:00	An attempt towards identification of clinical and genetic determinants of outcome of leishmaniasis in Sri Lanka Nadira Karunaweera (University of Colombo, Sri Lanka)
2104 Room 320B	<i>Toxoplasma</i> : Past and beyond Session Chairs   Hirotaka Kanuka, Yasuhiro Takashima
2104-1 10:30~11:00 Keynote	<i>Toxoplasma gondii</i> infection in domestic animals: Beyond mouse model Yasuhiro Takashima (Gifu University, Japan)
<b>2104-2</b> 11:00~11:15	Critical roles of pyruvate kinases in <i>Toxoplasma</i> central carbon metabolism Bang Shen (Huazhong Agricultural University, China)
<b>2104-3</b> 11:15~11:30	A novel Golgi-resident phosphatidylinositol synthase is essential for the lytic cycle of <i>Toxoplasma gondii</i> Bingjian Ren (Humboldt University of Berlin, Germany)
<b>2104-4</b> 11:30~11:45	An unusual multifunctional protein with P-type ATPase and guanylate cyclase motifs located at the apical end governs the lytic cycle of <i>Toxoplasma gondii</i> Özlem Günay-Esiyok (Humboldt University, Germany)
<b>2104-5</b> 11:45~12:00	Effect of metacytofilin against <i>Toxoplasma gondii</i> : A new drug candidate for toxoplasmosis therapy Yoshifumi Nishikawa (Obihiro University of Agriculture and Veterinary Medicine, Japan)
<b>2104-6</b> 12:00~12:15	An effector IRG is a critical factor mediating interferon - $\gamma$ - induced ubiquitin decoration of <i>Toxoplasma gondii</i> parasitophorous vacuoles Youngae Lee (Osaka University, Japan)
<b>2104-7</b> 12:15~12:30	Manipulation of host Akt signaling pathway benefits <i>Toxoplasma gondii</i> growth in ocular system Guang Ho Cha (Chungnam National University, Korea)

2	2105 Room 321A	Experimental studies of anti-inflammatory properties of helminths Session Chairs   Yoshio Osada, Luis Terrrazas
Day 9	<b>2105-1</b> 10:30~11:10 Keynote	Impact of <i>Taenia crassiceps</i> infection and its excretory - secretory products on the development of inflammatory-mediated diseases Luis I Terrrazas (FES-Iztacala, National University of Mexico, Mexico)
Monday	<b>2105-2</b> 11:10~11:30	Helminth-induced suppression of autoimmunity through activation of regulatory T cells Hajime Hisaeda (National Institute of Infectious Diseases, Japan)
MAIN 201	<b>2105-3</b> 11:30~11:50	Manipulating the host: Investigating intestinal targets of <i>Heligmosomoides polygyrus</i> excretory-secretory products Claire Drurey (University of Glasgow, UK)
	<b>2105-4</b> 11:50~12:10	Proteomic analysis of <i>Necator americanus</i> excretory secretory products and their potential in treating colitis Jayden Logan (James Cook University, Australia)
	<b>2105-5</b> 12:10~12:30	Inverse association between atopy and the presence of <i>Trichuris trichiura</i> infection: A study in urban schoolchildren of Makassar, South Sulawesi, Indonesia Sitti Wahyuni (Hasanuddin University, Indonesia)
2	2106 Room 321B	Molecular helminthology: From genome to structure and function Session Chair   Paul Sternberg
	<b>2106-1</b> 10:30~11:00 Keynote	<i>Caenorhabditis elegans</i> as a platform for comprehensive understanding of nematode biology Paul Sternberg (California Institute of Technology, USA)
	<b>2106-2</b> 11:00~11:15	Helminth glycomics and the role of glycans in host-parasite interaction Cornelis Hokke (Leiden University Medical Center, Netherlands)
	<b>2106-3</b> 11:15~11:30	Recent advances in post-genomic research of socioeconomically important parasitic helminths Erich Schwarz (Cornell University, USA)
	<b>2106-4</b> 11:30~11:45	Small peptide mediated self-recognition prevents cannibalism in predatory nematodes Ralf Sommer (Max Planck Institute for Developmental Biology, Germany)
	<b>2106-5</b> 11:45~12:00	The significance of accurate gene curation for molecular explorations of parasites Andreas Stroehlein (The University of Melbourne, Australia)
	<b>2106-6</b> 12:00~12:15	Absence of meiotic recombination in the sex chromatin of the nematode <i>Strongyloides</i> papillosus Adrian Streit (Max Planck Institute for Developmental Biology, Germany)
	<b>2106-7</b> 12:15~12:30	Genetic variation among liver flukes across an altitudinal gradient in Northeast India Damanbha Lyngdoh (Saint Anthony's College, India)

2107 Room 322A	Food borne zoonotic parasites and One health concept Session Chairs   Pascal Boireau, Liu Mingyuan *Supported by DIM1HEALTH
2107-1 10:30~11:00 Keynote	New challenges in Asia to fight against food-borne zoonotic parasites Liu Mingyuan (Jilin University, China)
<b>2107-2</b> 11:00~11:15	Characterization of antigenic properties of a serine protease of <i>Trichinella spiralis</i> involved in the invasive stage of the parasite Yong Yang (Jilin University, China)
<b>2107-3</b> 11:15~11:30	Effects of <i>Trichinella pseudospiralis</i> serine protease inhibitors on activation and differentiation of macrophages Ning Xu (Jilin University, China)
<b>2107-4</b> 11:30~11:45	Prevalence of <i>Clonorchis sinensis</i> infection in residents and fish in Fuyu City, Jilin Province, China Bin Tang (Jilin University, China)
<b>2107-5</b> 11:45~12:00	"Trichinella world" in Serbia and Southeastern Europe – Under the watchful eye of Europe Ljiljana Sofronic-Milosavljevic (Institute for the Application of Nuclear Energy, University of Belgrade, Serbia)
<b>2107-6</b> 12:00~12:15	Food safety: Detection and identification of parasites in water products by aptamers and LAMP Amandine Hauer (Bioeasy, China)
2108 Room 322B	Parasites of aquatic organisms in a changing world Session Chairs   Simonetta Mattiucci, Arne Levsen
<b>2108-1</b> 10:00~10:30 Keynote	Current range extension of some economically important marine parasites: Assessing possible drivers and impact on fisheries Arne Levsen (Institute of Marine Research, Norway)
<b>2108-2</b> 10:30~11:00 Keynote	Parasite loss or parasite gain? Story of <i>Contracaecum</i> nematodes in antipodean waters Shokoofeh Shamsi (Charles Sturt University, Australia)
<b>2108-3</b> 11:00~11:30 Keynote	The biodiversity of Amazonian fish parasites in Acre State, Brazil: Do land-use and rainfall have an impact? Cláudia Portes Santos (Instituto Oswaldo Cruz, Brazil)
<b>2108-4</b> 11:30~11:45	Marine fish parasites as biological tools in a changing world: What we can expect for the South Eastern Pacific Ocean? Marcelo Oliva (Universidad de Antofagasta, Chile)
<b>2108-5</b> 11:45~12:00	Climate change and parasite transmission in snail hosts inhabiting Humboldt Current System Teresa Gonzalez (University of Antofagasta, Chile)
<b>2108-6</b> 12:15~12:30	Seasonal occurrence of <i>Cardicola orientalis</i> , the blood fluke of Pacific bluefin tuna, in the polychaete intermediate host Kazuo Ogawa (Meguro Parasitological Museum, Japan)
<b>2108-7</b> 12:30~12:45	Molecular diagnostics for verifying an etiological agent of emaciation disease in cultured olive flounder <i>Paralichthys olivaceus</i> in Korea Sang Phil Shin (Jeju National University, Korea)
<b>2108-8</b> 12:45~13:00	Biodiversity of Anisakid nematodes from the Antarctic sea, over a temporal scale level: A tool for monitoring the habitat disturbance of marine ecosystems? Simonetta Mattiucci (Sapienza University of Rome. Italy)

2109 Room 323A	Traditional medicine for parasitic diseases Session Chairs   Kenji Hirayama, Kiichiro Tsutani
<b>2109-1</b> 10:30~11:00 Keynote	Role of government and international academic bodies for rational development and use of traditional medicines (Cancelled) Kiichiro Tsutani (Tokyo Ariake University of Medical and Health Sciences, Japan)
<b>2109-2</b> 11:00~11:15	Japanese herbal medicine (Kampo) based antimalarial drug development Shusaku Mizukami (Nagasaki University, Japan)
<b>2109-3</b> 11:15~11:30	<i>In vivo</i> anthelmintic efficacy of <i>Senna alata</i> against <i>Hymenolepis diminuta</i> (cestode) in rat model Saptarshi Roy (Visva-Bharati University, India)
<b>2109-4</b> 11:30~11:45	<i>In vitro</i> inhibitionof <i>Cryptosporidium parvum</i> by sesquiterpene lactone containing chicory ( <i>Cichorium intybus</i> cv. Spadona) root and leaf extracts lan Woolsey (Norwegian Veterinary Institue, Norway)
<b>2109-5</b> 11:45~12:00	Antimalarial efficacy of <i>Bergenia ciliata</i> (Haw.) Sternb. (Saxifragaceae) used in traditional medicine Neha Walter (Panjab University, India)
2110 Room 323B	Anthelmintic resistance: Problems and solutions Session Chairs   Dante Zarlenga, Roger Prichard
<b>2110-1</b> 10:30~11:15 Keynote	New anthelmintic resistance challenges and opportunities Roger Prichard (McGill University, Canada)
<b>2110-2</b> 11:15~11:40	Targeting detoxification network to increase anthelmintic efficacy in parasitic nematodes Anne Lespine (INRA, France)
<b>2110-3</b> 11:40~12:05	A reverse vaccinology approach for identifying STH vaccine candidates Makedonka Mitreva (Washington University, USA)
<b>2110-4</b> 12:05~12:30	Current status on the development and use of nematode vaccines as an alternative for anthelmintics Peter Geldhof (Ghent University, Belgium)

Day 2 Monday (Aug. 20)

<b>IFTM</b> Room <b>315</b> 10:30~16:30	IFTM 30 <sup>th</sup> Anniversary Symposium on "Parasites and Tropical Medicine" - Challenging human parasitic disease scenarios Session Chairs   Jong-Yil Chai, Joergen Kurtzhals
IFTM-1 10:30~11:00 Keynote	Parasitic diseases in tropical medicine: Past, present and the future challenging scenario Santiago Mas-coma (University of Valencia, Spain), Malcolm Jones (University of Queensland, Australia), Claudio Ribeiro (Laboratory for Malaria Resarch, Brazil)
IFTM-2 11:00~12:00 Keynote	Updating the NTDs WHO roadmap Albis Gabrielli (WHO, Switzerland)
IFTM-3 12:00~12:30 Round Table	Interactive Open Round Table
IFTM Room 315	IFTM 30 <sup>th</sup> Anniversary Symposium on "Parasites and Tropical Medicine" - Malaria in the world today Session Chairs   Shigeyuki Kano, Claudio Ribeiro
IFTM-1 13:30~14:00 Keynote	Epidemiology of malaria in Asia: Spread of artemisinin resistance under low endemic settings Shigeyuki Kano (National Center for Global Health and Medicine, Japan)
IFTM-2 14:00~14:30 Keynote	Zoonotic malaria transmission: A new kind of human malaria in the Brazilian Atlantic fores Claudio Ribeiro (Instituto Oswaldo Cruz, Brazil)
IFTM-3 14:30~15:00 Keynote	Residual malaria transmission and misbehaving in the Lake Victoria basin, Kenya Akira Kaneko (Karolinska Institutet, Sweden)
IFTM-4 15:00~15:30 Round Table	Interactive Open Round Table

		Plenary Lecture
PL-04	Room <b>Auditorium</b> 14:00~14:30	Cell biology & pathogenesis of the human-infective parasite <i>Trichomonas</i> <i>vaginalis</i> Dr. Patricia J. Johnson (University of California, USA) Session Chair   Guadalupe Ortega-Pierres
PL-05	Room <b>Auditorium</b> 14:30~15:00	Protein and lipid trafficking in the pathogenesis of Entamoeba histolytica Prof. Tomoyoshi Nozaki (The University of Tokyo, Japan) Session Chair   Shinjiro Hamano

Room **GBR** | 15:00~15:30

Coffee Break

#### **Parallel Oral Session 3** New insights into malaria immunology and pathogenesis: Lessons from experimental 2201 Room 325A malaria models (2) Session Chairs | Shin-Ichi Inoue, Patrick Duffy 15:30~16:10 Malaria vaccine trials: Bridging animal and human studies 2201-Patrick Duffy (National Institutes of Health, National Institue of Allergy and Infectious Diseases, USA) Keynote Host-parasite relationship in malaria - Parasites' evasion and hosts' protection 2201-2 16:10~16:30 Hajime Hisaeda (National Institute of Infectious Diseases, Japan) $\gamma \delta$ T cell-related protective immunity against *Plasmodium berghei* 2201-3 16:30~16:50 Shin-Ichi Inoue (Kyorin University School of Medicine, Japan) Regulation of the protective immune responses by IL-27 during malaria infection 2201-4 16:50~17:10 Katsuyuki Yui (Nagasaki University, Japan) Regulation of the germinal center reaction during experimental malaria 2201-5 17:10~17:30 Noah Butler (University of Iowa, USA) *Plasmodium vivax* : From basic biology to public health 2202 Room 325B Session Chairs | Ivo Mueller, Wai-Hong Tham 15:30~16:00 A new entry pathway for *Plasmodium vivax* into reticulocytes 2202-Wai-Hong Tham (The Walter and Eliza Hall, Australia) Keynote Integrated transcriptomic, proteomic and epigenomic analysis of *Plasmodium vivax*

Day 2 Monday (Aug. 20)

	Aaron Jex (The Walter and Eliza Hall, Australia)
<b>2202-3</b> 16:15~16:30	Impact of expanding levels of malaria control interventions on <i>Plasmodium vivax</i> : A mathematical modelling study Michael White (Institut Pasteur, France)
<b>2202-4</b> 16:30~16:45	Exosomes in <i>Plasmodium vivax</i> malaria: Why all this excitement? Hernando A del Portillo (Barcelona Institute for Global Health & Institut d'Investigació Germans Trias i Pujol Spain)
<b>2202-5</b> 16:45~17:00	Development of serological markers for detecting recent exposure to <i>Plasmodium vivax</i> malaria Ivo Mueller (The Walter and Eliza Hall, Australia)

salivary gland sporozoites

**2202-2** 16:00~16:15

2202	- 0004
2203	Room 320A

*Leishmania* and *Trypanosoma* : Recent updates Session Chairs | Vikas Kushwaha, Sukhbir Kaur

2203-1	15:30~15:45	Over expression of gene encoding HSP60 of filarial parasite <i>Brugia malayi</i> and its evaluation as a vaccine candidate against visceral leishmaniasis Vikas Kushwaha (Panjab university, India)
2203-2	15:45~16:00	Biochemical characterization, crystal structure and site-directed mutagenesis study of <i>Trypanosoma brucei</i> acetate:succinate CoA transferase Kota Mochizuki (Nagasaki University, Japan)
2203-3	16:00~16:15	Biochemical and structural characterizations of a non-canonical isocitrate dehydrogenase with activity towards NADP and NAD localized in <i>Trypanosoma brucei</i> glycosomes Xinying Wang (The University of Tokyo, Japan)
2203-4	16:15~16:30	The kinetoplast DNA transcriptome and RNA editing in <i>Trypanosoma lewisi</i> , a neglected zoonotic pathogen Su-Jin Li (Sun Yat-sen University, China)
2203-5	16:30~16:45	A mitochondrial malic enzyme is responsible for glucose production and proliferation of <i>Leishmania</i> in low glucose environment Dipon Mondal (Indian Institute of Science Education and Research Kolkata, India)
2203-6	16:45~17:00	Genome structure of the maxicircle of <i>Zelonia australiensis</i> kinetoplast and the evolutionary origins of the Leishmaniinae Alexa Kaufer (University of Technology Sydney, Australia)
2203-7	17:00~17:15	Chromosomal and biological characteristics of blood kissing bugs <i>Triatoma rubrofasciata</i> in Central Vietnam Hieu Ho Viet (Duy Tan University, Vietnam)
2203-8	17:15~17:30	Gamma-glutamylcysteine synthetase and tryparedoxin control the antioxidant system in <i>Trypanosoma cruzi</i> and provide drug resistance and higher infectivity Zabdi González (National Institute of Cardiology, Mexico)

	2204 Room 320B	Trichomoniasis and giardiasis Session Chairs   Soon Jung Park, Jung-Hsiang Tai
Day	2204-1 15:30~16:00 Keynote	Observations on cytoadherence of <i>Trichomonas vaginalis</i> Jung-Hsiang Tai (IBMS, Academia Sinica, Chinese Taipei)
2 Monda	<b>2204-2</b> 16:00~16:15	Epigenome mapping highlights chromatin-mediated gene regulation in the protozoan parasite <i>Trichomonas vaginalis</i> Hyoung Pyo Kim (Yonsei University, Korea)
'(Aug. 20)	<b>2204-3</b> 16:15~16:30	Involvement of mast cell in proliferation of prostate stromal cell in response to <i>Trichomonas vaginalis</i> infection Jae-Sook Ryu (Hanyang University, Korea)
	<b>2204-4</b> 16:30~16:45	Targeting of tail-anchored proteins to <i>T. vaginalis</i> hydrogenosomes Petr Rada (Charles University in Prague, Czech)
	<b>2204-5</b> 16:45~17:00	Determinants of translation efficiency in <i>Trichomonas vaginalis</i> Shuqi Wang (The University of Auckland, New Zealand)
	<b>2204-6</b> 17:00~17:15	Phosphorylation of <i>Giardia lamblia</i> end-binding 1 protein by <i>Giardia lamblia</i> aurora kinase is important in <i>Giardia</i> cytokinesis Juri Kim (Yonsei University, Korea)
	<b>2204-7</b> 17:15~17:30	Advanced CRISPR /Cas9-mediated disruption systems in <i>Giardia lamblia</i> Chin-Hung Sun (National Taiwan University, Chinese Taipei)
	<b>2204-8</b> 17:30~17:45	Prevalence of trichomoniasis in women referred to clinical centers in south of Tehran, Iran during years 2015-2016 Akram AzamBakhtiar (Tehran University of Medical Science, Iran)
	2205 Room 321A	Toxoplasmosis: association with mental disorders and other advances Session Chairs   Olgica Djurkovic, Fabrizio Bruschi
	2205-1 15:30~16:00 Keynote	Toxoplasmosis and brain changes with special emphasis on bipolar disorders Fabrizio Bruschi (PISA, Italy)
	<b>2205-2</b> 16:00~16:15	Transcriptomics reveals roles of Toll-like receptor 2 and CC chemokine receptor 5 against <i>Toxoplasma gondii</i> infection in primary mouse brain cells Kousuke Umeda (Obihiro University of Agriculture and Veterinary Medicine, Japan)
	<b>2205-3</b> 16:15~16:30	<i>Toxoplasma</i> Chinese 1 strain with <i>rop16</i> <sub>1/101</sub> <sup>-/-</sup> and <i>gra15</i> <sub>11</sub> genetic background contributes to abnormal pregnant outcomes in murine model Jilong Shen (Anhui Medical University, China)
	<b>2205-4</b> 16:30~16:45	Companion cats and their owners: Interrelation between seroprevalence of <i>Toxoplasma</i> infection in cats and epidemiological risk factors in owners Bourdeau Patrick (Veterinary School of Nantes - ONIRIS, France)

2206 Room 321 B	Heterophyids and other minute intestinal flukes causing human infections Session Chairs   Jong-Yil Chai, Nattawadee Nantarat
2206-1 15:30~16:00 Keynote	Molecular techniques for the study and diagnosis of trematodes in Family Heterophyidae in Thailand Nattawadee Nantarat (Chiang Mai University, Thailand)
<b>2206-2</b> 16:00~16:30 Keynote	Heterophyid flukes infecting humans in Thailand Jitra Waikagul (Mahidol University, Thailand)
2206-3 16:30~17:00 Keynote	Taxonomy and ecology of <i>Metagonimus</i> species occurring in Korea, Taiwan and Japan Hideto Kino (Hamamatsu University School of Medicine, Japan)
<b>2206-4</b> 17:00~17:20	Heterophyids from fish of the coast of Rio de Janeiro, Brazil Cláudia Portes Santos (Instituto Oswaldo Cruz, Brazil)
2207 Room 322A	Helminth infections in pigs and ruminants: Models for human infections and epidemiology Session Chairs   Stig Milan Thamsborg, Andrew Williams
2207-1 15:30~16:00 Keynote	Interactions between helminths, host diet and microbiota – Insights from pig models Andrew Williams (University of Copenhagen, Denmark)
<b>2207-2</b> 16:00~16:15	The Ascaris-pig infection model to study human ascariasis Peter Geldhof (Ghent University, Belgium)
<b>2207-3</b> 16:15~16:30	Dietary prebiotics and probiotics influence immune responses in helminth-infected pigs Laura Myhill (University of Copenhagen, Denmark)
<b>2207-4</b> 16:30~16:45	A survey of abomasal nematodes in adult dairy cattle Stig Milan Thamsborg (University of Copenhagen, Denmark)
<b>2207-5</b> 16:45~17:00	Studies on gastrointestinal nematodes of alpacas in Australia Abdul Jabbar (University of Melbourne, Australia)
2208 Room 322B	Neglected tropical helminthozoonoses: Emerging diseases in Asia Session Chairs   Veena Tandon, S L Hoti
2208-1 15:30~16:00 Keynote	Zoonotic filarial parasites emerging in new areas: Are we keeping our eyes open? S L Hoti (ICMR-National Institute of Traditional Medicine, India)
<b>2208-2</b> 16:00~16:20	Status of echinostomiasis in India – An emerging foodborne trematodiasis? Sudeep Ghatani (Sikkim University, India)
<b>2208-3</b> 16:20~16:40	Molecular identification and immunopathogenicity of <i>Procerovum varium</i> (Platyhelminthes Trematoda), the causative agent of ocular parasitozoonosis in rural populations of South India Lalan Kumar Arya (Indira Gandhi Institute of Medical Sciences, India)
<b>2208-4</b> 16:40~17:00	Indian herbal remedies against neglected helminthozoonoses: Leads from traditionally used medicinal plants Arun K. Yadav (North-Eastern Hill University, India)

Day 2	
Monday (Aug. 2	

209 Room 323A	Wolbachia and other endosymbionts of parasites Session Chairs   Wieslaw Kozek, Joseph Turner
2209-1 15:30~16:00 Keynote	Wolbachia as a target for anti-filarial therapy Joseph Turner (Liverpool School of Tropical Medicine, UK)
<b>2209-2</b> 16:00~16:15	Small but obligate: What narrates <i>Wolbachia</i> genomes from filarial nematodes Emilie Lefoulon (New England Blolabs, USA)
<b>2209-3</b> 16:15~16:30	Prokaryote-helminth associations and their aftermaths Wieslaw Kozek (University of Puerto Rico, Puerto Rico)
<b>2209-4</b> 16:30~16:45	Molecular evidence for new sympatric cryptic species of <i>Aedes albopictus</i> (Diptera: Culicidae) in China: A new threat from <i>Aedes albopictus</i> subgroup? Xueli Zheng (Southern Medical University, China)
<b>2209-5</b> 16:45~17:00	Molecular identification of tick-borne pathogens in ticks collected from dogs, horses and migratory birds from the Republic of Korea Yun Sang Cho (Animal and Plant Quarantine Agency, Korea)
210 Room 323B	Arthropods and allergy: 40 <sup>th</sup> Yonsei Trop Med Symposium / 2nd Joint symposium Mahidol and Yonsei Session Chairs   Anchalee Tungtrongchitr, Stephen Kwok-Wing Tsui
2210-1 15:30~16:00 Keynote	The genomes and microbiomes of <i>Dermatophagoides farinae</i> and <i>Dermatophagoides</i> <i>pteronyssinus</i> reveal a broad spectrum of dust mite allergens Stephen Kwok-Wing Tsui (The Chinese University of Hong Kong, Hong Kong)
<b>2210-2</b> 16:00~16:30 Keynote	Anaphylaxis due to stinging insect allergy Yong Won Lee (Catholic Kwandong University, International St.Mary's Hospital, Korea)
<b>2210-3</b> 16:30~16:45	Concordance of skin prick test and serum specific-IgE to locally produced-component- resolved diagnostics for American cockroach allergy Anchalee Tungtrongchitr (Mahidol University, Thailand)
<b>2210-4</b> 16:45~17:00	House dust mite allergen sensitization profile and clinical implication Kyoung Yong Jeong (Yonsei University, Korea)
<b>2210-5</b> 17:00~17:15	Helminth immunomodulation in arthropod allergy Monrat Chulanetra (Mahidol University, Faculty of Medicine Siriraj Hospital, Thailand)
<b>2210-6</b> 17:15~17:30	Effects of the Th2-dominant milieu on allergic responses in Der f 1-activated mouse basophils and mast cells Myunghee Yi (Yonsei University, Korea)

2211 Room 324B	Anthelminthics development: Genetics and drug targeting Session Chairs   Philip T. Loverde, James Cotton
2211-1 15:30~16:00 Keynote	Genomics approaches to anthelminthic drug resistance James Cotton (Wellcome Sanger Institute, UK)
<b>2211-2</b> 16:00~16:30	Using an iterative process in the development of novel therapeutics to treat human schistosomiasis Philip Loverde (University of Texas Health Science Center, USA)
<b>2211-3</b> 16:30~17:00	Molecular characterization of $\alpha$ - and $\beta$ -tubulin genes of Australian Fasciola hepatica isolates with various levels of triclabendazole resistance Sarah George (University of Sydney, Australia)
IFTM Room 315	IFTM 30 <sup>th</sup> Anniversary Symposium on "Parasites and Tropical Medicin" - Neglected Tropical Diseases (NTDs) caused by Parasites Session Chairs   Malcolm Jones, Momar Ndao
IFTM-1 15:50~16:20 Keynote	Schistosomiasis in Africa Louis Albert Tchuem-Tchuenté (University of Yaoundé I, Cameroon)
IFTM-2 16:20~16:50 Keynote	Giardia duodenalis: role of virulence factors secreted by this parasite in the interaction with epithelial cells Guadalupe Ortega-Pierres (Centro de Investigación y de Estudios Avanzados IPN, Mexico)
IFTM-3 16:50~17:20 Keynote	Neurological affection in human fascioliasis: direct and indirect causes and clinical repercussions Santiago Mas-Coma (University of Valencia, Spain)
IFTM-4 17:20~17:50 Round Table	Interactive Open Round Table

	Plenary Lecture
PL-06 Room Audito 08:30~09:00	The fibrinolytic system is essential for <i>Plasmodium</i> infection of its mosquito vector and its mammalian host Prof. Marcelo Jacobs-Lorena (Johns Hopkins Bloomberg School of Public Health, USA) Session Chair   Tai-Soon Yong
PL-07 Room Audito 09:00~09:30	rium Taeniasis and cysticercosis with a historical review on <i>Taenia asiatica</i> Prof. Keeseon S. Eom (Chungbuk National University, Korea) Session Chair   Ana Flisser
Room <b>GBR</b>   09:30	~10:00 Coffee Break
	Parallel Oral Session 4
3101 Room 325A	Liver stage biology of malaria parasites Session Chairs   Sattabongkot Jetsumon, Tomoko Ishino
<b>3101-1</b> 10:00~10:30 Keynote	Involvement of <i>Plasmodium</i> rhoptry proteins in sporozoite invasion of mammalian hepatocyte Tomoko Ishino (Ehime University, Japan)
<b>3101-2</b> 10:30~10:55	A new human receptor interaction for PfTRAP identifies a site of vulnerability for vaccine design Noah Sather (Center for Infectious Disease Research, USA)
<b>3101-3</b> 10:55~11:20	Harnessing animal models for studying human malaria pre-erythrocytic stages Brandon Sack (Center for Infectious Disease Research/NAMRU6, USA)
<b>3101-4</b> 11:20~11:45	<i>Plasmodium vivax</i> hypnozoite formation, growth and reactivation <i>in vivo</i> in a human-liver chimeric mouse Sebastian Mikolajczak (CIDR, USA)
<b>3101-5</b> 11:45~12:00	Localization of rhoptry-neck protein 2 in <i>Plasmodium vivax</i> liver stage and hypnozoite formation in huHep mice Chonnipa Praikongkatham (Mahidol University, Thailand)
8102 Room 325B	Non-human primate malaria: As models for investigating human disease Session Chairs   Bruce Russell, Robert Moon
3102-1 10:00~10:30 Keynote	Rapid, iterative and scalable CRISPR-Cas9 genome editing in <i>Plasmodium knowlesi</i> : New tools for invasion biology and <i>P. vivax</i> vaccine research Robert Moon (London School of Hygiene and Tropical Medicine, UK)
<b>3102-2</b> 10:30~10:45	Investigating the invasion biology of <i>P. vivax</i> using its sister species, <i>P. cynomolgi</i> Jie Ying (Jessica) Ong (University of Otago, New Zealand)
<b>3102-3</b> 10:45~11:00	Biomarkers of severe malaria in <i>Plasmodium coatneyi</i> infected <i>Rhesus macaques</i> Benoit Malleret (National University of Singapore, Singapore)
<b>3102-4</b> 11:00~11:15	Cross-species reactivity of <i>Plasmodium vivax</i> and <i>P. knowlesi</i> : The possibility of cross- protection in patients living in endemic area Fauzi Muh (Kangwon National University, Korea)
<b>3102-5</b> 11:15~11:30	The rheopathobiology of zoonotic primate malaria parasites Bruce Russell (University of Otago, New Zealand)

103 Room 320A	Leishmania and Trypanosoma : Toward new interventions Session Chairs   Joo Hwan No, Jean-Robert loset *Supported by Institut Pasteur Korea (IP-K)
<b>3103-1</b> 10:00 ~ 10:30 Keynote	Catalyzing research and development for neglected patients: The DND <i>i</i> model Jean-Robert loset (DNDi, Switzerland)
<b>3103-2</b> 10:30~10:45	Development of a nanobody-based lateral flow assay for the detection and diagnosis of trypanosomiasis Stefan Magez (Ghent University Global Campus, Korea)
<b>3103-3</b> 10:45~11:00	DDD853651, a pre-clinical candidate for visceral leishmaniasis, acts through inhibition of cyclin-dependent kinase 12 Susan Wyllie (University of Dundee, UK)
<b>3103-4</b> 11:00~11:15	Innovative <i>in vitro</i> approaches for <i>T. cruzi</i> drug discovery: Evaluation of replication rates and prediction of putative cytochrome P450 inhibition Vicky Avery (Griffith University, Australia)
<b>3103-5</b> 11:15~11:30	Deciphering fundamental mechanisms in leishmaniasis: From pathways to drug discovery David Shum (Institut Pasteur Korea, Korea)
<b>3103-6</b> 11:30~11:45	Loop-mediated isothermal amplification (LAMP) assay for rapid diagnosis of <i>Trypanosoma</i> <i>equiperdum</i> in South Africa Malitaba Mlangeni (North-West University, South Africa)
104 Room 320B	Manipulations of host functions by protozoan parasites Session Chairs   Young Ha Lee, Juan-Hua Quan
<b>3104-1</b> 10:00~10:30 Keynote	Modulation of host apoptotic pathways by <i>Toxoplasma gondii</i> Juan-Hua Quan (Affiliated Hospital of Guangdong Medical University, China)
<b>3104-2</b> 10:30~10:45	<i>Trichomonas vaginalis</i> induces apoptosis in human cervical carcinoma SiHa cells through ROS-mediated DNA damage and NF-κB inactivation Young-Ha Lee (Chungnam National University, Korea)
<b>3104-3</b> 10:45~11:00	Inhibition of dihydrofolate reductase gene expression in <i>Toxoplasma gondii</i> using siRNA and its effect on acute toxoplasmosis in mouse model Abbasali Eskandarian (Isfahan University of Medical Sciences, Iran)
<b>3104-4</b> 11:00~11:15	The distribution of <i>Toxoplasma gondii</i> cysts and their interaction with glial cells in the retina in chronic ocular toxoplasmosis Hyun Beom Song (Seoul National University, Korea)
<b>3104-5</b> 11:15~11:30	<i>Toxoplasma gondii</i> effectors differentially target host IDO1 to antagonize the IFN-y-induced anti - <i>T. gondii</i> response in human cells Hironori Bando (Research Institute for Microbial Diseases Osaka University, Japan)
<b>3104-6</b> 11:30~11:45	The effect of normal human serum on mouse <i>Trypanosoma musculi</i> and rat <i>Trypanosoma lewisi</i> Zhao-Rong Lun (Sun Yat-Sen University, China)

3105 Room 321A	Treatment of Chagas disease Session Chair   Werner Apt
<b>3105-1</b> 10:00~10:30 Keynote	Update treatment of Chagas disease Werner Apt (University of Chile, Chile)
<b>3105-2</b> 10:30~10:55	Congenital Chagas disease: Advances in diagnosis and treatment, prevention measures to avoid transmission Jaime Altcheh (Ricardo Gutiérrez Children's Hospital, Argentina)
<b>3105-3</b> 10:55~11:10	Chronic Chagas disease treatment with nifurtimox: An experience of prolonged parasitological follow-up Ines Zulantay (University of Chile, Chile)
<b>3105-4</b> 11:10~11:25	Followup study during and after two month regimen of benznidazole in pediatric chronic Chagas patients in Bolivia Clara Alejandra Vasquez Velasquez (Institute of Tropical Medicine, Nagasaki University, Japan)
<b>3105-5</b> 11:25~11:40	Microscopy-based observations of <i>Trypanosoma cruzi</i> egress Éden Ferreira (Federal University of São Paulo, Brazil)
3106 Room 321B	Drug resistance in <i>Giardia</i> : Mechanisms and alternatives Session Chairs   Guadalupe Ortega Pierres, Aaron Jex
<b>3106-1</b> 10:00~10:40 Keynote	Application of systems biology to exploring metronidazole resistance in <i>Giardia</i> Aaron Jex (Walter and Eliza Hall Institute of Medical Research, Australia)
<b>3106-2</b> 10:40~11:00	Epigenetic and post-translational modification networks in metronidazole drug-resistance in <i>Giardia duodenalis</i> Samantha Emery-Corbin (Walter and Eliza Hall Institute of Medical Research, Australia)
<b>3106-3</b> 11:00~11:20	Old and next generation nitroimidazoles as leads for metronidazole-sensitive and -resistant Giardia Anjan Debnath (University of California San Diego, USA)
<b>3106-4</b> 11:20~11:40	Thioallyl compounds from garlic induce damage in <i>Giardia dudodenalis</i> trophozoites and reduce parasite loads in experimental giardiasis M. Guadalupe Ortega-Pierres (Centro de Investigación y de estudios Avanzados IPN, Mexico)
<b>3106-5</b> 11:40~12:00	<i>In vitro</i> and <i>in vivo</i> evaluation of novel compounds active against <i>Giardia duodenalis</i> Christopher Hart (Griffith Institute for Drug Discovery, Australia)

3107 Room 322A	Recent advances in Acanthamoeba research Session Chairs   Julia Walochnik, Naveed Khan
<b>3107-1</b> 10:00~10:30 Keynote	Pathogenic free-living amoebae: Emerging problem with fatal consequences Naveed Khan (Sunway University, Malaysia)
<b>3107-2</b> 10:30~11:00 Keynote	Evolution of the mitochondrial genome and the mitochondrial proteome within <i>Acanthamoeba</i> Paul Fuerst (The Ohio State University, USA)
<b>3107-3</b> 11:00~11:15	Identification and characterization of sirtuin in the growth and encystation of <i>Acanthamoeba</i> Yeonchul Hong (Kyungpook National University, Korea)
<b>3107-4</b> 11:15~11:30	Establishment of mouse model for acanthamoebic keratitis HeeKyoung Kang (Ajou University, Korea)
<b>3107-5</b> 11:30~11:45	Application of microneedle with sustained drug release to treat <i>Acanthamoeba</i> keratitis Hyun Beom Song (Seoul National University, Korea)
<b>3107-6</b> 11:45~12:00	Anti- <i>Acanthamoeba</i> strategies: Disinfection and treatment Julia Walochnik (Medical University of Vienna, Austria)
3108 Room 322B	Babesiosis: From basic to applied aspects Session Chairs   Xuenan Xuan, Ikuo Igarashi
3108 Room 322B 3108-1 10:00~10:30 Keynote	Babesiosis: From basic to applied aspects         Session Chairs   Xuenan Xuan, Ikuo Igarashi         Developmentof novel diagnostic methods and drugs for babesiosis         Ikuo Igarashi (Obihiro University of Agriculture and Veterinary Medicine, Japan)
3108         Room 322B           3108-1         10:00~10:30           Keynote         10:30~10:45	Babesiosis: From basic to applied aspects         Session Chairs   Xuenan Xuan, Ikuo Igarashi         Developmentof novel diagnostic methods and drugs for babesiosis         Ikuo Igarashi (Obihiro University of Agriculture and Veterinary Medicine, Japan)         Phylogenetic analysis of a Babesia species found specifically in wild boars (Sus scrofa) in Wakayama and Kochi Prefecture, Japan         Fumi Murakoshi (Kyoto Prefectural University of Medicine, Japan)
3108       Room 322B         3108-1       10:00~10:30         Keynote       10:30~10:45         3108-2       10:30~10:45         3108-3       10:45~11:00	Babesiosis: From basic to applied aspects         Session Chairs   Xuenan Xuan, Ikuo Igarashi         Developmentof novel diagnostic methods and drugs for babesiosis         Ikuo Igarashi (Obihiro University of Agriculture and Veterinary Medicine, Japan)         Phylogenetic analysis of a Babesia species found specifically in wild boars (Sus scrofa) in Wakayama and Kochi Prefecture, Japan         Fumi Murakoshi (Kyoto Prefectural University of Medicine, Japan)         Evaluation of serum biochemical parameters levels in Babesia ovis-infected and healthy sheep         Mohammad Taghi Ahady (Ardabil Branch, Islamic Azad University, Iran)
3108       Room 322B         3108-1       10:00~10:30         Keynote       10:30~10:45         3108-2       10:30~10:45         3108-3       10:45~11:00         3108-4       11:00~11:15	Babesiosis: From basic to applied aspects         Session Chairs   Xuenan Xuan, Ikuo Igarashi         Developmentof novel diagnostic methods and drugs for babesiosis         Ikuo Igarashi (Obihiro University of Agriculture and Veterinary Medicine, Japan)         Phylogenetic analysis of a Babesia species found specifically in wild boars (Sus scrofa) in Wakayama and Kochi Prefecture, Japan         Fumi Murakoshi (Kyoto Prefectural University of Medicine, Japan)         Evaluation of serum biochemical parameters levels in Babesia ovis-infected and healthy sheep         Mohammad Taghi Ahady (Ardabil Branch, Islamic Azad University, Iran)         Babesia ovis : The principal tick-borne pathogen of sheep         Ferda Sevinc (Selcuk University, Turkey)
3108       Room 322B         3108-1       10:00~10:30         Keynote       10:30~10:45         3108-2       10:30~10:45         3108-3       10:45~11:00         3108-4       11:00~11:15         3108-5       11:15~11:30	Babesiosis: From basic to applied aspects         Session Chairs   Xuenan Xuan, Ikuo Igarashi         Developmentof novel diagnostic methods and drugs for babesiosis         Ikuo Igarashi (Obihiro University of Agriculture and Veterinary Medicine, Japan)         Phylogenetic analysis of a Babesia species found specifically in wild boars (Sus scrofa) in Wakayama and Kochi Prefecture, Japan         Fumi Murakoshi (Kyoto Prefecture, Japan)         Evaluation of serum biochemical parameters levels in Babesia ovis-infected and healthy sheep         Mohammad Taghi Ahady (Ardabil Branch, Islamic Azad University, Iran)         Babesia ovis : The principal tick-borne pathogen of sheep         Ferda Sevinc (Selcuk University, Turkey)         Molecular mechanisms involved in chaperoning activity of 2-Cys peroxiredoxins of Babesia microti (BmPrxs)         Houshuang Zhang (Shanghai Veterinary Research Institute, Chinese Academy of Agricultural Sciences, China)

3109 Room 323A	Towards a future free from female and male genital schistosomiasis Session Chairs   Russell Stothard, Alan Fenwick
<b>3109-1</b> 10:00~10:30 Keynote	Female genital schistosomiasis: A common sexual and reproductive health problem in sub Saharan Africa misunderstood, under-researched and under-reported Margaret Gyapong (University of Health and Allied Sciences, Ghana)
<b>3109-2</b> 10:30~10:45	Molecular diagnosis of urogenital schistosomiasis Jaco J. Verweij (ElisabethTweesteden Hospital, Netherlands)
<b>3109-3</b> 10:45~11:00	A urologic perspective of male genital schistosomiasis Michael Hsieh (George Washington University, USA)
<b>3109-4</b> 11:00~11:15	The effective factors towards elimination of urinary schistosomiasis in Iran with regards to its historical documents and experiences Gholamreza Mowlavi (Tehran University of Medical Sciences, Iran)
3110 Room 323B	TaRG joint symposium on taeinasis and cysticercosis (1) Session Chairs   Keeseon Eom, M. Teresa Galán-Puchades
<b>3110-1</b> 10:00~10:30 Keynote	<i>Taenia asiatica</i> : A journey from remote areas of Taiwan to Science and Nature M. Teresa Galán-Puchades (University of Valencia, Spain)
<b>3110-2</b> 10:30~10:45	A historical review on molecular approaches to <i>Taenia asiatica</i> Hyeong-Kyu Jeon (Chungbuk National University, Korea)
<b>3110-3</b> 10:45~11:00	Genetic relationship between <i>Taenia saginata, Taenia asiatica</i> and their hybrids Munehiro Okamoto (Primate Research Institute, Kyoto University, Japan)
<b>3110-4</b> 11:00~11:15	Taeniasis-neurocysticercosis in Ecuador-South America: Still a public health problem Manuel Calvopina (Universidad de Las Américas, Ecuador)
<b>3110-5</b> 11:15~11:30	<i>Taenia asiatica</i> infection in Japan: Current status and the origin of etiologic agent Hiroshi Yamasaki (National Institute of Infectious Diseases, Japan)
<b>3110-6</b> 11:30~11:45	The origin of <i>Taenia asiatica</i> : Out of Africa? Dongmin Lee (Chungbuk National University, Korea)
<b>3110-7</b> 11:45~12:00	Phylogenetic relationship of genus <i>Taenia</i> based on morphologic and molecular analysis Hansol Park (Chungbuk National University, Korea)

3111 Room 324A	Anti-tick vaccines Session Chairs   Consuelo Almazan, Isabel Santos
<b>3111-1</b> 10:00~10:30 Keynote	A decavalent vaccine based on recombinant tick salivary proteins decreases successive infestations with <i>Rhipicephalus microplus</i> in cattle Isabel Santos (Ribeirão Preto School of Medicine University of São Paulo, Brazil)
<b>3111-2</b> 10:30~10:45	An update on tick vaccines against the most important hard tick vectors of humans, domestic, and wild animals Consuelo Almazan (UMR BIPAR INRA, ANSES, ENVA, Universite Paris EST, France)
<b>3111-3</b> 10:45~11:00	Oogenesis in a parthenogenetic tick, <i>Haemaphysalis longicornis</i> Rika Umemiya-Shirafuji (Obihiro University of Agriculture and Veterinary Medicine, Japan)
<b>3111-4</b> 11:00~11:15	<i>In vitro</i> feeding – A gateway towards new discoveries in the physiology of hard ticks Petr Kopacek (Biology Centre, CAS, Czech)
<b>3111-5</b> 11:15~11:30	A current perspective on tick digestive peptidases Daniel Sojka (Biology Centre of the Czech Academy of Sciences, v.v.i., Czech)
<b>3111-6</b> 11:30~11:45	Immuno-bioinformatics strategies for the development of vaccines against <i>Rhipicephalus</i> ticks in Mexico Juan Mosqueda (Autonomous University of Queretaro, Mexico)
<b>3111-7</b> 11:45~12:00	Risk assessment of genetically modified mosquitoes for vector control Pascal Boireau (ANSES, France)
<b>3111-8</b> 12:00~12:30	Target Malaria: Step-wise development of genetic mosquito control, from lab to field Samantha O'Loughlin (Imperial College London, UK)

3112 Room 324B	A global perspective on ancient parasites: Current research projects (1) Session Chairs   Karl Reinhard, Alena Mayo Iñiguez
<b>3112-1</b> 10:00~10:30 Keynote	Archaeology, parasitology and the prehistoric ecology of infection Karl Reinhard (University of Nebraska - Lincoln, USA)
<b>3112-2</b> 10:30~10:45	Multidisciplinary paleoparasitology in South America Alena Iñiguez (FIOCRUZ, Brazil)
<b>3112-3</b> 10:45~11:00	Ancient parasitism of hunter-gatherers and agrarians Sergey Slepchenko (Tyumen Scientific Centre of Siberian Branch of the Russian Academy of Sciences, Russia)
<b>3112-4</b> 11:00~11:15	Diet and parasitism as causes of ancestral Pueblo anemia Morgana Camacho (Instituto Oswaldo Cruz, Fundação Oswaldo Cruz, Brazil)
<b>3112-5</b> 11:15~11:30	Zoonotic risk of human-dog association in ancient Mexico Johnica Morrow (Chadron State College, USA)
<b>3112-6</b> 11:30~11:45	Detection of arthropods by PCR in experimental coprolites Elisa Pucu (Universidade Federal Fluminense, Brazil)
<b>3112-7</b> 11:45~12:00	Capillariidae diversity in archeological samples Alena Iñiguez (FIOCRUZ, Brazil)
<b>3112-8</b> 12:00~12:15	Paleoparasitological and paleogenetical findings in Gruta Do Gentio II archeological site (12,000 - 3,500 BP), Brazil Alena Iñiguez (FIOCRUZ, Brazil)
IFTM Room 315	IFTM 30 <sup>th</sup> Anniversary Symposium on "Parasites and Tropical Medicine" - Vector-borne diseases and climate and global changes Session Chairs   Aileen Marty, Santiago Mas-coma
IFTM-1 10:30~11:00 Keynote	Aedes misquito-borne Zika, Dengue and Chikungunya: 'Fight the bite', the Miami experience Aileen Marty (FIU Health, USA)
IFTM-2 11:00~11:30 Keynote	Trypanosomiasis: Neglected, needs, new Lucille Blumberg (National Institute for Communicable Diseases, South Africa)
IFTM-3 11:30~12:00 Keynote	Phylogenetic relationships and phylogeographic patters in Chagas diseases vector Maria Dolores Bargues (University of Valencia, Spain)
IFTM-4 12:00~12:30 Round Table	Interactive Open Round Table

		Se	etellite Meetings
S.M	Room 306A / 306B	10:00~12:30	NTD Asia 2018

	Plenary Lecture
<b>Room Auditor</b> 13:00~14:00	ium Prof. Margaret Gyapong (University of Health and Allied Sciences, Ghana) Session Chair   Russell Stothard
Boom <b>GBB</b>   14:00	14-20 Coffee Break
	Unice break
	Parallel Oral Session 5
201 Room 325A	Malaria: Modification of target gene and application to parasite Session Chairs   Qingfeng Zhang, Manoj Duraisingh
<b>3201-1</b> 14:20~14:50 Keynote	Genetic dissection of host and parasite determinants of erythrocyte invasion by malaria parasites Manoj Duraisingh (Harvard University, USA)
<b>3201-2</b> 14:50~15:05	${\rm GC}\beta$ polarization initiates ookinete gliding of malaria parasite Yuan Jing (Xiamen University, China)
<b>3201-3</b> 15:05~15:20	Combining reverse genetics and live cell imaging to dissect <i>Plasmodium knowlesi</i> invasion of red blood cells Melissa Hart (London School of Hygiene and Tropical Medicine, UK)
<b>3201-4</b> 15:20~15:35	The RNA-binding KH domains are indispensable for transcriptional activity of PREBP, the unique transcriptional factor of <i>Plasmodium falciparum</i> Kanako Komaki-Yasuda (National Center for Global Health and Medicine, Japan)
202 Room 325B	The identification of new protective antigens and correlates of protection against malaria Session Chairs   Laurent Renia, James Beeson
<b>3202-1</b> 14:20~14:50 Keynote	Targets of functional protective antibodies in human immunity to malaria James Beeson (Burnet Institute, Australia)
<b>3202-2</b> 14:50~15:05	Naturally acquired antibody responses to PfEMP1 domains reveal potential protective targets of immunity in malaria Bernard N. Kanoi (Ehime University, Japan)
<b>3202-3</b> 15:05~15:20	Screening and identification of potential novel biomarkers for complicated <i>Plasmodium vivax</i> malaria diagnosis Hargobinder Kaur (PGIMER, India)
<b>3202-4</b> 15:20~15:35	Systematic approach to studying variant surface antigens in rodent malaria parasites Han Ping Loh (Nanyang Technological University, Singapore)
<b>3202-5</b> 15:35~15:50	Tim-3 signaling blockade improves cell-mediated immunity against malaria and facilitates elimination of parasites Nan Hou (Chinese Academy of Medical Sciences & Pecking Union Medical College, China)

3203 Room 320A	Molecular epidemiology and genomics of <i>Trypanosoma cruzi</i> Session Chairs   Juan David Ramírez González, Bjorn Andersson
<b>3203-1</b> 14:20~14:50 Keynote	Comparative genomics sheds light on antigenic variation in <i>Trypanosoma cruzi</i> Bjorn Andersson (Karolinska Institutet, Sweden)
<b>3203-2</b> 14:50~15:05	Purification of <i>Trypanosoma cruzi</i> metacyclic trypomastigotes from LIT culture byion exchange chromatography in sepharose-DEA Juan David Ramírez (Universidad del Rosario, Colombia)
3204 Room 320B	Epidemiolopgy, diagnosis and genetics of <i>Toxoplasma gondii</i> Session Chairs   Pikka Jokelainen, Motomichi Matsuzaki
<b>3204-1</b> 14:20~14:35	Repeated serological testing for <i>Toxoplasma gondii</i> : Do the patterns seen in a large sample fit with the presumed life-long seropositivity after infection? Pikka Jokelainen (Statens Serum Institut, Denmark)
<b>3204-2</b> 14:35~14:50	Seroprevalence of <i>Toxoplasma gondii</i> in Romanian patients with pulmonary diseases Maria Alina Lupu ("Victor Babes" University of Medicine and Pharmacy Timisoara, Roumania)
<b>3204-3</b> 14:50~15:05	Prevalence of toxoplasmosis and risk factors for infection in healthy men Milena Stopic (Institute for Medical Research, Serbia)
<b>3204-4</b> 15:05~15:20	Burden of toxoplasmosis and prevention of disease in transplant recipients: A European study Florence Robert-Gangneux (University Rennes 1, France)
<b>3204-5</b> 15:20~15:35	Detection and genotype determination of <i>Toxoplasma gondii</i> in atypical uveitis cases Agnes Kurniawan (Universitas Indonesia, Indonesia)
<b>3204-6</b> 15:35~15:50	Population structure of <i>Toxoplasma gondii</i> in Serbia Aleksandra Uzelac (Institute for Medical Research, University of Belgrade, Serbia)
<b>3204-7</b> 15:50~16:05	The seventh "clade" of <i>Toxoplasma gondii</i> excavated by genome-wide SNP analysis of Japanese isolates Motomichi Matsuzaki (National Institute of Infectious Diseases, Japan)
<b>3204-8</b> 16:05~16:15	Seroprevalence, associated risk factors and hematological impacts of toxoplasmosis in small ruminants of Multan, Pakistan Mian Muhammad Awais (Bahauddin Zakariya University, Pakistan)

3205 Room 321A	New insights in the pathophysiology of giardiasis Session Chairs   Guadalupe Ortega Pierres, Staffan Svärd
<b>3205-1</b> 14:20~14:45	From proteomics to pathogenesis Kevin Tyler (UEA, UK)
<b>3205-2</b> 14:45~15:10	Giardipain-1 from <i>Giardia duodenalis</i> causes damage to epithelial cells both <i>in vitro</i> in cell monolayers and <i>in vivo</i> in a ligated gerbil duodenal loop model Guadalupe Ortega-Pierres (Centro de Investigación y de Estudios Avanzados IPN, Mexico)
<b>3205-3</b> 15:10~15:35	The Giardia secretome and its role during Giardia-host cell interactions Staffan Svärd (Uppsala University, Sweden)
<b>3205-4</b> 15:35~16:00	Variability in giardiasis: Roles for immune responses and microbiota Steven Singer (Georgetown University, USA)
<b>3205-5</b> 16:00~16:25	Interactions of <i>Giardia</i> with intestinal microbiome, mucus and tissue barriers Thibault Allain (University of Calgary, Canada)
3206 Room 321B	Water and foodborne protists Session Chairs   Monica Santin, Sonia Almeria
<b>3206-1</b> 14:20~14:50 Keynote	<i>Cyclospora cayetanensis</i> : Molecular detection of an emerging global parasite Sonia Almeria (U.S. FDA, USA)
<b>3206-2</b> 14:50~15:05	Advances in epidemiological characterization of <i>Blastocystis</i> in livestock and its implications in public health Monica Santin (USDA, USA)
<b>3206-3</b> 15:05~15:20	Comparative genomics of an emerging <i>Cryptosporidium hominis</i> outbreak subtype Lihua Xiao (East China University of Science and Technology, China)
<b>3206-4</b> 15:20~15:35	Metagenomic analysis of <i>Cryptosporidium</i> species and genotypes in wastewater treatment plants Una Ryan (Murdoch University, Australia)
<b>3206-5</b> 15:35~15:50	Quantifying the comprehensive burden of <i>Cryptosporidium</i> diarrhea: Morbidity, mortality and long-term consequences of infection among children under 5 Ali Mokdad (University of Washington, USA)
<b>3206-6</b> 15:50~16:05	Prevalence of <i>Blastocystis</i> sp. among adolescence with irritable bowel syndrome in South Sumatra, Indonesia and evaluation of treatment strategy Yudianita Kesuma (Universitas Sriwijaya, Indonesia)

3207 Room 322A	Environmental and transmission surveillance of schistosomiasis Session Chairs   Russell Stothard, Louis-Albert Tchuem Tchuenté
<b>3207-1</b> 14:20~14:50 Keynote	Better understand the transmission of schistosomiasis for optimized interventions Louis-Albert Tchuem Tchuenté (University of Yaoundé I, Cameroon)
<b>3207-2</b> 14:50~15:05	The integrated strategy applied in the China-Zanzibar pilot project to eliminate schistosomiasis Xiao-Nong Zhou (National Institute of Parasitic Diseases at China CDC, China)
<b>3207-3</b> 15:05~15:20	Significance of echogenic snow sign as an ultrasonography finding for diagnosis of urogenital schistosomiasis Sung-Tae Hong (Seoul National University, Korea)
<b>3207-4</b> 15:20~15:35	The environmental changes which can affect the transmission of schistosomiasis Alan Fenwick (Imperial College London, UK)
<b>3207-5</b> 15:35~15:50	Release of exosome-like extracellular vesicles during <i>in vitro Schistosoma mansoni</i> miracidial transformation: Isolation and proteomic analysis Timothy Yoshino (University of Wisconsin, USA)
<b>3207-6</b> 15:50~16:05	Knowledge, attitudes and practices on <i>Schistosomiasis haematobium</i> and associated factors among communities and schools in Pemba, Zanzibar Jlan He (Jlangsu Institute of Parasitic Diseases, China)
<b>3207-7</b> 16:05~16:20	A persistent high intensity cluster of <i>Schistosoma mansoni</i> infection around Mbita causeway, western Kenya Evans Asena (Nagasaki University, Japan)
3208 Room 322B	Asian current innovation of One Health: Need for speed Session Chairs   Jun Kobayashi, Marcello Otake Sato
<b>3208-1</b> 14:20~14:35	Conceiving new approaches for the control of foodborne trematodes Jitra Waikagul (Mahidol University, Thailand)
<b>3208-2</b> 14:35~14:50	Environmental DNA as a tool in One Health approaches Marcello Otake Sato (Dokkyo Medical University, Japan)
<b>3208-3</b> 14:50~15:20 Keynote	Tracking hosts and its importance on the control of NTDs Megumi Sato (Niigata University, Japan)
3208-4 15:20~15:50 Keynote	Causes of the persistence of STHs in the field: Case study of Tha-Song-Yang in Thailand Poom Adisakwattana (Mahidol University, Thailand)
<b>3208-5</b> 15:50~16:05	Development of an eDNA detection method for Philippine isolates of <i>Schistosoma japonicum</i> and <i>Oncomelania hupensis quadrasi</i> from field water samples Ian Kendrich Fontanilla (University of the Philippines Diliman, Philippines)
<b>3208-6</b> 16:05~16:20	Prevalence of human schistosomiasis japonica infection in selected endemic regions in the Philippines using three stool Kato-Katz technique Raffy Jay Fornillos (University of the Philippines Diliman, Philippines)
<b>3208-7</b> 16:20~16:35	Formulation of the innovation ecosystem for NTD research in Okinawa, Japan Jun Kobavashi (University of the Ryukyus, Japan)

3209 Room 323A	Recent advances in tick biology Session Chairs   Shin-Ichiro Kawazu, Juan Mosqueda
<b>3209-1</b> 14:20~14:25	Recent advances in tick biology Shin-Ichiro Kawazu (Obihiro University of Agriculture and Veterinary Medicine, Japan)
3209-2 14:25~14:55 Keynote	Recent advances towards the development of effective vaccines blocking the vector- pathogen interphase in the cattle fever tick Juan Mosqueda (Autonomous University of Queretaro, Mexico)
<b>3209-3</b> 14:55~15:15	Acaricide resistance in African cattle ticks: An attempt in developing a field-tailored diagnostic system Takeshi Hatta (Kitasato University School of Medicine, Japan)
<b>3209-4</b> 15:15~15:35	Complete mitochondrial genome analysis of ticks Ryo Nakao (Hokkaido University, Japan)
<b>3209-5</b> 15:35~15:55	Autophagy-related genes in ticks Rika Umemiya-Shirafuji (Obihiro University of Agriculture and Veterinary Medicine, Japan)
<b>3209-6</b> 15:55~16:15	Physiology of vector tick and longistatin, an antagonist of the receptor for advanced glycation end products Naotoshi Tsuji (Kitasato University School of Medicine, Japan)
<b>3209-7</b> 16:15~16:30	What's in a tick? Meta-analysis of the Australian tick microbiome Charlotte Oskam (Murdoch University, Australia)
3210 Room 323B	TaRG joint symposium on taeinasis and cysticercosis (2) Session Chairs   Keeseon Eom, Akira Ito
<b>3210-1</b> 14:20~14:50 Keynote	Cysticercosis: Is there any really species specific serologic test in humans and pigs? Akira Ito (Asahikawa Medical University, Japan)
<b>3210-2</b> 14:50~15:05	Oral treatment with recombinant <i>Taenia solium</i> calreticulin in experimental murine colitis Ana Flisser (UNAM, Mexico)
<b>3210-3</b> 15:05~15:20	Neurocysticercosis immuno-diagnosis: An experience from highly endemic Indian community Amit Prasad (Indian Institute of Technology Mandi, India)
<b>3210-4</b> 15:20~15:35	Need to estimate burden of recent onset seizures due to neurocysticercosis in previously unexplored regions of Asia Priyadarshi Soumyaranjan Sahu (International Medical University, Malaysia)
<b>3210-5</b> 15:35~15:50	Effectiveness of the TSOL 18 vaccine and oxfendazole concurrently administered, or oxfendazole treatment alone on prevalence of <i>Taenia solium</i> in rural pigs of Tanzania Mwemezi Kabululu (Tanzania Livestock Research Institute, Sokoine University of agriculture, Tanzania)

3211 Room 324A	Multiple points of interventions for neglected zoonotic helminths (2) Session Chairs   Sarah Gabriel, Banchob Sripa
<b>3211-1</b> 14:20~14:50 Keynote	Integrated liver fluke control program using ecohealth / One Health Approach Banchob Sripa (Khon Kaen University, Thailand)
<b>3211-2</b> 14:50~15:20 Keynote	Challenges for the control of liver fluke in southern China Xiao-Nong Zhou (National Institute of Parasitic Diseases at China CDC, China)
<b>3211-3</b> 15:20~15:50 Keynote	<i>Taenia solium</i> control in Zambia: The potholed road to success Sarah Gabriel (Ghent University, Faculty of Veterinary Medicine, Belgium)
<b>3211-4</b> 15:50~16:05	Long-term impact of 'The Vicious Worm' - the <i>Taenia solium</i> computer-based health education tool in primary school students in rural areas in eastern Zambia Chiara Trevisan (Institute of Tropical Medicine, Belgium)
<b>3211-5</b> 16:05~16:20	Parasitic infections status of the urban poor communities in Peninsular Malaysia Siti Nursheena Mohd Zain (University of Malaya, Malaysia)
<b>3211-6</b> 16:20~16:35	Status of soil-transmitted helminth infections in Semarang, Central Java, Indonesia Johanna Kurscheid (Australian National University, Australia)
<b>3211-7</b> 16:35~16:50	Impact of health educational program for soil-transmitted helminthiasis among Thai hill- tribe in Omkoi District, Chiang Mai Province Chaemchan Reelachat (Simahasarakham Nursing College, Thailand)
3212 Room 324B	A global perspective on ancient parasites: Current research projects (2) Session Chairs   Min Seo, Dong Hoon Shin
<b>3212-1</b> 14:20~14:50 Keynote	What history tells about ancient parasitism in South Korea Dong Hoon Shin (Seoul National University, Korea)
<b>3212-2</b> 14:50~15:05	High endemicity of digenean trematodes in the ancient times of Korea Min Seo (Dankook University, Korea)
<b>3212-3</b> 15:05~15:20	DNA analysis of COI and ITS2 genes using ancient <i>Paragonimus westermani</i> eggs remained in Joseon Dynasty mummies Jong Ha Hong (Seoul National Universiry, Korea)
<b>3212-4</b> 15:20~15:35	The eradication campaign against oriental schistosomiasis in China and neighbouring regions in the 1940s and 1950s Ivy Hui-Yuan Yeh (Nanyang Technological University, Singapore)
<b>3212-5</b> 15:35~15:50	Intestinal parasites from public and private latrines at Roman Period Ephesus, Turkey (1 <sup>st</sup> c. BC to ca. 6 <sup>th</sup> c. AD) Marissa Ledger (University of Cambridge, Canada)
<b>3212-6</b> 15:50~16:05	Intestinal parasites at the Bronze Age marshland pile dwelling village at Must Farm, UK (920 - 790 BC) Piers Mitchell (University of Cambridge, UK)
<b>3212-7</b> 16:05~16:20	Paleogenetic detection of <i>Ascaris</i> sp. infection in Malhada archaeological site (4808 - 546calBP). Alena Iñiguez (FIOCRUZ, Brazil)

	Setellite Meetings
Room 306A	14:00~18:00 NTD Asia 2018
Room 306B	14:00~18:00 The 15 <sup>th</sup> APCPZ
Room <b>GBR</b>   16:20-	~16:40 Coffee Break
	Parallel Oral Session 6
3301 Room 325A	Epidemiology and research for malaria in Asia Session Chairs   Joon-Sup Yeom, Kamala Thriemer
<b>3301-1</b> 16:40~17:10 Keynote	Challenges for malaria elimination in the Asia-Pacific Kamala Thriemer (Menzies School of Health Research, Australia)
<b>3301-2</b> 17:10~17:25	Genetic surveillance of <i>Plasmodium vivax</i> in the Republic of Korea Sang Eun Lee (Korea CDC, Korea)
<b>3301-3</b> 17:25~17:40	The effect of nerolidol in <i>Plasmodium falciparum</i> gametocytogenesis Chonnapat Naktubtim (Mahidol University, Thailand)
<b>3301-4</b> 17:40~17:55	Impact of seasonal malaria chemoprevention after 3 years at scale in southern Senegal Jean Louis Ndiaye (University of Thies, Senegal)
<b>3301-5</b> 17:40~18:10	Prevalence of G6PD deficiency and diagnostic performance of G6PD rapid test among military personnel based in Nay Pyi Taw ??? (Myanmar Wanlapa Roobsoong Mahidol University, Thailand)
3302 Room 325B	Emergence of drug resistance malaria Session Chairs   Eun-Taek Han, Zbynek Bozdech
<b>3302-1</b> 16:40~17:10 Keynote	Artemisinin resistance of malaria: A complex genetic trait of the past, presence and future Zbynek Bozdech (Nanynag Technological University, Singapore)
<b>3302-2</b> 17:10~17:30	Artemisinin-resistant <i>Plasmodium falciparum</i> in Africa Jun Cao (Jiangsu Institute of Parasitic Diseases, China)
<b>3302-3</b> 17:30~17:50	Protein turnover dynamics in artemisinin - resistant parasites and the contribution of K13 to protein homeostasis Simon Cobbold (University of Melbourne, Australia)
<b>3302-4</b> 17:50~18:05	Detection of artemisinin-resistant <i>Plasmodium falciparum</i> with high survival rates in Uganda Toshihiro Mita (Juntendo Umiversity, Japan)
<b>3302-5</b> 18:05~18:20	Artemisinin drug resistance of <i>Plasmodium falciparum</i> in Myanmar Eun-Taek Han (Kangwon National University, Korea)
<b>3302-6</b> 18:20~18:35	The role of glutathione in cellular resistance to artemisinin in <i>Plasmodium falciparum</i> Ghizal Siddiqui (Monash University, Australia)
<b>3302-7</b> 18:35~18:50	DNA analysis revealed rapid increase and northward spread of artemisinin-resistant <i>Plasmodium falciparum</i> in Laos Moritoshi Iwagami (National Center for Global Health and Medicine, Japan)

3303 Room 320A	Waterborne pathogens: Current challenges and new solutions Session Chairs   Una Ryan, Yaoyu Feng
<b>3303-1</b> 16:40~17:10 Keynote	Genome evolution and host specificity in <i>Cryptosporidium</i> Yaoyu Feng (East China University of Science and Technology, China)
<b>3303-2</b> 17:10~17:25	Diversity of <i>Cryptosporidium</i> species and subtypes in faecal samples from drinking water catchments in Australia Una Ryan (Murdoch University, Australia)
<b>3303-3</b> 17:25~17:40	Molecular detection and genotyping of <i>Giardia</i> and <i>Cryptosporidium</i> in raw and treated water samples from southwest Colombia Juan David Ramírez (Universidad del Rosario, Colombia)
<b>3303-4</b> 17:40~17:55	Molecular characterization of <i>Cryptosporidium</i> from humans in Ontario, Canada Rebecca Guy (Public Health Agency of Canada, Canada)
<b>3303-5</b> 17:55~18:10	Prevalence of <i>Cryptosporidium</i> and <i>Giardia</i> in selected recreational pools in Calamba, Laguna, Philippines Anna Monica Bordado (University of the Philippines Los Banos, Philippines)
3304 Room 320B	New developments in diagnostics for emerging human and animal diseases Session Chairs   Momar Ndao, Malcolm Jones
<b>3304-1</b> 16:40~17:10 Keynote	Next generation approaches to the diagnosis of filarial infections Thomas Nutman (National Institutes of Health, USA)
<b>3304-2</b> 17:10~17:25	The impact of genomics on the future of diagnostic techniques and epidemiology for <i>Cyclospora cayetanensis</i> Hediye Nese Cinar (US Food and Drug Administration (FDA), USA)
<b>3304-3</b> 17:25~17:40	Diagnosis of parasitic diseases: From the eye to the omics Momar Ndao (McGill University, Canada)
<b>3304-4</b> 17:40~17:55	Genotype characteristics of <i>Giardia duodenalis</i> isolates in patients in Khorramabad city in Iran using High Resolution Melting Analysis technique Nader Pestehchian (Isfahan University of Medical Sciences, Iran)
<b>3304-5</b> 17:55~18:10	<b>Urbanorum spp. in Ecuador</b> Betty Pazmiño (Universidad Estatal de Milagro, Ecuador)
<b>3304-6</b> 18:10~18:25	Isolation of schistosome eggs from urine using magnetic microspheres and a magnetic probing device Malcolm Jones (University of Queensland, Australia)

3305A Room 321A	Proteases of parasitic organisms Session Chairs   Byoung-Kuk Na, Kailash Pandey
<b>3305A</b> -1 16:40~17:10 Keynote	Targeting protein-protein interactions and unusual proteases: New tools to combat drug resistance problem in malaria Kailash Pandey (National Institute of Malaria Research, India)
<b>3305A</b> 17:10~17:25	Fowlerstefin, a cysteine protease inhibitor of <i>Naegleria fowleri</i> , induces inflammatory responses in BV-2 microglial cells Thai Thi Lam (Gyeongsang National University, Korea)
<b>3305A</b> 17:25~17:40	Characters of matrix metalloproteinase 12A from <i>Haemonchus contortus</i> Ruofeng Yan (Nanjing Agricultural University, China)
<b>3305A</b> - <b>4</b> 17:40~17:55	Impairment of <i>Plasmodium falciparum</i> invasion and gametocytogenesis by serine protease inhibitor Gamolthip Niramolyanun (Mahidol University, Thailand)
3305B Room 321A	Prediction and prevention models for parasites Session Chair   Choosak Nithikethkul
<b>3305B</b> 18:00~18:15	The prevention model of opisthorchiasis in Thailand Choosak Nithikethkul (Faculty of Medicine, Mahasarakham University, Thailand)
<b>3305B</b> 18:15~18:30	High-throughput sequencing and latent variable modelling of within-host parasite communities Tuomas Aivelo (University of Helsinki, Finland)
<b>3305B</b> 18:30~18:45	Using a dirichlet regression model to predict the spatial distribution of <i>Plasmodium falciparum</i> genetic clusters in Papua New Guinea Eimear Cleary (The Australian National University, Australia)
3306 Room 321 B	Paediatric schistosomiasis: New developments in disease surveillance and advancing praziquantel treatment Session Chairs   Russell Stothard, Eliézer N'Goran
<b>3306-1</b> 16:40~17:10 Keynote	Development of a new oral dispersible tablet (ODT) formulation of praziquantel to treat pre-school age children infected with Schistosomiasis Eliézer N'Goran (Parasitology and Parasitic Ecology University of Cocody, Côte d'Ivoire)
<b>3306-2</b> 17:10~17:25	Improving knowledge of schistosomiasis among elementary school-children in West Lore subdistrict, Central Sulawesi, Indonesia Anis Nurwidayati (Balai Litbang Kesehatan Donggala, Indonesia)
<b>3306-3</b> 17:25~17:40	Progress and challenges in eliminating urogenital schistosomiasis on the islands of Zanzibar David Rollinson (The Natural History Museum, UK)
<b>3306-4</b> 17:40~17:55	Multidisciplinary studies of female urogenital schistosomiasis in Africa: From preschool- aged children to women of child bearing age Russell Stothard (Liverpool School of Tropical Medicine, UK)

3307 Room 322A	Epidemiology, Sociology and biology of siberian liver fluke: From research to control Session Chair   Olga Fedorova
<b>3307-1</b> 16:40~17:10 Keynote	Epidemiology of <i>Opisthorchis felineus</i> infection in Shegarskiy district, Western Siberia, Russian Federation Olga Fedorova (Siberian State Medical University, Russia)
<b>3307-2</b> 17:10~17:30	<i>Opisthorchis felineus</i> infection and glutathione system imbalance Alexey Sazonov (Siberian State Medical University, Russia)
<b>3307-3</b> 17:30~17:50	Comparative transcriptomics of Opisthorchiidae liver flukes Maria Pakharukova (Institute of Cytology and Genetics, Russia)
<b>3307-4</b> 17:50~18:10	Exploratory metabolomics of the experimental opisthorchiasis Daria Kokova (LUMC, Netherlands)
<b>3307-5</b> 18:10~18:30	Building control programs locally Olga Zvonareva (Siberian State Medical University, Russia)
3308 Room 322B	Echinococcosis in Central Asia Session Chairs   Timur Muratov, Uktam Suvonkulov
<b>3308-1</b> 16:40~17:10 Keynote	Diagnostic availability of IgG ELISA in human hydatidosis in Samarkand, Uzbekistan Uktam Suvonkulov (Institute of Parasitology, Uzbekistan)
<b>3308-2</b> 17:10~17:25	Genotypic and phylogenetic characteristics of <i>Echinococcus granulosus</i> sensu lato in Uzbekstan Timur Muratov (Isaev Research institute of Medical Parasitology, Ministry of Health, Uzbekistan)
<b>3308-3</b> 17:25~17:40	Infection status of <i>Echinococcus granulosus</i> in domestic and wild animals in the Samarkant area, Uzbekistan Gab-Man Park (Catholic Kwandong University, Korea)
<b>3308-4</b> 17:40~17:55	Biochemical investigation of hydatid cyst fluid from ruminants and humans in Punjab, Pakistan Asma Abdul Latif (Labore College for Women University Labore, Pakistan)

3309 Room 323A	Animal parasites Session Chairs   Frederic Beugnet, Congshan Yang
<b>3309-1</b> 16:40~16:55	Two new <i>Hepatozoon</i> species (Apicomplexa: Adeleorina: Hepatozoidae) co-infecting wild and captive leopards <i>Panthera pardus</i> (Linnaeus,1758) in South Africa Michelle Van As (University of the Free State, South Africa)
<b>3309-2</b> 16:55~17:10	Identification of helminths in house mice from the European hybrid zone: Combining classical taxonomy and a molecular approach Jenny Jost (Humboldt University, Germany)
<b>3309-3</b> 17:10~17:25	Changes in the composition and structure of the helminth communities of the Mongolian racerunner across an urbanization gradient Zhargal Dugarov (Institute of General and Experimental Biology, Siberian branch, Russian Academy of Sciences, Russia)
<b>3309-4</b> 17:25~17:40	NcGRA17 is an important regulator of parasitophorous vacuole morphology and pathogenicity of <i>Neospora caninum</i> Congshan Yang (China Agricultural University, China)
<b>3309-5</b> 17:40~17:55	Genome wide identification of mutational hotspots in the apicomplexan parasite <i>Neospora</i> caninum and the implications for virulence Larissa Calarco (University of Technology, Australia)
<b>3309-6</b> 17:55~18:10	Distinct canine and feline host association with two <i>Dipylidium caninum</i> different genotypes Frederic Beugnet (Boehringer-Ingelheim, France)
<b>3309-7</b> 18:10~18:25	Molecular characterization of <i>Dipylidium caninum</i> : Genetic analysis supporting two distinct species adapted to dogs and cats Frederic Beugnet (Boehringer-Ingelheim, France)
3310 Room 323B	Ticks and tick-borne pathogens Session Chairs   Abdul Jabbar, Alejandro Cabezas-Cruz
<b>3310-1</b> 16:40~17:10 Keynote	Tick research in the 21st century: From pathogens to red meat allergy Alejandro Cabezas-Cruz (French National Institute for Agricultural Research (INRA), France)
<b>3310-2</b> 17:10~17:25	Bovine theileriosis – A new disease of cattle in Australia Abdul Jabbar (University of Melbourne, Australia)
<b>3310-3</b> 17:25~17:40	Prevalence and molecular characterization of tick-borne pathogens amongst sheep and goats in Sudan Seung-Hun Lee (Obihiro University of Agriculture and Veterinary Medicine, Japan)
<b>3310-4</b> 17:40~17:55	Molecular detection of zoonotic pathogens from ticks of domestic animals in Lesotho Sibonginhlanhla Innocentia Credentia Mahlobo (University of KwaZulu-Natal, South Africa)
<b>3310-5</b> 17:55~18:10	Transmission dynamics of <i>Borrelia afzelii</i> - Main European Lyme disease agent Radek Sima (Biology Centre of the CAS, Czech)
<b>3310-6</b> 18:10~18:25	Inter-institutional approach to study tickborne diseases in northern Mexico Jaime Adame-Gallegos (Autonomous University of Chihuahua, Mexico)

3311 Room 324A	Pathogen-insect vector interactions Session Chairs   Marcelo Jacobs-Lorena, George Christophides
<b>3311-1</b> 16:40~17:10 Keynote	How the mosquito immune system shapes the malaria parasite populations George Christophides (Imperial College London, UK)
<b>3311-2</b> 17:10~17:25	Reversible paratransgenesis Marcelo Jacobs-Lorena (Johns Hopkins Bloomberg School of Public Health, USA)
<b>3311-3</b> 17:25~17:40	Symbiotic bacteria in the <i>Anopheles</i> mosquito: Their roles in infection and malaria control Sibao Wang (Chinese Academy of Science, China)
<b>3311-4</b> 17:40~17:55	Sequential blood meals augment vector infectiousness by promoting <i>Leishmania</i> dedifferentiation Tiago D. Serafim (NIH, USA)
<b>3311-5</b> 17:55~18:10	Population modification of mosquitoes for malaria control Rebeca Carballar-Lejarazú (University of California Irvine, USA)
<b>3311-6</b> 18:10~18:25	PGRP-LD mediates <i>A. stephensi</i> vector competency by regulating homeostasis of microbiota-induced peritrophic matrix synthesis Jingwen Wang (Fudan University, China)
3312 Room 324B	The genome biology of parasites Session Chairs   Shiroh Iwanaga, Makedonka Mitreva
<b>3312-1</b> 16:40~17:10 Keynote	Metagenomics of parasitic helminths Makedonka Mitreva (Washington University School of Medicine, USA)
<b>3312-2</b> 17:10~17:25	Repressive H3K27me3 marks contribute to the pathogenicity of <i>Theileria annulata</i> - transformed macrophages Takaya Sakura (Nagasaki University, Japan)
<b>3312-3</b> 17:25~17:40	Transcriptional regulation mechanism of <i>Plasmodium</i> parasites Shiroh Iwanaga (Tokyo Medical and Dental University, Japan)
<b>3312-4</b> 17:40~17:55	Female-specific gene regulation in malaria parasites by an AP2 family transcription factor Yuho Murata (Mie University, Japan)
<b>3312-5</b> 17:55~18:10	Dynamic transcriptomes identify biogenic amines and insect-like hormonal regulation for mediating reproduction in <i>Schistosoma japonicum</i> Wei Hu (Fudan University, China)

#### 18:40~19:40

Day 3 Tuesday (Aug. 21)

Poster Session 1

#### Hereit Day 4. Wednesday (Aug. 22)

	Plenary Lecture	
L- 09	Room <b>Auditorium</b> 08:30~09:00	Pharmacology of anthelmintic drugs: Challenges to optimize parasite control in resistant populations Prof. Carlos Lanusse (National Council of Scientific and Technical Research, Argentina) Session Chair   Hyun Park
L-10	Room Auditorium	Emerging canine zoonoses in Australasia: Challenging the dogmas Prof. Rebecca J. Traub (University of Melbourne, Australia) Session Chair   Xing-Quan Zhu

**Coffee Break** 

Room GBR | 09:30~10:00

**Parallel Oral Session 7** Global challenges and novel technologies for control of parasitic diseases 4101 Room 325A Session Chairs | Malla Rao, Ingrid Felger Overview of challenges and new technologies **4101-1** 10:00~10:15 Malla Rao (NIAID, NIH, USA) Innovative diagnostics for deeper understanding of malaria epidemiology and public 10:15~10:45 4101-2 health applications Keynote Ingrid Felger (Swiss Tropical and Public Health Institute, Switzerland) Pathogenesis of cerebral malaria revealed through serial MRI of the brain 4101-3 10:45~11:00 Sanjib Mohanty (Ispat General Hospital, India) Novel Plasmodium falciparum biomarkers for detectionof submicroscopic asymptomatic 4101-4 11:00~11:15 infections and transmission reservoirs Sanjai Kumar (FDA, USA) Novel treatments for cutaneous leishmaniasis and new developments for vaccines 4101-5 11:15~11:30 Abhay Satoskar (Ohio State University, USA) A new international standard for the quality control and harmonization of Plasmodium **4101-6** 11:30~11:45 falciparum antigen detection assays Lynne Harris (National Institute for Biological Standards and Control, UK) Ultrasonography in the management of Indian visceral leishmaniasis 4101-7 11:45~12:00 Shyam Sundar (Banaras Hindu University, India)

4102 Room 325B	Malaria genetics Session Chairs   Qijun Chen, Liwang Cui
4102-1 10:00~10:30 Keynote	Translational regulation by Puf protein members in malaria parasites <i>Plasmodium falciparum</i> Liwang Cui (Penn State University, USA)
<b>4102-2</b> 10:30~10:45	Alternative splicing is required for proliferation and stage differentiation in apicomplexan parasites Stuart Ralph (The University of Melbourne, Australia)
<b>4102-3</b> 10:45~11:00	Apicoplast and nuclear genome phylogeny supports the hypothesis of African origin of <i>Plasmodium vivax</i> Nobuko Arisue (Osaka University, Japan)
<b>4102-4</b> 11:00~11:15	Molecular genetic analysis of <i>Plasmodium vivax</i> isolates from Eastern and Central Sudan using <i>Pvcsp</i> and <i>Pvmsp-3</i> genes as molecular markers Albadawi Talha (University of Gezira, Sudan)
<b>4102-5</b> 11:15~11:30	Genetic and current scenario of <i>Plasmodium falciparum</i> drug resistance loci against antimalarial drugs in endemic region of India Amit Kumar (National Institute of Malaria Research, India)
<b>4102-6</b> 11:30~11:45	Predicting sex determinant proteins of human malaria parasites: Sequence and structure homology analysis Odaka Mitsuhiro (Nagasaki University School of Medicine, Japan)
4103 Room 320A	Cross talk between protozoan parasite and host Session Chairs   Myeong Heon Shin, Petrus Tang
<b>4103-1</b> 10:00~10:30 <b>Keynote</b>	Cross talk between <i>Trichomonas vaginalis</i> and neutrophil Petrus Tang (Chang Gung University, Chinese Taipei)
<b>4103-2</b> 10:30~10:45	BLT1-mediated O-GlcNAcylation is required for migration, IL-8 production and degranulation of human mast cell induced by <i>Trichomonas vaginalis</i> -secreted LTB <sub>4</sub> Arim Min (Yonsei University, Korea)
<b>4103-3</b> 10:45~11:00	Cleavage specificity of secreted <i>Giardia intestinalis</i> cysteine proteases: Degradation of immunoglobulins and defensins Jingyi Liu (Uppsala University, Sweden)
<b>4103-4</b> 11:00~11:15	Apicomplexan parasites, <i>Toxoplasma gondii</i> and <i>Eimeria falciformis</i> , induce and co-opt a master transcription factor c-Fos in the mammalian host cell Bingjian Ren (Humboldt University of Berlin, Germany)
<b>4103-5</b> 11:15~11:30	Immune host response during <i>L</i> . ( <i>V</i> .) guyanensis American tegumentary leishmaniasis from IgG production to cytokine and chemokine responses Jean-Pierre Gangneux (University Rennes, France)
<b>4103-6</b> 11:30~11:45	A <i>Cryptosporidium parvum</i> integrin-like domain containing protein (Cgd5_830) mediates adhesion of intestinal epithelial cells via interactions with sulfated heparin Jigang Yin (Jilin university, China)
<b>4103-7</b> 11:45~12:00	CysLTs receptor is required for migration, exocytotic degranulation and cytokine production in human mast cells induced by <i>Trichomonas vaginalis</i> -derived secretory products Myeong Heon Shin (Yonsei university College of Medicine, Korea)

Day 4 Wednesday (Aug. 22)

4104 Room 320B	Recent advances in <i>Trypanosoma brucei</i> , the causative parasite of African sleeping sickness Session Chairs   Hee Sook Kim, Richard McCulloch
<b>4104-1</b> 10:00~10:05	Greetings from session Organizer Hee-Sook Kim (Cleveland State University, USA)
4104-2 Keynote	Does replication-transcription conflict provide the initiating event in host immune evasion by antigenic variation in the African trypanosome? Richard McCulloch (University of Glasgow, UK)
<b>4104-3</b> 10:35~10:50	Transcription activity contributes to the activation of dormant origins maintaining the robustness of the S phase in African trypanosomes Marcelo da Silva (University of Glasgow, Butantan Institute, UK)
<b>4104-4</b> 10:50~11:05	Investigating the role of the atypical protein kinase ATR in kinetoplastid parasites Jennifer Ann Black (University of Glasgow, UK)
<b>4104-5</b> 11:05~11:20	The arms race between host and parasite: Primate specific serum resistance in zoonotic trypanosomes and the fitness cost Jayne Raper (City University of New York, USA)
<b>4104-6</b> 11:20~11:35	A transgenic approach towards the control of veterinary trypanosomiasis Joey Verdi (City University of New York, USA)
<b>4104-7</b> 11:35~11:50	ERAD and disposal of misfolded GPI-anchored proteins in <i>Trypanosoma brucei</i> Calvin Tiengwe (Imperial College London, UK)
<b>4104-8</b> 11:50~12:05	Overexpression library reveals the target of the clinical and veterinary trypanocidal benzoxaboroles Richard Wall (University of Dundee, UK)
<b>4104-9</b> 12:05~12:20	Epigenetic marks control DNA replication and transcription in <i>Trypanosoma brucei</i> Hee-Sook Kim (Cleveland State University, USA)
4105 Room 321A	Immunopathogenesis of amebiasis Session Chairs   Nancy Guillen, Shinjiro Hamano
4105-1 10:00~10:30 Keynote	Host factors associated with the settlement of ameba in the gut and defense mechanisms to ameba Shinjiro Hamano (Nagasaki University, Japan)
<b>4105-2</b> 10:30~10:55	Signaling role of NOX4-derived ROS in Jurkat T cell death induced by Entamoeba histolytica Young Ah Lee (Yonsei university, Korea)
<b>4105-3</b> 10:55~11:15	Enteric bacteria boost defences against oxidative stress in <i>Entamoeba histolytica</i> , the agent of amoebiasis Nancy Guillen (Institut Pasteur, France)
<b>4105-4</b> 11:15~11:35	During the amoebic liver abscess in hamsters the amoebic oxygen reduction pathway and HSP70 protein are both necessary to resist both the oxidative and heat stresses Alfonso Olivos-García (National Autonomous University of Mexico, Mexico)
<b>4105-5</b> 11:35~12:00	Identification of farnesyltransferase inhibitors as new leads against <i>Entamoeba histolytica</i> Anjan Debnath (University of California San Diego, USA)

4106 Room 321B	Update on human babesiosis and search for new therapeutic agents Session Chairs   Atsuko Saito-Ito, Edouard Vannier
<b>4106-1</b> 10:00~10:05	Review of <i>Babesia microti</i> parasites in Japan and surrounding Asian countries Atsuko Saito-Ito (Hyogo University Health Sciences, Japan)
<b>4106-2</b> 10:05~10:40 Keynote	An appraisal of human babesiosis in the USA Edouard Vannier (Tufts Medical Center & Tufts University, USA)
<b>4106-3</b> 10:40~11:00	A molecular survey of <i>Babesia microti</i> and malaria parasites infections among febrile cases along China-Myanmar border in Yunnan province Xia Zhou (Soochow University, China)
<b>4106-4</b> 11:00~11:15	Clofazimine as a potential agent for treating human babesiosis caused by <i>Babesia microti</i> Bumduuren Tuvshintulga (National Research Center for Protozoan Diseases, Obihiro University of Agriculture and Veterinary, Japan)
<b>4106-5</b> 11:15~11:30	Evaluationof the <i>in vitro</i> and <i>in vivo</i> inhibitory effect of thymoquinone on <i>Babesia</i> and <i>Theileria</i> parasites Mohamed Rizk (Obihiro University of Agriculture and Veterinary Medicine, Japan)
<b>4106-6</b> 11:30~11:45	Cryptolepine and ellagic acid inhibit <i>Babesia</i> and <i>Theileria in vitro</i> Amani Beshibeshy (Obihiro University of Agriculture and Veterinary Medicine, Japan)
<b>4106-7</b> 11:45~12:00	DXR is a potential drug target for controlling <i>Babesia orientalis</i> Lan He (Huazhong Agricultural University, China)
<b>4106-8</b> 12:00~12:15	Validation of <i>Babesia</i> proteasome as a drug target Marie Jalovecka (Biology Centre CAS, Czech)
4107 Room 322A	Molecular diagnosis of parasitic diseases Session Chairs   Rune Stensvold, Jaco Verweij
4107-1 10:00~10:30 Keynote	Setting the stage: Current techniques and applications of molecular diagnostics Jaco Verweij (ElisabethTweesteden Hospital, Netherlands)
<b>4107-2</b> 10:30~10:45	Genetic diversity as a marker for a healthy gut microbiome Christen Rune Stensvold (Statens Serum Institut, Denmark)
<b>4107-3</b> 10:45~11:00	COUNTDOWN in Ghana: Expanding molecular diagnostics of helminthiasis piloting use of the GPLN platform for surveillance of soil transmitted helminthiasis and schistosomiasis Russell Stothard (Liverpool School of Tropical Medicine, UK)
<b>4107-4</b> 11:00~11:15	Targeted amplicon deep sequencing and its application for diagnostic parasitology Richard Bradbury (Centers for Disease Control and Prevention, USA)
<b>4107-5</b> 11:15~11:30	Intestinal protozoa in high-endemic setting cause or bystander Mami Taniuchi (University of Virginia, USA)

Day 4 Wednesday (Aug. 22)

4108 Room 322B	Echinococcus and echinococcosis: Emerging issues Session Chairs   Andrew Thompson, Thomas Romig
4108-1 10:30~11:00 Keynote	Emerging issues with <i>Echinococcus</i> in this wild, wormy world Emily Jenkins (University of Saskatchewan, Canada)
<b>4108-2</b> 11:00~11:15	A new host of <i>Echinococcus felidis</i> in Tanzania: <i>Panthera pardus</i> (leopard) Hansol Park (Chungbuk National University, Korea)
<b>4108-3</b> 11:15~11:45 Keynote	Survey designs for detecting <i>Echinococcus multilocularis</i> infections in wild hosts: Problems and solutions Alessandro Massolo (University of Pisa, Italy)
<b>4108-4</b> 11:45~12:00	Vole population density and <i>Echinococcus multilocularis</i> prevalence in foxes in Southern Germany Thomas Romig (University of Hohenheim, Germany)
<b>4108-5</b> 12:00~12:15	Pro-angiogenic activity of monocyte-type myeloid-derived suppressor cells from Balb/c mice infected with <i>Echinococcus granulosus</i> and the regulatory role of miRNAs Yujuan Shen (Chinese Center for Disease Control and Prevention, China)
<b>4108-6</b> 12:15~12:30	Breed effect on <i>Echinococcus multilocularis</i> and <i>Echinococcus canadensis</i> infections in urban dogs: pooled prevalence may be misleading Alessandro Massolo (University of Pisa, Italy)
4109 Room 323A	Neglected parasitic diseases in Southeast and East Asia: Challenges and opportunities Session Chairs   Vachel Gay Paller, Mary Jane Flores
4109-1 10:00~10:30 Keynote	From water sources to food: The impact of emerging protozoan parasites in Asia Windell Rivera (University of the Philippines, Philippines)
<b>4109-2</b> 10:30~11:00 <b>Keynote</b>	Pulmonary paragonimiasis: Updates on epidemiology and control in Southeast Asia and Western Pacific regions Vicente Belizario (University of the Philippines Manila, Philippines)
<b>4109-3</b> 11:00~11:15	Farm practices as risk factors of parasite contamination in farm produce: The case of Philippine agriculture Vachel Gay Paller (University of the Philippines Los Baños, Philippines)
<b>4109-4</b> 11:15~11:30	Bioaccumulation of cadmium (Cd), copper (Cu), lead (Pb) and zinc (Zn) in water buffaloes ( <i>Bubalus bubalis</i> ) infected with liver flukes ( <i>Fasciola gigantica</i> ) Mary Jane Flores (The Philippine Society of Parasitology, Inc., De La Salle University, Philippines)
<b>4109-5</b> 11:30~11:45	A multicenter study of dogs and cats parasites in East and Southeast Asia: Preliminary results Lénaïg Halos (Boehringer Ingelheim, France)
<b>4109-6</b> 11:45~12:00	Insights into the phylogeny and species history of <i>Strongyloides stercoralis</i> , the parasitic threadworm of human and dogs Eiji Nagayasu (University of Miyazaki, Japan)
<b>4109-7</b> 12:00~12:15	The burden of parasitic food borne diseases in South-East Asia region Mohammad Bagher Rokni (Tehran University of Medical Sciences, Iran)

4110 Room 323B	Wonkwang zoonosis and biomedical symposium: Diagnosis and therapy of zoonosis Session Chairs   Hyun Park, Leo Lit-Man Poon *Supported by NRF-2015R1A6A1A03032236 & Wonkwang University Institute for Biomedical Science
4110-1 10:00~10:30 Keynote	MERS coronavirus infection in camels and humans Leo Lit-Man Poon (The University of Hong Kong, Hong Kong)
<b>4110-2</b> 10:30~10:45	Clinical correlations of blood transcriptional profile in patients - Using avian influenza (H7N9) virus infection as an example Chris Ka Pun Mok (The University of Hong Kong, Hong Kong)
<b>4110-3</b> 10:45~11:00	Development of peptide aptamers to diagnose vector-borne zoonotic diseases Seon Ju Yeo (Wonkwang University, Korea)
<b>4110-4</b> 11:00~11:15	An immunochromatographic test for human babesiosis caused by <i>Babesia microti</i> Ikuo Igarashi (Obihiro University of Agriculture and Veterinary Medicine, Japan)
4111 Room 324A	Diversity of parasites in birds Session Chairs   Jean Mariaux, Tommy Leung
4111-1 10:00~10:30 Keynote	Do early birds really catch the worms? How host traits influence parasite diversity in birds Tommy Leung (University of New England, Australia)
<b>4111-2</b> 10:30~10:45	Avian parasite diversity: The case of tapeworms Jean Mariaux (Natural History Museum of Geneva, Switzerland)
<b>4111-3</b> 10:45~11:00	Avian malaria parasites: Disease severity and peculiarities of diagnosis Vaidas Palinauskas (Nature Research Centre, Lithuania)
<b>4111-4</b> 11:00~11:15	Prokaryotic expression of <i>EnPIPK, EnAGC, EnCK2</i> and <i>EnHAP2</i> gene of <i>Eimeria necatrix</i> and their immunofluorescence localization Dandan Liu (Yangzhou University, China)
<b>4111-5</b> 11:15~11:30	Response of Indonesian indigenous chicken to <i>Eimeria tenella</i> challenge infection April Wardhana (Indonesian Research Center for Veterinary Science, Indonesia)

Day 4 Wednesday (Aug. 22)

4112 Room 324B	A global perspective on ancient parasites: Current research projects (3) Session Chair   Gholamreza Mowlavi
4112-1 10:00~10:30 Keynote	Tracking of parasitic infections in humans and animals in ancient Iran: Could these findings interpret the emerging and re-emerging diseases? Gholamreza Mowlavi (Tehran University of Medical Sciences, Iran)
<b>4112-2</b> 10:30~10:45	Did the ancient Egyptians know schistosomiasis? Nadia El-Dib (Cairo University, Egypt)
<b>4112-3</b> 10:45~11:00	Paleoparasitological evidence of human giant kidney worm infection in ancient Iran dates back to Parthian Empire (247 BC-224 AD) Negar Bizhani (Tehran University of Medical Sciences, Iran)
<b>4112-4</b> 11:00~11:15	Prehistoric parasites in Western Iran: Helminths eggs retrieved from a dog's biological remains Gholamreza Mowlavi (Tehran University of Medical Sciences, Iran)
<b>4112-5</b> 11:15~11:30	Shahr-e Sukhteh archaeological site of Bronze Age (3200-1800 BC) and a glance on human and animal parasites on that time in Iran Gholamreza Mowlavi (Tehran University of Medical Sciences, Iran)

	Setellite Meetings		
SM	Room <b>306A</b>	The Second SUKO International Conference on Elimination of Schistosomiasis and	
3.IW	10:00~12:00	Other NTDs in Sudan	
SM	Room <b>306B</b>	Forum Chain 20 (Trands in Parasitalogy in Karaa and Japan)	
3.IW	08:00~12:00	rolun cheju-zo (menus ni rarasitology ni Korea anu Sapan)	

		Plenary Lecture
	D Audita	<i>Toxocara</i> , the most common helminth parasite of humans on the planet
PL-11		Prof. Dwight D. Bowman (Cornell University, USA)
	08:30~09:00	Session Chair   David Rollinson
	Room Audito	rium Anisakis and anisakiasis: Facts and trends
PL-12	09:00~09:30	Prof. Simonetta Mattiucci (Umberto I. Hospital, Italy)
Ro	oom <b>GBR</b>   09:30-	~10:00 Coffee Break
		Parallel Oral Session 8
5101	Boom 325 A	Malaria vaccine: Novel vaccine candidate discovery
5101	Room 325A	Malaria vaccine: Novel vaccine candidate discovery Session Chairs   Takafumi Tsuboi, Joao Aguiar
5101	Room <b>325A</b>	Malaria vaccine: Novel vaccine candidate discovery Session Chairs   Takafumi Tsuboi, Joao Aguiar
<b>5101</b>	Room <b>325A</b> 10:00~10:10	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)
<b>5101</b>	Room <b>325A</b> 1 10:00~10:10 Introduction	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)
<b>5101</b> 5101- 5101-	Room <b>325A</b> 10:00~10:10 Introduction 10:10~10:50	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)         Discovery of novel, highly protective pre-erythrocytic Plasmodium vaccine antigens
5101 5101- 5101-	Room 325A           1           10:00~10:10           Introduction           2           10:10~10:50           Keynote	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)         Discovery of novel, highly protective pre-erythrocytic Plasmodium vaccine antigens         Joao Aguiar (NMRC, USA)
<b>5101</b> 5101- 5101-	Room 325A           1           10:00~10:10           Introduction           2           10:10~10:50           Keynote	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)         Discovery of novel, highly protective pre-erythrocytic Plasmodium vaccine antigens         Joao Aguiar (NMRC, USA)         Potential antigen targets associated with sterile protection in humans after experimenta
5101 5101- 5101- 5101-	Room 325A           1           10:00~10:10           Introduction           2           10:10~10:50           Keynote           3           10:50~11:10	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)         Discovery of novel, highly protective pre-erythrocytic Plasmodium vaccine antigens         Joao Aguiar (NMRC, USA)         Potential antigen targets associated with sterile protection in humans after experimenta         Plasmodium falciparum sporozoite inoculation
5101 5101- 5101-	Room 325A         10:00~10:10         Introduction         10:10~10:50         Keynote         3       10:50~11:10	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)         Discovery of novel, highly protective pre-erythrocytic Plasmodium vaccine antigens         Joao Aguiar (NMRC, USA)         Potential antigen targets associated with sterile protection in humans after experimental         Plasmodium falciparum sporozoite inoculation         Laurent Renia (SIgN-A*STAR, Singapore)
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5101 5101- 5101- 5101-	Room 325A         1         10:00~10:10         Introduction         1         10:10~10:50         Keynote         3         10:50~11:10         4	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)         Discovery of novel, highly protective pre-erythrocytic Plasmodium vaccine antigens         Joao Aguiar (NMRC, USA)         Potential antigen targets associated with sterile protection in humans after experimenta         Plasmodium falciparum sporozoite inoculation         Laurent Renia (SIgN-A*STAR, Singapore)         Discovery of novel blood-stage vaccine candidates for vivax malaria         Eun-Taek Han (Kangwon National University, Korea)
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5101 5101- 5101- 5101- 5101-	Room 325A         1         10:00~10:10         Introduction         2         10:10~10:50         Keynote         3         10:50~11:10         4         11:10~11:30         5         11:30~11:50	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)         Discovery of novel, highly protective pre-erythrocytic Plasmodium vaccine antigens         Joao Aguiar (NMRC, USA)         Potential antigen targets associated with sterile protection in humans after experimenta         Plasmodium falciparum sporozoite inoculation         Laurent Renia (SlgN-A*STAR, Singapore)         Discovery of novel blood-stage vaccine candidates for vivax malaria         Eun-Taek Han (Kangwon National University, Korea)         Post-genomic strategies for the identification of novel blood-stage vaccine candidates
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5101 5101- 5101- 5101- 5101-	Room 325A         1       10:00~10:10 Introduction         2       10:10~10:50 Keynote         3       10:50~11:10         4       11:10~11:30         5       11:30~11:50	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)         Discovery of novel, highly protective pre-erythrocytic Plasmodium vaccine antigens         Joao Aguiar (NMRC, USA)         Potential antigen targets associated with sterile protection in humans after experimenta         Plasmodium falciparum sporozoite inoculation         Laurent Renia (SlgN-A*STAR, Singapore)         Discovery of novel blood-stage vaccine candidates for vivax malaria         Eun-Taek Han (Kangwon National University, Korea)         Post-genomic strategies for the identification of novel blood-stage vaccine candidates         with wheat germ cell-free system         Eizo Takashima (Ehime University, Japan)
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5101 5101- 5101- 5101- 5101- 5101-	Room 325A         1       10:00~10:10 (ntroduction)         2       10:10~10:50 (Keynote)         3       10:50~11:10         4       11:10~11:30         5       11:30~11:50         6       11:50~12:05	Malaria vaccine: Novel vaccine candidate discovery         Session Chairs   Takafumi Tsuboi, Joao Aguiar         Malaria vaccine: Novel vaccine candidate discovery         Takafumi Tsuboi (Ehime University, Japan)         Discovery of novel, highly protective pre-erythrocytic Plasmodium vaccine antigens         Joao Aguiar (NMRC, USA)         Potential antigen targets associated with sterile protection in humans after experimenta         Plasmodium falciparum sporozoite inoculation         Laurent Renia (SlgN-A*STAR, Singapore)         Discovery of novel blood-stage vaccine candidates for vivax malaria         Eun-Taek Han (Kangwon National University, Korea)         Post-genomic strategies for the identification of novel blood-stage vaccine candidates         with wheat germ cell-free system         Eizo Takashima (Ehime University, Japan)         Partial peptide AD22 of Plasmodium falciparum enolase: a promising malaria vaccine candidates         Karthita Vaca (Research Institute National Casters for Clabel Uset Hand Maticing Japan)

5102 Room 325B	Operational research to accelerate malaria elimination Session Chairs   Jun Cao, James Kelley
5102-1 10:00~10:30 Keynote	Operational research to accelerate malaria elimination: landscape, case studies and priority James Kelley (WHO, Philippines)
<b>5102-2</b> 10:30~10:45	A novel point-of-contact test for malaria serosurveillance James Beeson (Burnet Institute, Australia)
<b>5102-3</b> 10:45~11:00	Improving malaria elimination strategies with pharmacogenomics: Tackling the unique problems posed by <i>Plasmodium vivax</i> Sarah Charnaud (Walter and Eliza Hall Institute of Medical Research, Australia)
5103 Room 320A	The LeishVet symposium: Leishmaniasis in dogs and cats: Disease, hosts and reservoirs (1) Session Chairs   Gad Baneth, Christine Petersen
5103-1 10:00~10:30 Keynote	Host factors that promote transmission of <i>Leishmania infantum</i> from dogs Christine Petersen (University of Iowa, USA)
<b>5103-2</b> 10:30~10:45	The diversity of non-canine hosts of <i>Leishmania infantum</i> in Europe: Who is the source who is the reservoir? Bourdeau Patrick (Veterinary School of Nantes - ONIRIS, France)
<b>5103-3</b> 10:45~11:00	Canine leishmaniasis: From infection to disease Gaetano Oliva (University of Naples Federico II, Italy)
<b>5103-4</b> 11:00~11:15	Canine leishmaniasis in Eastern Europe Andrei Mihalca (USAMV Cluj-Napoca, Rumania)
5104 Room 320B	Amebiasis: Biology, biochemistry, pathogenesis and drug development (1) Session Chairs   Tomoyoshi Nozaki, William Petri
5104-1 10:00~10:40 Keynote	How the gut microbiome, parasite and human genetics influence susceptibility to amebic colitis William Petri (University Virginia, USA)
<b>5104-2</b> 10:40~11:00	Uniqueness and conservation of the Atg8 conjugation system in <i>Entamoeba histolytica</i> Kumiko Nakada-Tsukui (National Institute of Infectious Diseases, Japan)
<b>5104-3</b> 11:00~11:20	Natural antisensetranscripts in <i>Entamoeba histolytica</i> Nancy Guillen (Institut Pasteur, France)
<b>5104-4</b> 11:20~11:40	Genome-wide association study reveals genetic link between diarrhea- associated <i>Entamoeba histolytica</i> infection and inflammatory bowel disease William Petri (University Virginia, USA)
<b>5104-5</b> 11:40~12:00	<i>Escherichia coli</i> mediated resistance of <i>Entamoeba histolytica</i> to oxidative stress is triggered by oxaloacetate Serge Ankri (Faculty of Medicine, TECHNION, Israel)

5105 Room 321A	Host-parasite interaction of intracellular protozoan (1) Session Chairs   Hongjuan Peng, Qijun Chen
<b>5105-1</b> 10:00~10:30 <b>Keynote</b>	Novel proteins of <i>Plasmodium falciparum</i> associated with erythrocyte invasion Qijun Chen (Shenyang Agricultural University, China)
<b>5105-2</b> 10:30~11:00 Keynote	Modulation of host transcriptomes by <i>Toxoplasma gondii</i> infection Xing-Quan Zhu (Lanzhou Veterinary Research Institute, Chinese Academy of Agricultural Sciences, China)
<b>5105-3</b> 11:00~11:15	Sand fly vector nanobiome: Impact on cutaneous leishmaniasis development Martin Olivier (McGill University, Canada)
<b>5105-4</b> 11:15~11:30	Several progresses on <i>T. gondii</i> -host cell interaction Hongjuan Peng (Southern Medical University, China)
<b>5105-5</b> 11:30~11:45	Characterization of <i>Plasmodium falciparum</i> binding to blood group A and B determinants Jørgen Kurtzhals (University of Copenhagen, Denmark)
5106 Room 321B	Immunity to <i>Trichinella</i> infection Session Chairs   Sofronic-Milosavljevic Ljiljana, Zhiliang Wu
<b>5106-1</b> 10:00~10:30 Keynote	Immunomodulation by <i>Trichinella</i> infection and its excretory-secretory products Zhiliang Wu (Gifu University School of Medicine, Japan)
<b>5106-2</b> 10:30~10:45	Anti-arthritic effects of <i>Trichinella spiralis</i> do not depend on Th2 cytokines Yoshio Osada (University of Occupational and Environmental Health, Japan)
<b>5106-3</b> 10:45~11:00	<b>Up-date on immunology of human trichinellosis</b> Fabrizio Bruschi (PISA, Italy)
<b>5106-4</b> 11:00~11:15	Role of serum and mucosal antibodies in cell mediated cytotoxicity mechanism during <i>Trichinella spiralis</i> infection in protein deficient rats Cecilia Celeste Vila (University of Buenos Aires, Argentina, Argentina)
<b>5106-5</b> 11:15~11:30	The antitumor effect of ScFv antibody against 7 transmembrane receptor of <i>Trichinella spiralis</i> on A549 cells Xichen Zhang (Jilin University, China)

Day 5	
Thursday	
/ (Aug. 23)	

5107 Room 322A	Schistosomiasis, protozoan diseases, malaria and others Session Chairs   Hye-Sook Kim, Kyungsoo Chang
<b>5107-1</b> 10:00~10:30 Keynote	N-89, a new synthetic compound: Prospective view of apossible super drug for wide spectrum of NTD Nobuo Ohta (Suzuka University of Medical Science, Japan)
<b>5107-2</b> 10:30~11:00 Keynote	Basic research of non-oral antimalarial endopeoxide Hye-Sook Kim (Okayama University, Japan)
<b>5107-3</b> 11:00~11:15	Potential of synthetic endoperoxides against <i>Trichomonas vaginalis in vitro</i> Jae-Sook Ryu (Hanyang University, Korea)
5107-4 11:15~11:30	<i>In vitro</i> inhibition of <i>Toxoplasma gondii</i> by the anti-malarial candidate, 6-(1, 2, 6, 7- tetraoxaspiro [7.11] nonadec - 4 - yl) hexan - 1 - ol Eun Hee Shin (Seoul National University, Korea)
<b>5107-5</b> 11:30~11:45	Dermal super-saturated delivery (DSSD) of antimalarial-endoperoxides: A new strategy for dosage form designing Yuji Kurosaki (Okayama University, Japan)
<b>5107-6</b> 11:45~12:00	Biological activity of endopeoxides against protozoan diseases and HCV Hye-Sook Kim (Okayama University, Japan)
<b>5107-7</b> 12:00~12:15	Identification and development of multifunctional antimicrobial material Kyungsoo Chang (Catholic University of Pusan, Korea)
5108 Room 322B	Anthelmintics, their use and resistance in veterinary parasites Session Chairs   Chaoqun Yao, Ray Kaplan
5108 Room 322 B 5108-1 10:00~10:40 Keynote	Anthelmintics, their use and resistance in veterinary parasites         Session Chairs       Chaoqun Yao, Ray Kaplan         The global rise of anthelmintic resistance and what this means for the future of parasite control         Ray Kaplan (University of Georgia, USA)
5108 Room 322 B 5108-1 10:00~10:40 Keynote 5108-2 10:40~10:55	Anthelmintics, their use and resistance in veterinary parasites         Session Chairs       Chaoqun Yao, Ray Kaplan         The global rise of anthelmintic resistance and what this means for the future of parasite control         Ray Kaplan (University of Georgia, USA)         Effect of anthelmintics on gut microbiome of non-human primates         Chaoqun Yao (Ross University School of Veterinary Medicined, St. Kitts)
5108         Room 322 B           5108-1         10:00~10:40           Keynote         Keynote           5108-2         10:40~10:55           5108-3         10:55~11:10	Anthelmintics, their use and resistance in veterinary parasites         Session Chairs   Chaoqun Yao, Ray Kaplan         The global rise of anthelmintic resistance and what this means for the future of parasite control         Ray Kaplan (University of Georgia, USA)         Effect of anthelmintics on gut microbiome of non-human primates         Chaoqun Yao (Ross University School of Veterinary Medicined, St. Kitts)         Mitochondrial NADH-fumarate reductase system of adult <i>Fasciola</i> flukes, a potentially novel drug target         Atsushi Tashibu (Iwate University, Japan)
5108       Room 322 B         5108-1       10:00~10:40 Keynote         5108-2       10:40~10:55         5108-3       10:55~11:10         5108-4       11:10~11:25	Anthelmintics, their use and resistance in veterinary parasites Session Chairs   Chaoqun Yao, Ray KaplanThe global rise of anthelmintic resistance and what this means for the future of parasite control Ray Kaplan (University of Georgia, USA)Effect of anthelmintics on gut microbiome of non-human primates Chaoqun Yao (Ross University School of Veterinary Medicined, St. Kitts)Mitochondrial NADH-fumarate reductase system of adult Fasciola flukes, a potentially novel drug target Atsushi Tashibu (Iwate University, Japan)Effect of a herbal complex against common parasites of animals and poultry in Pakistan Muhammad Arfan Zaman (University of Veterinary and Animal Sciences, Pakistan)
5108       Room 322 B         5108-1       10:00~10:40         Keynote       Keynote         5108-2       10:40~10:55         5108-3       10:55~11:10         5108-4       11:10~11:25         5108-5       11:25~11:40	Anthelmintics, their use and resistance in veterinary parasites Session Chairs   Chaoqun Yao, Ray KaplanThe global rise of anthelmintic resistance and what this means for the future of parasite control Ray Kaplan (University of Georgia, USA)Effect of anthelmintics on gut microbiome of non-human primates Chaoqun Yao (Ross University School of Veterinary Medicined, St. Kitts)Mitochondrial NADH-fumarate reductase system of adult <i>Fasciola</i> flukes, a potentially novel drug target Atsushi Tashibu (Iwate University, Japan)Effect of a herbal complex against common parasites of animals and poultry in Pakistan Muhammad Arfan Zaman (University of Veterinary and Animal Sciences, Pakistan)Sustained released-suspension of ivermectin based on solid lipid dispersion for subcutaneous delivery: Development and evaluation Baoliang Pan (China Agricultural University, China)

5109 Room 323A	Immunological diagnosis of parasitic diseases Session Chairs   Haruhiko Maruyama, Tokio Hoshina
5109-1 10:00~10:30 Keynote	Revisiting the role of serodiagnosis of toxoplasmosis Tokio Hoshina (Jukei University School of Medicine, Japan)
<b>5109-2</b> 10:30~10:45	The immunochromatographic test (ICT) kit, a point-of-care test kit for rapid serodiagnosis of human gnathostomiasis Wanchai Maleewong (Khon Kaen University, Thailand)
<b>5109-3</b> 11:45~11:00	Evaluation of the NIE-ELISA for diagnosis of strongyloidiasis among patients in Japan Phoo Pwint Ko (University of Miyazaki, Myanmar (Burma))
<b>5109-4</b> 11:00~11:15	Evaluation of LIPS (luciferase immunoprecipitation system) using recombinant antigens for serodiagnosis of toxoplasmosis Khin Myo Aye (University of Miyazaki, Myanmar (Burma))
<b>5109-5</b> 11:15~11:30	Significance of serology by multi-antigen ELISA for tissue helminthiases in Korea Sung-Tae Hong (Seoul National University, Korea)
<b>5109-6</b> 11:30~11:45	ELISA using recombinant cathepsin L1 can detect antibodies against <i>Fasciola</i> flukes from sika deer and humans in Japan Madoka Ichikawa Seki (Iwate University, Japan)
5110 Room 323B	Impacts of global warming on fish parasites in aquatic ecosystems Session Chairs   Meesun Ock, Banchob Sripa
5110-1 10:00~10:30 Keynote	Ecology of <i>Opisthorchis viverrini</i> transmission and possible effects of global warming Banchob Sripa (Khon Kaen University, Thailand)
<b>5110-2</b> 10:30~10:45	Changes of infection status of <i>Anisakis</i> larvae in some fish due to SST rise in the Korean waters Meesun Ock (Kosin University, Korea)
<b>5110-3</b> 10:45~11:00	Infection characteristics of <i>Clonorchis sinensis</i> metacercariae in fish from major rivers of Republic of Korea Woon Mok Sohn (Gyeongsang National University, Korea)
<b>5110-4</b> 11:00~11:15	Distribution pattern of infection and pathogenic potential of nematodes in hill-stream, freshwater and marine fishes in India Sandeep K Malhotra (University of Allahabad, India)
<b>5110-5</b> 11:15~11:30	Digenean trematodes from marine fishes caught off the Ogasawara Islands Toshiaki Kuramochi (National Museum of Nature and Science, Japan)
<b>5110-6</b> 11:30~11:45	Parasites infection amongst fish captured in lower Kinabatangan river, Sabah, Malaysia and its relation to water quality

111 Room 324A	Magic glasses Asia: A research program for the prevention of STH infections Session Chairs   Don McManus, Darren Gray
<b>5111-1</b> 10:00~10:05	Introduction Donald McManus (QIMR Berghofer Medical Research Institute, Australia)
<b>5111-2</b> 10:05~10:35 Keynote	The magic glasses research programme for the global control of intestinal worms Darren Gray (Australian National University, Australia)
<b>5111-3</b> 10:35~10:50	The Magic Glasses: Philippines Mary Lorraine Mationg (The Australian National University, Philippines)
<b>5111-4</b> 10:50~11:05	A randomized controlled trial to evaluate the impact of combining hygiene education with deworming in Vietnam Paul Monaghan (Evidence Action, USA)
<b>5111-5</b> 11:05~11:20	Mathematical modelling of 'Magic Glasses' and mass drug administration in controlling soil-transmitted helminth infections Gail Williams (University of Queensland, Australia)
<b>5111-6</b> 11:20~11:35	Molecular diagnosis for evaluating the impact of public health interventions such as the Magic Glasses Catherine Gordon (QIMR Berghofer Medical Research Institute, Australia)
<b>5111-7</b> 11:35~11:50	Magic Glasses Asia research program for the prevention of intestinal worms -Wrap-up Donald McManus (QIMR Berghofer Medical Research Institute, Australia)
12 Room 324B	Omics approaches in animal protozoan parasites Session Chairs   Ikuo Igarashi, Shin-Ichiro Kawazu
5112-1 10:00~10:20 Keynote	Studies on development and application of gene manipulation methodologies for investigation of gene function and life cycle of <i>Babesia</i> parasites Shin-Ichiro Kawazu (Obihiro University of Agriculture and Veterinary Medicine, Japan)
5112-2 10:20~10:40 Keynote	<i>Eimeria</i> genomics: Towards understanding the molecular basis of coccidiosis control Kiew-Lian Wan (Universiti Kebangsaan Malaysia, Malaysia)
<b>5112-3</b> 10:40~10:55	Relationship between chromosomal somy and gene dosage in a <i>Leishmania braziliensis</i> strain sensitive and resistant to Sb <sup>III</sup> Juan David Ramírez (Universidad del Rosario, Colombia)
<b>5112-4</b> 10:55~11:10	Whole-genome assembly of <i>Babesia</i> parasite with long-read sequencers Junya Yamagishi (Hokkaido University, Japan)
<b>5112-5</b> 11:10~11:25	Babesia bovis ves1a expression is correlated with cytoadhesion of parasite-infected erythrocyte to the endothelial cells Masahito Asada (Nagasaki University, Japan)
<b>5112-6</b> 11:25~11:40	Proteomic approach leads to the identification of novel <i>Babesia bovis</i> proteins expressed on the surface of infected erythrocytes Hassan Hakimi (Nagasaki University, Japan)
<b>5112-7</b> 11:40~11:55	Quantitative proteomics of <i>Trichomonas vaginalis</i> secretome Jan Tachezy (Charles University, Czech)

SM	Room <b>30</b>
0.IVI	10:00~18

Day 5 Thursday (Aug. 23)

#### Setellite Meetings

**D6A** The Second SUKO International Conference on Elimination of Schistosomiasis and other NTDs in Sudan

	Plenary Lecture		
PL-13	Room <b>Auditorium</b> 13:00~13:30	Driving force for schistosomiasis elimination in China Prof. Xiao-Nong Zhou (Chinese Center for Disease Control and Prevention, China) Session Chair   Philip Loverde	
PL-14	Room <b>Auditorium</b> 13:30~14:00	Advances in Asian liver flukes: From bench to community Prof. Banchob Sripa (Khon Kaen University, Thailand) Session Chair   Sung-Tae Hong	

Room <b>GBR</b>   14:00~	14:20 Coffee Break
	Parallel Oral Session 9
201 Room 325A	The malaria parasite druggable genome Session Chairs   Amanda Lukens, Elizabeth Winzeler
5201-1 14:20~14:50 Keynote	Malaria Drug Accelerator Consortium Elizabeth Winzeler (University of California, USA)
<b>5201-2</b> 14:50~15:05	Exploiting collateral sensitivity in antimalarial drug development Amanda Lukens (The Broad Institute and Harvard T.H. Chan School of Public Health, USA)
<b>5201-3</b> 15:05~15:20	Attacking and probing malaria parasites with small molecule inhibitors of plasmepsin V Brad Sleebs (Walter and Eliza Hall Institute of Medical Research, Australia)
<b>5201-4</b> 15:20~15:35	Structure and drug target validation studies of the malaria parasite proteasome Stanley Cheng Xie (University of Melbourne, Australia)
<b>5201-5</b> 15:35~15:50	Targeted phenotypic screening in <i>Plasmodium falciparum</i> and <i>Toxoplasma gondii</i> reveals novel modes of action of medicines for Malaria Venture Malaria Box Molecules Gowtham Subramanian (Singapore University of Technology and Design, Singapore)

5202 Room 325B	Vivax malaria vaccines Session Chairs   Takafumi Tsuboi, Anjali Yadava
<b>5202-1</b> 14:20~14:30 Introduction	Vivax malaria vaccine Takafumi Tsuboi (Ehime University, Japan)
5202-2 14:30~15:10 Keynote	Preerythrocytic vaccines for <i>Plasmodium vivax</i> - Current status and future directions Anjali Yadava (WRAIR, USA)
<b>5202-3</b> 15:10~15:40	Accelerating <i>Plasmodium vivax</i> vaccine development through the identification of highly- protective combinations of recombinant proteins Ivo Mueller (Walter and Eliza Hall Institute of Medical Research, Australia)
<b>5202-4</b> 15:40~16:00	Efficacy of the vivax malaria vaccine using recombinant adenovirus and vaccinia virus expressing 33 kDa fragment of <i>Plasmodium vivax</i> merozoite surface protein - 1 Tae Yun Kim (Korea Centers for Disease Control & Prevention, Korea)
<b>5202-5</b> 16:00~16:30	Update on transmission blocking vaccine against <i>Plasmodium vivax</i> Jetsumon Prachumsri (Mahidol University, Thailand)
5203 Room 320A	The LeishVet symposium: Leishmaniasis in dogs and cats: Disease, hosts and reservoirs (2) Session Chairs   Gad Baneth, Laia Solano-Gallego
<b>5203-1</b> 14:20~14:50 Keynote	Clinical immunology in canine leishmaniasis: Diagnosis, treatment and prognosis Laia Solano-Gallego (Autonomous University of Barcelona, Spain)
<b>5203-2</b> 14:50~15:05	Canine leishmaniasis vaccines: Advantages and pitfalls Gaetano Oliva (University of Naples Federico II, Italy)
<b>5203-3</b> 15:05~15:20	<i>Leishmania</i> infection and disease in felids Maria-Grazia Pennisi (University of Messina, Italy)
<b>5203-4</b> 15:20~15:35	Drug therapy and resistance in canine leishmaniasis Gad Baneth (Hebrew University, Korea)
5204 Room 320B	Amebiasis: Biology, biochemistry, pathogenesis and drug development (2) Session Chairs   Tomoyoshi Nozaki, Alok Bhattacharya
<b>5204-1</b> 14:20~15:00 Keynote	Molecular mechanism of phagocytosis in the protist parasite <i>Entamoeba histolytica</i> Alok Bhattacharya (Jawaharlal Nehru University, India)
<b>5204-2</b> 15:00~15:20	Functional implication of lipid transport in <i>Entamoeba histolytica</i> pathogenesis Koushik Das (The University of Tokyo, Japan)
<b>5204-3</b> 15:20~15:40	<b>Dynamin-related proteins for the fission of <i>Entamoeba</i> mitosomes</b> Takashi Makiuchi (Tokai University School of Medicine, Japan)
<b>5204-4</b> 15:40~16:00	Entamoeba histolytica trophozoites induce a rapid non-classical NETosis mechanism independent of NOX2-derived reactive oxygen species and PAD4 activity Julio Carrero (Instituto de Investigaciones Biomédicas, Universidad Nacional Autónoma de México, Mexico)

5205 Room 321A	<i>Cryptosporidium</i> minisymposium Session Chairs   Guan Zhu, Boris Striepen
5205-1 14:20~14:50 Keynote	Molecular genetics for <i>Cryptosporidium</i> Boris Striepen (University of Pennsylvania, USA)
<b>5205-2</b> 14:50~15:05	Novel and promising compounds to treat <i>Cryptosporidium pavum</i> infections James Sacchettini (Texas A&M University, USA)
<b>5205-3</b> 15:05~15:20	Molecular epidemiology and genomics of <i>Cryptosporidium</i> spp. Yaoyu Feng (East China University of Science and Technology, China)
<b>5205-4</b> 15:20~15:35	Developing therapeutics to reduce <i>Cryptosporidium</i> morbidity and mortality among children in low-resource settings Robert Choy (PATH, USA)
<b>5205-5</b> 15:35~15:50	Non-coding RNAs in <i>Cryptosporidium</i> -host epithelial cell interactions Xian-Ming Chen (Creighton University, USA)
<b>5205-6</b> 15:50~16:05	Implication of the unique <i>Cryptosporidium</i> parasitophorous vacuole membrane (PVM) as a metabolically active organelle Guan Zhu (Texas A&M University, USA)
<b>5205-7</b> 16:05~16:20	The <i>Cryptosporidium parvum</i> TSP4 mediates adhesion of intestinal epithelial cells via interactions with sulfated heparin Jigang Yin (Jilin university, China)
5206 Room 321B	Recent advances in <i>Blastocystis</i> research: From genome to microbiome Session Chairs   Kevin Tan, Anastasios Tsaousis
<b>5206-1</b> 14:20~14:25	Welcome remarks by Session Chair Kevin S.W. TAN (National University of Singapore, Singapore)
5206-2 14:25~15:00 Keynote	Establishing the building blocks of <i>Blastocystis</i> research: From genome to microbiome Anastasios TSAOUSIS (University of Kent, UK)
<b>5206-3</b> 15:00~15:20	The relationship between <i>Blastocystis</i> sp. and intestinal microbiota in cirrhosis patients with hepatic encephalopathy: The first experience from Turkey Funda DOGRUMAN-AL (Gazi University, Turkey)
<b>5206-4</b> 15:20~15:40	The ubiquity of <i>Blastocystis</i> and associations between <i>Blastocystis</i> and gut microbiota Christen Rune STENSVOLD (Statens Serum Institut, Denmark)
<b>5206-5</b> 15:40~16:00	The impact of <i>Blastocystis</i> and intestinal polyparasitism in the gut microbiota: A comprehensive analysis in Colombian patients Juan David RAMÍREZ (Universidad del Rosario, Colombia)
<b>5206-6</b> 16:00~16:20	Characterization and role of horizontally-acquired tryptophanase gene in <i>Blastocystis</i> : Insights into survival amongst bacterial microbiota Kevin S.W. TAN (National University of Singapore, Singapore)

5207 Room 322A	Recent advances in the study of <i>Trichinella</i> and trichinellosis Session Chairs   Guadalupe Ortega Pierres, Dante Zarlenga
5207-1 14:20~14:50 Keynote	<b>Cyanase: Evidence of plant-derived horizontal gene transfer within the genus</b> <i>Trichinella</i> Dante Zarlenga (US Department of Agriculture, USA)
<b>5207-2</b> 14:50~15:15	Clock of <i>Trichinella spiralis</i> Ljiljana Sofronic-Milosavljevic (Institute for the Application of Nuclear Energy INEP, University of Belgrade, Serbia)
<b>5207-3</b> 15:15~15:40	Characterization of selected innate immune cells in mice infected with <i>Trichinella spiralis</i> during the early infection phase Xiaoxiang Hu (Jilin University, China)
<b>5207-4</b> 15:40~16:05	Characterization and potential use of early diagnostic antigens from <i>T. spiralis</i> adult worm ES proteins Gege Sun (Zhengzhou University, China)
<b>5207-5</b> 16:05~16:30	Biological characterization of vesicles from excretion-secretion products of <i>Trichinella</i> <i>spiralis</i> María Priscila Saracino (Buenos Aires University, Argentina)
5208 Room 322B	Immunology in schistosomiasis Session Chairs   Minjun Ji, Xi Sun
5208-1 14:20~14:50 Keynote	Chi3l3 aggravates eosinophilic meningitis induced by <i>Angiostrongylus cantonensis</i> via a IL-13 mediated positive feedback loop Xi Sun (Sun Yat-sen University, China)
<b>5208-2</b> 14:50~15:05	Innate scavenger receptor-A regulates adaptive T helper cell responses during <i>Schistosoma japonicum</i> infection Zhipeng Xu (Nanjing Medical University, China)
<b>5208-3</b> 15:05~15:20	MULT1 encoding DNA alleviate murine schistosomiasis-induced hepatica fibrosis Shengjun Lu (Huazhong University of Science & Technology, China)
<b>5208-4</b> 15:20~15:35	<i>Schistosoma mansoni</i> infection suppresses the growth of <i>Plasmodium yoelii</i> parasites in the liver and reduces gametocyte infectivity to mosquitoes Taeko Moriyasu (Nagasaki University, Japan)
<b>5208-5</b> 15:35~15:50	Developmental and host-mediated regulation of <i>Schistosoma mansoni</i> AMP-activated protein kinase (AMPK) expression and activity Stephen Davies (Uniformed Services University of the Health Sciences, USA)

5209 Room 323A	Recent updates on liver fluke Session Chairs   De-Hua Lai, Sung-Tae Hong
<b>5209-1</b> 14:20~14:50 Keynote	Current status of <i>Clonorchis sinensis</i> and clonorchiasis in China De-Hua Lai (Sun Yat-Sen University, China)
<b>5209-2</b> 14:50~15:20 Keynote	Diagnosis of clonorchiasis: Which one is the best? Sung-Tae Hong (Seoul National University, Korea)
<b>5209-3</b> 15:20~15:35	Characteristics and application of serum panels for the development of the sero- diagnostics of clonorchiasis Jung Won Ju (KCDC, Korea)
<b>5209-4</b> 15:35~15:50	<i>Clonorchis sinensis</i> lysophospholipase A upregulates IL-25 expression in macrophages as a potential pathway to liver fibrosis Yan Huang (Sun Yat-sen University, China)
<b>5209-5</b> 15:50~16:05	Intestinal fluke <i>Metagonimus yokogawai</i> and liver fluke <i>Clonorchis sinensis</i> infection increases probiotic <i>Lactobacillus</i> in mouse gut Ju Yeong Kim (Yonsei University, Korea)
<b>5209-6</b> 16:05~16:15	Whole transcriptome sequencing for analysis of the genes in cholangiocytes treated with <i>Clonorchis sinensis</i> excretory-secretory product and N-nitrosodimethylamine Eun Min Kim (Yonsei University, Korea)
5210 Room 323B	Sparganosis and diphyllobothriasis Session Chairs   Keeseon Eom, Hiroshi Yamasaki
5210-1 14:20~14:50 Keynote	Diphyllobothriasis: Systematics, molecular diagnostics and epidemiology Hiroshi Yamasaki (National Institute of Infectious Diseases, Japan)
<b>5210-2</b> 14:50~15:05	<i>Dibothriocephalus latus</i> , the national parasite of Finland : From being highly prevalent to near perdition Antti Oksanen (Finnish Food Safety Authority Evira, Finland)
<b>5210-3</b> 15:05~15:20	Newly identified <i>Spirometra</i> species inducing human sparganosis Keeseon Eom (Chungbuk National University, Korea)
5210-4 5210-4	Genetic identification of <i>Spirometra</i> species in Asian region, North America and East Africa Hyeong-Kyu Jeon (Chungbuk National University School of Medicine, Korea)
<b>5210-5</b> 15:50~16:05	Establishment of a newly isolated triploid clone of <i>Spirometra</i> (Cestoda: Diphyllobothriidae) as a powerful tool for studying the molecular and cellular bases of sparganosis Tetsuya Okino (Kawasaki Medical School, Japan)

5211 Room 324A	Control of livestock helminths Session Chairs   Ray M. Kaplan, Jozef Vercruysse
<b>5211-1</b> 14:20~14:35	Opening Remark
<b>5211-2</b> 14:35~15:05 Keynote	The future control of helminth ruminant infections Jozef Vercruysse (Ghent University, Belgium)
<b>5211-3</b> 15:05~15:20	Anthelmintic resistance in ruminants: A worldwide problem. Why is it rare in Italy? Laura Rinaldi (University of Napoli Federico II, Italy)
<b>5211-4</b> 15:20~15:35	Monitoring emerging drug-resistant populations using a panel of genome-wide SNPs: Case study of the sheep gastro-intestinal nematode <i>Haemonchus contortus</i> Marielle Babineau (CSIRO, Australia)
<b>5211-5</b> 15:35~15:50	Comparative study on immunoglobulins isotypes and histamine concentration towards resistances against <i>Haemonchus contortus</i> in Teddy and Beetal Goat Breeds Asim Shamim (The University of Poonch Rawalakot Azad Kashmir, Pakistan)
<b>5211-6</b> 15:50~16:05	Impact of a refugia-based strategy in stocker cattle on species diversity, pasture contamination and development of resistance Ray Kaplan (University of Georgia, USA)
5212 Room 324B	Diagnosis of parasitic diseases Session Chairs   Andreas Latz, Sirowan Ruantip
<b>5212-1</b> 14:20~14:35	Novel IVD tools for diagnosing filariasis in humans and animals Andreas Latz (NovaTec Immundiagnostica GmbH, Germany)
	Assurant of uring approximation of strangulaidiania uning reported completeness
<b>5212-2</b> 14:35~14:50	for three consecutive days Sirowan Ruantip (Khon Kaen University, Thailand)
<b>5212-2</b> 14:35~14:50 <b>5212-3</b> 14:50~15:05	Accuracy of three assay for tragnosis of strongyloidiasis using repeated sample analysis for three consecutive days Sirowan Ruantip (Khon Kaen University, Thailand) Development and performance evaluation of enzyme linked immunosorbent assay and line blot for serological diagnosis of <i>Trichinella</i> in humans and animals Andreas Latz (NovaTec Immundiagnostica GmbH, Germany)
5212-2         14:35-14:50           5212-3         14:50-15:05           5212-4         15:05-15:20	Accuracy of unite assay for diagnosis of strongyloidiasis dising repeated sample analysis for three consecutive days Sirowan Ruantip (Khon Kaen University, Thailand) Development and performance evaluation of enzyme linked immunosorbent assay and line blot for serological diagnosis of <i>Trichinella</i> in humans and animals Andreas Latz (NovaTec Immundiagnostica GmbH, Germany) Identification and characterization of antigenic proteins of excretory/secretory and somatic products of amphistomes in buffaloes from Pakistan Kiran Afshan (Quaid-i-Azam University, Pakistan)
5212-2       14:35~14:50         5212-3       14:50~15:05         5212-4       15:05~15:20         5212-5       15:20~15:35	Accuracy of unite assay for unagrosis of strongyloidiasis dising repeated sample analysis for three consecutive days Sirowan Ruantip (Khon Kaen University, Thailand) Development and performance evaluation of enzyme linked immunosorbent assay and line blot for serological diagnosis of <i>Trichinella</i> in humans and animals Andreas Latz (NovaTec Immundiagnostica GmbH, Germany) Identification and characterization of antigenic proteins of excretory/secretory and somatic products of amphistomes in buffaloes from Pakistan Kiran Afshan (Quaid-i-Azam University, Pakistan) Development of an <i>Bartonella henselae</i> specific human IgG ELISA Andreas Latz (NovaTec Immundiagnostica GmbH, Germany)
5212-2       14:3514:50         5212-3       14:5015:05         5212-4       15:0515:20         5212-5       15:2015:35         5212-6       15:3515:50	Accuracy of unite assay for unagrosis of strongyloidiasis using repeated sample analysis for three consecutive days         Sirowan Ruantip (Khon Kaen University, Thailand)         Development and performance evaluation of enzyme linked immunosorbent assay and line blot for serological diagnosis of <i>Trichinella</i> in humans and animals         Andreas Latz (NovaTec Immundiagnostica GmbH, Germany)         Identification and characterization of antigenic proteins of excretory/secretory and somatic products of amphistomes in buffaloes from Pakistan         Kiran Afshan (Quaid-i-Azam University, Pakistan)         Development of an <i>Bartonella henselae</i> specific human IgG ELISA         Andreas Latz (NovaTec Immundiagnostica GmbH, Germany)         Restriction enzyme digestion of host DNA enhances universal detection of parasitic pathogens via 18s rRNA deep sequencing         Richard Bradbury (Centers for Disease Control and Prevention, USA)

	Setellite Meetings
<b>S.M</b> Room <b>306A</b> 10:00~18:00	The Second SUKO International Conference on Elimination of Schistosomiasis and other NTDs in Sudan
Room <b>GBR</b>   16:20	~16:40 Coffee Break
	Parallel Oral Session 10
5301 Room 325A	Towards malaria eradication: Innovations and community engagement Session Chairs   Akira Kaneko, Tomohiko Sugishita
<b>5301-1</b> 16:40~17:10 Keynote	Innovative people-centered approach towards achieving universal health coverage Tomohiko Sugishita (Tokyo Women's Medical University, Japan)
<b>5301-2</b> 17:10~17:25	Community engagement, social context and the uptake of mass anti-malarial administration: Comparative findings from multi-site mixed-methods research in the Greater Mekong sub-Region Bipin Adhikari (Mahidol-Oxford Tropical Medicine Research Unit, Thailand)
<b>5301-3</b> 17:25~17:40	Residual <i>Plasmodium vivax</i> submicroscopic infections on islands in Vanuatu Akira Kaneko (Karolinska Institutet, Sweden)
<b>5301-4</b> 17:40~17:55	Malaria importation and resurgence after elimination by mass drug administration on Ngodhe Island Wataru Kagaya (Osaka City University, Japan)
<b>5301-5</b> 17:55~18:05	Covering house eave gaps and ceilings with Olyset® Net reduces risk of <i>Plasmodium falciparum</i> parasite infection among children: A cluster randomised controlled trial Noboru Minakawa (Nagasaki University, Japan)
5302 Room 325B	Anti-malaria drug development Session Chairs   Hyun Park, Seon Ju Yeo
<b>5302-1</b> 16:40~17:10 Keynote	Ivermectin mass drug administration for malaria elimination in the Greater Mekong Subregion Kevin Kobylinski (Armed Forces Institute of Medical Sciences, Thailand)
<b>5302-2</b> 17:10~17:25	A novel antimalarial compound to inhibit <i>Plasmodium falciparum</i> Seon Ju Yeo (Wonkwang University, Korea)
<b>5302-3</b> 17:25~17:40	<i>Plasmodium falciparum</i> deoxyhypusine synthase is essential and a valid antimalarial target Philip J. Shaw (National Science and Technology Development Agency, Thailand)
<b>5302-4</b> 17:40~17:55	PfMRP1 is a drug/metabolite importer in <i>Plasmodium falciparum</i> Pedro Ferreira (University of Minho, Portugal)
<b>5302-5</b> 17:55~18:05	Novel antimalarials: Aminoquinolines affording murine survival with huge levels of parasitemia Jelena Srbljanović (Institute for Medical Research, University of Belgrade, Serbia)
<b>5302-6</b> 18:05~18:20	Retargeting the antibiotic azithromycin as an antimalarial with dual-modality Amy Burns (The University of Adeiade, Australia)
<b>5302-7</b> 18:20~18:35	<i>In vitro</i> antimalarial activity of biosynthesized silver nanoparticles using leaf extract of <i>Zeuxine gracilis</i> against malaria parasite, <i>Plasmodium falciparum</i> Kovendan Kalimuthu (Annamalai University, India)

5303 Room 320A	Leishmaniasis in animals Session Chair   Gaetano Oliva
<b>5303-1</b> 16:40~17:10 Keynote	Current scenario of <i>Leishmania infantum</i> reservoirs Gioia Capelli (Istituto Zooprofilattico Sperimentale delle Venezie, Italy)
<b>5303-2</b> 17:10~17:25	Study of hemotropics present in livestock farms of the Province of Guayas, Ecuador: 2016 - 2017 Glenda Llaguno (Universidad Agraria del Ecuador, Ecuador)
<b>5303-3</b> 17:25~17:40	The ability of vertical transmission to maintain <i>Leishmania</i> infection in dogs Christine Petersen (University of Iowa, USA)
<b>5303-4</b> 17:40~17:55	Canine leishmaniasis caused by <i>Leishmania tropica</i> and <i>Leishmania major</i> Gad Baneth (Hebrew University, Israel)
<b>5303-5</b> 17:55~18:05	<b>The potential of non-human reservoirs in Bihar, India</b> Puja Tiwary (Banaras Hindu University, India)
<b>5303-6</b> 18:05~18:20	Development and performance evaluation of enzyme linked immunosorbent assay and line blot for serological diagnosis of leishmaniasis in dogs Andreas Latz (NovaTec Immundiagnostica GmbH, Germany)
5304 Room 320B	Cancer and parasites Session Chairs   Hossein Yousofi Darani, Tai-Soon Yong
<b>5304-1</b> 16:40~17:10 Keynote	Convergence between parasites and cancer cells Nishith Gupta (Humboldt University, Germany)
<b>5304-2</b> 17:10~17:40 Keynote	Parasite antigens as possible targets for cancer immunotherapy Hossein Yousofi Darani (Isfahan University of Medical Sciences, Iran)
<b>5304-3</b> 17:40~17:55	Effect of a fraction of hydatid cyst fluid on inhibition of colorectal cancer growth in mouse model Shahla Rostamirad (Islamic Azad University, Iran)
<b>5304-4</b> 17:55~18:10	Therapeutic effect of hydatid cyst liquid on melanoma tumor growth in mouse model Seyedeh Maryam Sharafi (Isfahan University of Medical Sciences, Iran)
<b>5304-5</b> 18:15~18:30	Anti- <i>Toxoplasma</i> antibody selectively attach to mouse melanoma and breast cancer cells Azar Balouti Dehkordi (Isfahan University of Medical Sciences, Iran)
<b>5304-6</b> 18:30~18:45	Mice immunization against 27/28 kDa hydatic cyst wall antigens inhibits growth and metastasis of 4T1 breast cancer tumors and mass spectrometry and bioinformatic analyses could identify susceptible antigens for the immune response Mahshid Shakibapour (Isfahan University of Medical Sciences, Iran)
<b>5304-7</b> 18:45~19:00	<i>Trypanosoma cruzi</i> mucins as possible anticancer targets in acute lymphoblastic leukemia Enedina Jiménez Cardoso (Hospital Infantil de México Federico Gómez, Mexico)

5305 Room 321A	Tissue larva migrans revisited Session Chairs   Hong-Kean Ooi, Hiroshi Sato
<b>5305-1</b> 16:40~17:10 <b>Keynote</b>	Baylisascaris procyonis larva migrans Hiroshi Sato (Yamaguchi University, Japan)
<b>5305-2</b> 17:10~17:25	Loop-mediated isothermal amplification (LAMP) method for identification of <i>Baylisascaris</i> procyonis, Toxocara canis and T. cati Hong-Kean Ooi (Azabu University, Japan)
<b>5305-3</b> 17:25~17:40	Infectivity and migration pattern of <i>Baylisascaris potosis</i> larvae in mice and chickens Kensuke Taira (Azabu University, Japan)
<b>5305-4</b> 17:40~17:55	The <i>Baylisascaris</i> infection of domesticated bear in Korea Hee Jeong Youn (Seoul National University, Korea)
<b>5305-5</b> 17:55~18:05	Seroprevalence, environmental and behavioral risk factors of <i>Toxocara canis</i> infection among women in Swaziland, Southern Africa Chia-Kwung Fan (Taipei Medical University, Chinese Taipei)
<b>5305-6</b> 18:05~18:20	RNAi mediated suppression of venestatin in the subcutaneous migration of <i>Strongyloides</i> venezuelensis Daigo Tsubokawa (Kitasato University, Japan)
<b>5305-7</b> 18:20~18:35	Proteomic analysis of <i>Trichinella spiralis</i> and <i>Trichinella britovi</i> muscle larvae excretory- secretory proteins recognized by sera of patients with trichinellosis Sylwia Grzelak (Witold Stefanski Institute of Parasitology, Polish Academy of Sciences, Poland)
5306 Room 321B	<i>Toxocara</i> : The enigmatic parasite Session Chairs   Celia Holland, Dwight Bowman
<b>5306-1</b> 16:40~17:10 <b>Keynote</b>	<i>Toxocara</i> : a look at some of the unenigmatic bits Dwight Bowman (Cornell University, USA)
<b>5306-2</b> 17:10~17:25	A survey of <i>Toxocara</i> sp. environmental contamination from public spaces in New York City Donna Tyungu (University of Oklahoma Health Sciences Center, USA)
<b>5306-3</b> 17:25~17:40	Enhanced expressions of neurodegeneration-associated factors, UPS impairment, and excess A $\beta$ accumulation in the hippocampus of mice with persistent cerebral toxocariasis Chia-Kwung Fan (Taipei Medical University, Chinese Taipei)
<b>5306-4</b> 17:40~17:55	Improving the serodiagnosis of human toxocariasis Rahmah Noordin (Universiti Sains Malaysia, Malaysia)
<b>5306-5</b> 17:55~18:05	Zoonotic evidence of <i>Toxocara</i> spp. between domestic and human dogs of the town Colimes. Guayas, Ecuador. Betty Pazmiño (Universidad Estatal de Milagro, Ecuador)

5307 Room 322A	Foodborne trematode zoonoses and their snail vectors Session Chairs   Santiago Mas-Coma, Maria Dolores Bargues
5307-1 16:40~17:10 Keynote	Snails vectors in the fascioliasis worldwide expansion: Spreading and non-spreading lymnaeids Maria Dolores Bargues (University of Valencia, Spain)
<b>5307-2</b> 17:10~17:25	Multidisciplinary research news in human fascioliasis Santiago Mas-Coma (University of Valencia, Spain)
<b>5307-3</b> 17:25~17:40	Genetic structure of <i>Fasciola</i> population in Japan based on microsatellite DNA markers Yuma Ohari (Iwate University, Japan)
<b>5307-4</b> 17:40~17:55	Development of quantitative PCRs to determine nuclear genotypes of hybrid <i>Fasciola</i> flukes Madoka Ichikawa Seki (Iwate University, Japan)
<b>5307-5</b> 17:55~18:05	Cathepsin L proteases of liver flukes - Different enzymes for different tasks? Peter Smooker (RMIT University, Australia)
<b>5307-6</b> 18:05~18:20	Monthly prevalence and parasite burden of <i>Fasciola hepatica</i> in dairy cattle from two districts of the Mantaro Valley, Junín, Perú, in a period of one year (2014 - 2015) Daniel Zarate (Universidad Nacional Agraria La Molina, Peru)
5308 Room 322B	Paragonimus and paragonimiasis Session Chairs   Yukifumi Nawa, Makedonka Mitreva
5308-1 16:40~16:43 Opening Remark	An update of <i>Paragonimus</i> and paragonimiasis Yukifumi Nawa (Khon Kaen University, Thailand)
<b>5308-2</b> 16:43~17:13 Keynote	Looking for biology in the genomes of lung flukes Makedonka Mitreva (Washington University, USA)
<b>5308-3</b> 17:13~17:28	First intermediate hosts of <i>Paragonimus</i> spp. in Vietnam and identification of <i>Paragonimus</i> species at intramolluscan stages Doanh Pham (Institute of Ecology and Biological Resources, Vietnam)
<b>5308-4</b> 17:28~17:40	Venison: A new transmission route for human paragonimiasis Ayako Yoshida (University of Miyazaki, Japan)
<b>5308-5</b> 17:40~17:52	Boar-hunting dogs maintain and expand the lifecycle of <i>Paragonimus westermani</i> in western Japan Yoichiro Horii (University of Miyazaki, Japan)
<b>5308-6</b> 17:52~18:04	ELISA based on a recombinant <i>Paragonimus heterotremus</i> protein for serodiagnosis of human paragonimiasis in Thailand Kanokkarn Pothong (Mahidol University, Thailand)
<b>5308-7</b> 18:04~18:16	Paragonimiasis and <i>Paragonimus</i> species in Central America Roderico Hernández Chea (University of San Carlos of Guatemala, Guatemala)
<b>5308-8</b> 18:16~18:28	Paragonimiasis among Asian immigrants in Japan Haruhiko Maruyama (University of Miyazaki, Japan)
5308-9 18:28~18:40 Free Discussion	Open for all participants

5309 Room 323A	Parasites of fish and marine animals (2) Session Chair   Rachel Welicky
<b>5309-1</b> 16:40~16:55	New species of the genus <i>Paragyliauchen</i> with a proposal of <i>Immersagyliauchen</i> n. g. for the type species <i>I. arusettae</i> n. comb. Yeseul Kang (Chungbuk National University, Korea)
<b>5309-2</b> 16:55~17:10	Species complexes are complex: A redescription of the fish parasitic isopod, <i>Anilocra capensis</i> Leach, 1818 (Crustacea: Isopoda: Cymothoidae), and the description of 7 new species from Africa Rachel Welicky (North-West University, South Africa)
<b>5309-3</b> 17:10~17:25	New genera of highland leech (Hirudinida: Piscicolidae) parasitic on Siamese freshwater batfish ( <i>Oreoglanis siamensis</i> ) from Chiang Mai province, Thailand Wasin Srirattanasart (Chiang Mai University, Thailand)
<b>5309-4</b> 17:25~17:40	Infestation dynamics of gill monogeneans from the wild Nile tilapia ( <i>Oreochromis niloticus</i> ) in Chiang Mai Province, Thailand Satawat Srichaiyo (Chiang Mai University, Thailand)
<b>5309-5</b> 17:40~17:55	<i>Nematopsis</i> sp. (Apicomplexa: Porosporidae) affecting gills of white scar oyster ( <i>Crassostrea belcheri</i> ) from Bandon Bay, Southern Thailand Kanda Kamchoo (Prince of Songkla University, Thailand)
<b>5309-6</b> 17:55~18:10	Differences in force of infection among age groups influence aggregation pattern of Acanthogyrus sp. in wild Nile tilapia ( <i>Oreochromis niloticus</i> ) Dana Vi Husana (University of the Philippines- Los Banos, Philippines)
<b>5309-7</b> 18:10~18:25	Reorganising the largest family of trematodes: A new subfamilial classification for the Opecoelidae Storm Martin (University of Queensland, Australia)
5310 Room 324A	Molecular diagnosis of helminthiasis Session Chairs   Sung-Jong Hong, Paiboon Sithithaworn
<b>5310-1</b> 16:40~17:10 Keynote	Urine antigen assay: A new diagnostic tool for screening and control of opisthorchiasis Paiboon Sithithaworn (Khon Kaen University, Thailand)
<b>5310-2</b> 17:10~17:30 Keynote	Recombinant and chimeric antigens of <i>Clonorchis sinensis</i> and rapid diagnostic test Sung-Jong Hong (Chung-Ang University, Korea)
<b>5310-3</b> 17:30~17:45	A novel diagnostic tool to diagnose prevalent of schistosomiasis Andreas Latz (NovaTec Immundiagnostica GmbH, Germany)
<b>5310-4</b> 17:45~18:00	Detection and characterization of food-borne trematode parasites prevalent in Northeast India using molecular tools Pramod Kumar Prasad (Science and Engineering Research Board, India)
<b>5310-5</b> 18:00~18:15	Quantitative PCR for diagnosis of soil-transmitted helminths: A comparison with a flotation- based technique and an investigation of variability in DNA detection Naomi Clarke (Australian National University, Australia)
<b>5310-6</b> 18:15~18:30	SchistoDetect <sup>™</sup> : Development of a reliable and sensitive rapid diagnostic test for <i>Schistosoma japonicum</i> infection in humans Shin-Ichiro Kawazu (Obihiro University of Agriculture and Veterinary Medicine, Japan)

311 Room 324B	Parasites and wildlife Session Chair   Serge Morand
<b>5311-1</b> 16:40~17:10 Keynote	The ecology of wildlife-parasite interactions in the era of global defaunation Serge Morand (CNRS - CIRAD - Kasetsart University, Thailand)
<b>5311-2</b> 17:10~17:25	Endoparasite of some reptiles and amphibians in Doi Saket and Meuang district, Chiang Mai province, Thailand Nut Aungviboon (Chiang Mai University, Thailand)
<b>5311-3</b> 17:25~17:40	Lungworms of European badgers, <i>Meles meles</i> : A complex puzzle Georgiana Deak (University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca, Rumania)
<b>5311-4</b> 17:40~17:55	Natural cycles of <i>Trichinella</i> spp. in Romania: The role of wild carnivores Calin Gherman (University of Agricultural Sciences and Veterinary Medicine, Rumania)
<b>5311-5</b> 17:55~18:10	Recent cases of parasitic helminthiasis dealt with the Wild Animal Medical Center, Rakuno Gakuen University, Japan Mitsuhiko Asakawa (Rakuno Gakuen University, Japan)

Room **GBR** | 18:40~19:40

Poster Session 2

9:50~21:30	
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Gala Dinner

	Parallel Oral Session 11
6101 Room 325A	Innovative approaches for malaria elimination Session Chairs   Toshihiro Horii, Benjamin Mordmueller
6101-1 08:30~09:00 Keynote	Controlled human infections as a tool for evaluating antimalarial interventions Benjamin Mordmueller (University of Tuebingen, Germany)
<b>6101-2</b> 09:00~09:12	Immune response to the malaria vaccine candidate BK-SE36 in clinical trials Nirianne Palacpac (Osaka University, Japan)
<b>6101-3</b> 09:12~09:24	BK-SE36 pathway for malaria vaccine development Toshihiro Horii (Osaka University, Japan)
<b>6101-4</b> 09:24~09:36	Mining the malaria genome for malaria vaccine candidates by innovative wheat germ cell- free technology Takafumi Tsuboi (Ehime University, Japan)
<b>6101-5</b> 09:36~09:48	Global issue of drug resistant malaria and population structure of malaria parasites for global malaria control Toshihiro Mita (Juntendo Umiversity, Japan)
<b>6101-6</b> 09:48~10:00	Overcoming the challenge of asymptomatic malaria infections for malaria control and elimination Pratap Singhasivanon (Mahidol University, Thailand)
<b>6101-7</b> 10:00~10:12	Introduction of the automated hematology analyzer XN-30 Kinya Uchihashi (Sysmex Corporation, Japan)
102 Room 325B	The need for new treatments for filariasis to ensure that no-one is left behind Session Chair   Sabine Specht
6102-1 08:30~09:00 Keynote	Development of alternative treatments for filarial diseases Sabine Specht (DNDi, Switzerland)
<b>6102-2</b> 09:00~09:15	Exploring the potential impact of hypothetical new drugs for onchocerciasis using mathematical models Luc Coffeng (Erasmus MC University Medical Center Rotterdam, Netherlands)
<b>6102-3</b> 09:15~09:30	30 years of annual ivermectin mass-treatments did not stop transmission in a former hyperendemic focus of river blindness ( <i>Onchocerca volvulus</i> ) in Northern Cameroon Adrian Streit (Max Planck Institute for Developmental Biology, Germany)
<b>6102-4</b> 09:30~09:45	Innate control of filarial nematode infection: The unexpected role of Natural Killer cells Nicolas Pionnier (Liverpool School of Tropical Medicine, UK)
<b>6102-5</b> 09:45~10:00	Challenges of interrupting transmission of lymphatic filariasis and onchocerciasis in Nigeria Chinyere Ukaga (Imo State University Owerri, Nigeria)
<b>6102-6</b> 10:00~10:15	Development of murine models of loiasis to assess filaricidal activity of preclinical candidate anti-filarial drugs Nicolas Pionnier (Liverpool School of Tropical Medicine, UK)

6103 Room 320A	Challenge for leishmaniasis Session Chairs   Yoshitsugu Matsumoto, Maowia Mukhtar
08:30~08:35	Opening Remark
6103-1 08:35~09:05 Keynote	Challenges and progress towards a simple point of care diagnostic test for visceral leishmaniasis Maowia Mukhtar (The Institute of Endemic Diseases, University of Khartoum, Sudan)
<b>6103-2</b> 09:05~09:20	The role of BAFF in antibody production and pathology during experimental visceral leishmaniasis Yasuyuki Goto (University of Tokyo, Japan)
<b>6103-3</b> 09:20~09:35	Mucosal vaccination for cutaneous leishmaniasis in mouse model Yasunobu Matsumoto (University of Tokyo, Japan)
<b>6103-4</b> 09:35~09:50	Species identification and phylogenetic analysis of <i>Leishmania</i> isolated from Xinjiang Autonomous Region, The People's Republic of China De-Hua Lai (Sun Yat-Sen University, China)
<b>6103-5</b> 09:50~10:20	The last situation of leishmaniasis in European and Middle East countries Yusuf Ozbel (Ege University, Turkey)
10:20~10:30	Discussion
6104 Room 320B	Control of soil-transmitted helminths Session Chairs   Jong-Yil Chai, Susana Vaz Nery
6104-1 08:30~09:00 Keynote	Optimizing strategies for STH control Susana Vaz Nery (UNSW, Australia)
<b>6104-2</b> 09:00~09:15	Evaluation of crude adult <i>Ascaris suum</i> intestinal tract homogenate in inducing protective IgG production against <i>A. suum</i> larvae in BALB/c mice Mark John Girasol (University of the Philippines, Philippines)
<b>6104-3</b> 09:15~09:30	<i>Toxocara canis</i> - A one-health problem Dwight Bowman (Cornell University, USA)
<b>6104-4</b> 09:30~09:45	An integrated approach for the control of intestinal parasites, south-central Côte d'Ivoire Gaoussou Coulibaly (University Félix Houphouët-Boigny, Côte d'Ivoire)
<b>6104-5</b> 09:45~10:00	A hotspot survey of neglected tropical diseases (NTDs) in three states, Sudan Hassan Ahmed Hassan Ahmed Ismail (Federal Ministry of Health, Sudan)
<b>6104-6</b> 10:00~10:15	Schistosomiasis and soil-transmitted helminths: the need for integrated and sustained control in North Kordofan State, Sudan Hassan Ahmed Hassan Ahmed Ismail (Federal Ministry of Health, Sudan)

Day 6 Friday (Aug. 24)

6105 Room 321A	Host-parasite interaction of intracellular protozoan (2) Session Chairs   Hongjuan Peng, Jon Boyle
6105-1 08:30~09:00 Keynote	Using comparative genomics and genetic manipulation in closely-related parasite species to understand the molecular underpinnings of life cycle and host range evolution in the human parasite <i>Toxoplasma gondii</i> Jon Boyle (University of Pittsburgh, USA)
<b>6105-2</b> 09:00~09:15	<i>Toxoplasma gondii</i> ROP18 <sub>1</sub> suppresses IFN-γ/STAT1 pathway by targeting NMI in human cells Jing Xia (Southern Medical University, China)
<b>6105-3</b> 09:15~09:30	Genome-wide expression profiling of the spleen in a lethal and non-lethal malaria infection model Regina May Ling Hoo (Nanyang Technological University of Singapore, Singapore)
<b>6105-4</b> 09:30~09:45	Investigating duffy binding protein gene duplication in Sudanese <i>Plasmodium vivax</i> field isolates Muzamil Abdelhamid Elmahdi (University of Khartoum, Sudan)
<b>6105-5</b> 09:45~10:00	Trypanosomiasis-induced B cell apoptosis results in loss of protective anti-parasite antibody responses and abolishment of vaccine-induced memory responses Magdalena Radwanska (Ghent University Global Campus, Korea)
<b>6105-6</b> 10:00~10:15	Anti- <i>Toxoplasma gondii</i> antibodies in hospitalized cancer patients compared with non- cancerous matched group in Isfahan, Iran Abbasali Eskandarian (Isfahan University of Medical Sciences, Iran)
6106 Room 321B	Geospatial health: Challenges and opportunities in parasitology Session Chair   Laura Rinaldi
<b>6106-1</b> 08:00~08:15	Geospatial health: Challenges and opportunities in parasitology Laura Rinaldi (University of Napoli Federico II, Italy)
<b>6106-2</b> 08:15~08:45	Spatial decision support for malaria elimination Archie Clements (Curtin University, Australia)
<b>6106-3</b> 08:45~09:00	Risk assement of malaria tranmission in the border areas between China and Myanmar Xiao-Nong Zhou (National Institute of Parasitic Diseases at China CDC, China)
<b>6106-4</b> 09:00~09:15	Comparing Bayesian decision networks and multilevel logistic regression models to predict spatial prevalence of malaria in Papua New Guinea Eimear Cleary (The Australian National University, Australia)
<b>6106-5</b> 09:15~09:30	Geospatial-temporal distribution of tegumentary leishmaniasis in Colombia (2007-2016) Juan David Ramírez (Universidad del Rosario, Colombia)

107 Room 322A	Vaccines for parasitic diseases Session Chairs   Fu-Shi Quan, Xing-Quan Zhu
6107-1 08:30~09:00 Keynote	Advances in anti- <i>Toxoplasma gondii</i> vaccine development: Opportunities and challenges Xing-Quan Zhu (Lanzhou Veterinary Research Institute, Chinese Academy of Agricultural Sciences, China)
<b>6107-2</b> 09:00~09:15	Regulation of memory T cell response in cutaneous leishmaniasis: Implications for vaccin design and vaccination strategies Jude Uzonna (University of Manitoba, Canada)
<b>6107-3</b> 09:15~09:30	Incorporation of <i>Toxoplasma gondii</i> multiple antigenic protein into influenza virus-like particles enhances protection Su-Hwa Lee (Kyung Hee University, Korea)
<b>6107-4</b> 09:30~09:45	Live attenuated <i>Leishmania major</i> as a prophylactic vaccine Md Abu Musa (Nagasaki University, Japan)
<b>6107-5</b> 09:45~10:00	Development of a novel malaria vaccine based on heterologous prime-boost immunization regimen using adenovirus and adeno-associated virus vectors Mitsuhiro Iyori (Kanazawa University, Japan)
<b>6107-6</b> 10:00~10:15	Respiratory syncytial virus infection induces resistance against subsequent <i>Trichinella spiralis</i> infection Ki Back Chu (KyungHee University, Korea)
108 Room 322B	Challenges and opportunities in foodborne parasite genomics: From microscope to MiSeq Session Chairs   Gopal R. Gopinath, Bjorn Andersson
6108-1 08:30~09:00 Keynote	TBA Bjorn Andersson (Karolinska Insitute, Sweden)
<b>6108-2</b> 09:00~09:15	<i>Cyclospora cayetanensis</i> genomics: From human stool samples to whole genome assemblies Hediye Nese Cinar (US Food and Drug Administration, USA)
<b>6108-3</b> 09:15~09:30	iTRAQ-based proteomics reveals cross-talk interactions between the newly excysted juveniles (NEJ) from <i>F. hepatica</i> and the host's intestinal epithelium Javier González-Miguel (Institute of Natural Resources and Agrobiology of Salamanca, Spain)
<b>6108-4</b> 09:30~09:45	Genetic diversity of <i>Echinococcus granulosus</i> sensu stricto in Algeria Mohammed Mebarek Bia (Chungbuk National University, Korea)
<b>6108-5</b> 09:45~10:00	Detoxification system of the food-borne parasite <i>Opisthorchis felineus</i> , Rivolta 1884: Functional and bioinformatic studies Maria Pakharukova (Institute of Cytology and Genetics, Russia)
<b>6108-6</b> 10:00~10:15	Molecular identification and phylogenetic analysis of <i>Fasciola</i> flukes from Ecuador Shinpei Kasahara (Iwate University, Japan)

6109 Room 323A	Ichtyoparasitology Session Chairs   Roman Kuchta, Thomas Cribb
6109-1 6109-1 Keynote	Biodiversity of parasitic flatworms of fishes in the 21 <sup>st</sup> Century – The Golden Age Thomas Cribb (The University of Queensland, Australia)
<b>6109-2</b> 09:00~09:30	Knowns and unknowns about the diversity of marine parasitic Nematoda Shokoofeh Shamsi (Charles Sturt University, Australia)
<b>6109-3</b> 09:30~09:45	Fish haemogregarines – A molecular approach to resolve the phylogeny of a currently morphologically characterised group Courtney Cook (North-West University, Australia)
<b>6109-4</b> 09:45~10:00	Uncovering the digenean diversity in freshwater fishes in Africa Olena Kudlai (North-West University, South Africa)
<b>6109-5</b> 10:00~10:15	The current status of, and future research trends on, African freshwater and estuarine fish parasitic Crustacea Nico Smit (North-West University, South Africa)
<b>6109-6</b> 10:15~10:30	The role of parasitic Crustacea as vectors of fish pathogens Kerry Hadfield Malherbe (North-West University, South Africa)
6110 Room 323B	Livestock parasites Session Chairs   Michael Stear, Shokoofeh Shamsi
<b>6110-1</b> 08:30~08:45	Pentastomid parasites in Australian carnivores and livestock Shokoofeh Shamsi (Charles Sturt University, Australia)
<b>6110-2</b> 08:45~09:00	Site-directed mutagenesis study revealed three important residues in Hc-DAF-22, a key enzyme regulating diapause of <i>Haemonchus contortus</i> Jingru Zhou (Zhejiang University, China)
<b>6110-3</b> 09:00~09:15	The mechanisms underlying the MHC association with resistance to the nematode <i>Teladorsagia circumcincta</i> Michael Stear (La Trobe University, Australia)
<b>6110-4</b> 09:15~09:30	A novel antagonist against goat IL-4 derived from the excretory and secretory products of <i>H. contortus</i> Xiaowei Tian (Nanjing Agricultural Uinversity, China)
<b>6110-5</b> 09:30~09:45	Molecular characterization of <i>Oxyspirura mansoni</i> and <i>Philophthalmus gralli</i> detected from the eye of domestic chickens in Bangladesh Peru Gopal Biswas (Iwate University, Japan)

6111 Room 324A	Flies and other arthropods Session Chairs   Yusuf Ozbel, Ashok Chaubey
6111-1 08:30~08:45	Morphine presence detection on flies larvae that found in rat carcasses in the botanical garden Dita Pratiwi Kusuma Wardani (Universitas Muhammadiyah Purwokerto, Indonesia)
<b>6111-2</b> 08:45~09:00	Furoncular skin and wounds myiasis in French Guyana Alireza Ensaf (H.S.F., France)
<b>6111-3</b> 09:00~09:15	Human urinary myiasis caused by <i>Clogmia albipunctata</i> (Diptera: Psychodidae) with morphological description of larva and pupa: Case report Nadia EI-Dib (Cairo University, Egypt)
<b>6111-4</b> 09:15~09:30	The toxicity of essential oils from some <i>Origanum</i> species against <i>Pediculus capitis</i> Yusuf Ozbel (Ege University, Turkey)
<b>6111-5</b> 09:30~09:45	Screening available agents for the control of <i>Aaethina tumida</i> (Coleoptera: Nitidulidae) in the Republic of Korea Yun Sang Cho (Animal and Plant Quarantine Agency, Korea)
6111-6 09:45~10:00	<i>Helicoverpa armigera</i> (Lepidoptera: Noctuidae) immune response to nematode-bacteria complex Ashok Chaubey (Chaudhary Charan Singh University, India)
<b>6111-7</b> 10:00~10:15	Identification of mite (Macronyssidae: Ophionyssus) from snake in Indonesia Kurniasih Imanudin (Gadjah Mada University, Indonesia)
<b>6111-8</b> 10:15~10:30	Evaluation of blood meal source by molecular tools of <i>Rhodnius robustus</i> submitted to starvation Alena Iñiguez (FIOCRUZ, Brazil)
6112 Room 324B	Drug resistance in STH of humans Session Chairs   Ray M. Kaplan, Luc Coffeng
6112-1 08:30~09:00 Keynote	Evolution of anthelminthic drug resistance in the era of preventive chemotherapy: What can mathematical models tell us? Luc Coffeng (Erasmus MC University Medical Center Rotterdam, Netherlands)
<b>6112-2</b> 09:00~09:15	The dog hookworm ( <i>Ancylostoma caninum</i> ): An ideal model for studying drug resistance in human hookworms Ray Kaplan (University of Georgia, USA)
<b>6112-3</b> 09:15~09:30	Quinolone-fused cyclic sulfonamide as a novel benign antifilarial agent Suprabhat Mukherjee (Visva-Bharati University, India)
<b>6112-4</b> 09:30~09:45	Identification of potential anthelmintic molecules with a new high content screening strategy using the <i>Caenorhabditis elegans</i> model Giovana Cintra (Federal University of São Paulo, Brazil)
<b>6112-5</b> 09:45~10:00	Genistein: Is the multifarious botanical a natural anthelmintic too? Bidyadhar Das (North Eastern Hill University, India)

Day 6 Friday (Aug. 24)

Ro	om <b>GBR</b>   10:30~	-11:00 Coffee Break
		Plenary Lecture
PL-15	Room <b>325</b> 11:00~11:30	Global health challenges and the elimination of parasitic diseases: Chances or contradictions? Prof. Marcel Tanner (DNDi, Switzerland) Session Chair   Santiago Mas-Coma
PL-16	Room <b>325</b> 11:30~12:00	Progress towards elimination of neglected tropical diseases Dr. Alan Fenwick (Imperial College London, UK) Session Chair   Shigeyuki Kano

#### Room 325 | 12:00~12:30

**Closing Ceremony** 

**ICOPA 2018 Poster Session** 



» Tuesday (Aug. 21) » Thursday (Aug. 23)

#### 18:40~19:40

Day 3 Tuesday (Aug. 21)

	Presentation Title	Presenter	Affiliation	Country
P1-001	Efficacy and usability of three fipronil spot-on formulations, the original and two Japanese made generic products, against fleas and ticks	Yukari Nakamura	Katsuragi Institute of Life Sciences	Japan
P1-002	<i>Neoergasilus japonicus</i> : An alien invasive dispersing at an alarming rate in South Africa	Willem Smit	University of Limpopo	South Africa
P1-003	Prevalence, mean intensity and ecological factors of copepod, <i>Lernanthropus</i> sp. infesting the Asian sea bass <i>Lates calcarifer</i> rearing in floating-cage culture at Laemsing estuary, Chanthaburi province, Thailand	Molruedee Sonthi	Burapha University	Thailand
P1-004	The prevalence, mean intensity of <i>Lemanthropus</i> sp. and correlation analysis between parasite and hematological values in Asian seabass ( <i>Lates calcarifer</i> ) cultured in Chanthaburi province, Thailand.	Janjarus Watanachote	Burapha University	Thailand
P1-005	The use of the mouse model to determine efficacy and longevity of the contact and systemic action of some insecticides on <i>Xenopsylla cheopis</i> and <i>Ornithonyssus bacoti</i>	Olga Eremina	Scientific Research Disinfectology Institute	Russia
P1-006	Prevalence of head lice among children in 30 primary schools in South Korea, 2017	Bong Kwang Jung	Institute of Parasitic Diseases	Korea
P1-007	Development of control measures of small hive beetles ( <i>Aethina tumida</i> ) in Korean apiaries	Bo-Ram Yun	Animal and Plant Quarantine agency	Korea
P1-008	The influence of socioeconomic and climate factors on the prevalence of scabies in Central Europe (Poland)	Ewa Dzika	University of Warmia and Masuria	Poland
P1-009	The core microbiome of <i>Dermatophagoides farina</i> and its potential immunomodulatory effect	Ju Yeong Kim	Yonsei University	Korea
P1-010	The allergic lung inflammation due to storage mite <i>Tyrophagus putrescentiae</i> is more severe than that of two common house dust mites	Eun Min Kim	Yonsei University	Korea
P1-011	Correlation of IgE reactivity to house dust mite and non-biting midges, potentially potent producers of allergens around the river	Myunghee Yi	Yonsei University College of Medicine	Korea
P1-012	Difference of cytokine production between mouse bone marrow-derived basophils and mast cells in response to Der f 1	Myunghee Yi	Yonsei University College of Medicine	Korea
P1-013	Allergenicity of recombinant Der f 23 and Der p 23 among mite-sensitized patients in Korea	Seogwon Lee	Yonsei University College of Medicine	Korea
P1-014	The host-parasite relationships in the system composed of quill mites (Acariformes: Syringophilidae) and Sunbirds (Aves: Nectariniidae)	Maciej Skoracki	Adam Mickiewicz University	Poland
P1-015	An original case of feline sarcoptic acariosis successfully treated with fluralaner (isoxazolin)	Bourdeau Patrick	Veterinary School of Nantes - ONIRIS	France

	Presentation Title	Presenter	Affiliation	Country
P1-016	Horse ticks and tick-borne equine piroplasmosis in the Republic of Korea, 2016-2017	Yoo Mi-Sun	Animal and Plant Quarantine Agency	Korea
P1-017	Distribution of ticks and molecular detection of tick-borne infectious diseases from dog in the Republic of Korea, 2017	Yoo Mi-Sun	Animal and Plant Quarantine Agency	Korea
P1-018	Expression patterns of host inflammatory cytokine genes during infestation with <i>Haemaphysalis longicornis</i> , a zoonotic vector, in blood sucking periods	Myungjo You	Chonbuk National University	Korea
P1-019	Molecular detection of <i>Babesia equi</i> and <i>Babesia caballi</i> transmitted by soft tick bite to equines in different localities of Chihuahua, Mexico	Raul Alejandro Medrano Bugarini	Autonomous University Of Chihuahua	Mexico
P1-020	Impact of subolesin and cystatin knockdown by RNA interference in adult female <i>Haemaphysalis longicornis</i> (Acari: Ixodidae) on blood engorgement and reproduction	Md. Khalesur Rahman	Chonbuk National University	Korea
P1-021	Hard ticks and tick-borne pathogens of buffalos in Maswa, Seronera and Namitumbo, Tanzania	Basir Ahmad Sharifi	Yonsei University College of Medicine	Korea
P1-022	Determination of the prevalence of brown dog ticks ( <i>Rhipicephalus sanguineus</i> ) through a Rickettsiosis control program in the city of Chihuahua, Mexico	Stephany García Martínez	Autonomous University Of Chihuahua, Faculty of Chemistry	Mexico
P1-023	Taxonomic identification of ticks collected from dogs in the city of Chihuahua, México	Diana Alondra Palomino García	Universidad Autónoma de Chihuahua	Mexico
P1-024	Efficacy of Afoxolaner and Ivermectin in dog naturally infested with <i>Rhipicephalus sanguineus</i> : Clinical field studies in Thailand	Saruda Tiwananthagorn	Faculty of Veterinary Medicine, Chiang Mai University	Thailand
P1-025	Distribution of hard ticks in Northern Iran	Hamideh Edalat	School of Public Health, Tehran University of Medical Sciences	Iran
P1-026	<i>Otobius megnini</i> (Acari: Argasidae) in Iran: Exotic or established?	Hamideh Edalat	School of Public Health, Tehran University of Medical Sciences	Iran
P1-027	Cestode fauna of terrestrial birds from Poland, the Czech Republic, Slovakia and Ukraine: The present state of studies	Ruslan Salamatin	Medical University of Warsaw	Poland
P1-028	Structural and biochemical alterations of tegumental surface of <i>Raillietina echinobothrida</i> exposed to astrakurkurone, a triterpene synthesized from fungus <i>Astreus hygrometricus</i>	Rima Majumdar	Cooch Behar Panchan Barma University	India
P1-029	A morphological and molecular study of intestinal helminths from road-killed dogs in Algeria	Mohammed Mebarek Bia	Chungbuk National University	Korea
P1-030	Immunological diagnosis of human hydatid cyst using Western immunoblotting technique	Mahboubeh Hadipour	Isfahan University of Medical Sciences	Iran

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	Presentation Title	Presenter	Affiliation	Country
P1-031	Phytotherapeutics against cystic echinococcosis: <i>In vitro</i> protoscolicidal efficacy appraisal of methanolic herbal extracts against hydatids	Aman Dev Moudgil	College of Veterinary and Animal Sciences, CSK HPKV	India
P1-032	MicroRNA expression profile in mouse peritoneal macrophages of <i>Echinococcus multilocularis</i> -infected mouse	Xiaola Guo	Lanzhou Veterinary Research Institute, CAAS	China
P1-033	Allergic airway inflammation could be inhibited by <i>Echinococcus granulosus</i> cystic fluid	Mi Jin Jeong	Pusan National University	Korea
P1-034	Genetic diversity of <i>Echinococcus multilocularis</i> in red foxes in Central Europe (Poland) - Westernmost location of haplotype belonging to the Asian clade in Europe	Miroslaw Rozycki	National Veterinary Research Institute in Pulawy, Poland	Poland
P1-035	High efficiency of HIFU in treatment of liver alveococcosis	Nurlan Zhampeissov	Astana Medical University	Kazakhstan
P1-036	Genetic characterization of <i>Echinococcus granulosus</i> sensu lato in livestock and human isolates from north of Iran indicates the presence of <i>E. ortleppi</i> in cattle	Meysam Galyan Sharif Dini	School of Medicine, Guilan University of Medical Sciences	Iran
P1-037	Screening and verification for leucine aminopeptidase- interacting partners of <i>Taenia pisiformis</i> by yeast two-hybrid system	Shaohua Zhang	Lanzhou Veterinary Research Institute, Chinese Academy of Agricultural Sciences	China
P1-038	Pulmonary cysticercosis due to <i>Cysticercus longicollis</i> in a lemurian Maki ( <i>Lemur catta</i> )	Bourdeau Patrick	Veterinary School of Nantes - ONIRIS	France
P1-039	Influence of cestode parasites ( <i>Hymenolepis</i> spp.) on metallothionein levels in cadmium-exposed rats ( <i>Rattus</i> spp.)	Anna Monica Bordado	University of the Philippines Los Banos	Philippines
P1-040	<i>Sepia pharaoniis</i> and <i>Urotenthis duvaucelii</i> of Persian Gulf were affected with different parasitic organisms	Jamileh Pazooki	Faculty of Life Sciences and Biotechnology, Shahid Beheshti University,	Iran
P1-041	Hurdles in the evolutionary epidemiology of <i>Angiostrongylus cantonensis</i> : Pseudogenes, incongruence between taxonomy and DNA sequence variants, and cryptic lineages	Urusa Thaenkham	Mahidol University	Thailand
P1-042	Distribution of the newly invasive New Guinea flatworm <i>Platydermus manokwari</i> (Platyhelminthes: Geoplanidae) in Thailand and potential role in the epidemiology of angiostrongyliasis	Kittipong Chaisiri	Faculty of Tropical Medicine, Mahidol University	Thailand
P1-043	Angiostrongylus vasorum in domestic dogs in Finland: Autochthonous infections have started to appear	Pikka Jokelainen	Statens Serum Institut	Denmark
P1-044	A high-sensitivity chemiluminescence sandwich ELISA for detection of <i>Anisakis simplex</i> in food	Miroslaw Rozycki	National Veterinary Research Institute in Pulawy, Poland	Poland
P1-045	Microbiological risk to human consumer health caused by Anisakidae larvae	Agnieszka Pekala Safinska	National Veterinary Research Institute	Poland

	Presentation Title	Presenter	Affiliation	Country
P1-046	Zoonotic nematodes of Baltic cod and herring	Miroslaw Rozycki	National Veterinary Research Institute in Pulawy, Poland	Poland
P1-047	Prevalence of Anisakidae nematodes in marine fishes and molecular epidemiology of <i>Anisakis</i> larvae in <i>Trichiurus lepturus</i> from Taiwan Strait	June-Der Lee	Kaohsiung Medical University	Chinese Taipei
P1-048	<i>In vitro</i> culture of third stage larvae of <i>Anisakis</i> and <i>Hysterothylacium</i> (Nematoda: Anisakidae, Raphidascarididae) as an aid tool for specific identification	Diana Berenguer	University of Barcelona	Spain
P1-049	Anisakids' ecology, hosted by <i>Sardina pilchardus</i> of the North-Eastern Atlantic coast	Maria João Santos	Porto University	Portugal
P1-050	$T_{\rm m}\mbox{-}shift$ detection of dog-derived Ancylostoma ceylanicum and A. caninum	Guoqing Li	South China Agricultural University	China
P1-051	Development of Multi-ARMS-qPCR method for detection of hookworms from cats and dogs $% \left( {{{\rm{ARMS}}} \right) = {{\rm{ARMS}}} \right)$	Guoqing Li	South China Agricultural University	China
P1-052	Characterization of two <i>Trichinella spiralis</i> adult-specific DNase IIs and their induced protective immunity against trichinellosis in BALB/c mice	Xin Qi	Zhengzhou University	China
P1-053	Failure of some anthelmintics to control cyathostomins in Ireland	Theo De Waal	Unversity College Dublin	Ireland
P1-054	Emergence and control of the oriental eyeworm <i>Thelazia callipaeda</i> in dogs in France and Spain	Lénaïg Halos	Boehringer Ingelheim	France
P1-055	Prevalence of <i>Enterobius vermicularis</i> among kindergarten children in Ulaanbaatar city, Mongolia	Giimaa Narantsogt	Mongolian National University of Medical Sciences	Mongolia
P1-056	A long-term survey of pinworm infection among children in kindergartens from 5 cities and 9 provinces of Korea (2008-2017)	Bong Kwang Jung	Institute of Parasitic Diseases	Korea
P1-057	First molecular identification and genetic variation of <i>Enterobius vermicularis</i> among schoolchildren in Thailand	Kanchana Tomanakan	Khon Kaen Hospital	Thailand
P1-058	<i>Dirofilaria immitis</i> possesses molecules with anticoagulant properties in its excretory/secretory antigens	Javier González- Miguel	Institute of Natural Resources and Agrobiology of Salamanca	Spain
P1-059	Insights into the life-cycle of the two sibling species of the <i>Contracaecum rudolphii</i> Hartwich, 1964 (sensu lato) complex (Nematoda: Anisakidae), from Central Italy	Simonetta Mattiucci	Sapienza University of Rome	Italy
P1-060	Anisakid nematodes in the liver of cod ( <i>Gadus morhua</i> ): Growing problem in the Baltic Sea	Magdalena Podolska	National Marine Fisheries Research Institute	Poland

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P1-061	Expression profiles of some relevant genes in <i>Anisakis pegreffii</i> and <i>A. simplex</i> (s. s.) larvae (Nematoda: Anisakidae) cultured <i>in vitro</i> and from infected fish	Simonetta Mattiucci	Sapienza University of Rome	Italy
P1-062	Real-time PCR kit to specific identification of the selected nematodes of the family Anisakidae	Beata Szostakowska	A&A Biotechnology s.c.	Poland
P1-063	Genetic characterization and redescription of alien nematode, <i>Rostellascaris spinicaudatum</i> (Malhotra and Anas, 2001) and phylogeny of Indian raphidascaridoids	Shiv Ji Malviya	University of Allahabad	India
P1-064	Comparison between the enzyme-linked immunosorbent assay (ELISA) and the flotation method for canine toxocariasis diagnosis in the metropolitan area of Asunción, Paraguay	Jorge Miret	University National of Asuncion	Paraguay
P1-065	Visceral larva migrans in rats and mice caused by experimental infections with embryonated eggs of <i>Ophidascaris</i> sp.	Woon Mok Sohn	Gyeongsang National University	Korea
P1-066	Comparison of <i>Trichuris</i> egg counting between the computer based automated and concentration methods	Phatcharaphon Akkharapridi	Suranaree University of Technology	Thailand
P1-067	Comparison of three parasitological stool examination methods with the formalin-ethyl acetate procedure for the diagnosis of intestinal parasites in humans	Maria de la Luz Galván-Ramírez	University of Guadalajara	Mexico
P1-068	Prevalence mapping of soil-transmitted helminthes in Eastern and North Eastern India	Sandipan Ganguly	Indian Council of Medical Research, National Institute of Cholera and Enteric Diseases	India
P1-069	The efficacy of selected stages of sewage treatment in the elimination of intestinal parasite eggs	Miroslaw Rozycki	National Veterinary Research Institute in Pulawy	Poland
P1-070	Parasitology teaching at the school of medicine, Honduras: Congruent to national needs?	Rina Kaminsky	Institute of Infectious Diseases and Parasitology	Honduras
P1-071	A novel $\alpha/\beta$ hydrolase domain-containing protein derived from <i>Haemonchus contortus</i> induced apoptosis and inhibited cell proliferation of goat T lymphocytes <i>in vitro</i>	Xiangrui Li	Nanjing Agricultural University	China
P1-072	Fatal pulmonary strongyloidiasis with acute respiratory distress syndrome and a miliary pattern on chest computed tomography	Kyung Nyeo Jeon	Gyeongsang National University Changwon Hospital	Korea
P1-073	Presence of helminth species in horses from the Third Division of Cavalry in Curuguaty, Paraguay	Jorge Miret	University National of Asuncion	Paraguay
P1-074	Characterization and function analysis of a novel gene, <i>Hc-maoc-1</i> , in the parasitic nematode <i>Haemonochus</i> <i>contortus</i>	Yi Yang	Zhejiang University	China
P1-075	Molecular identification of <i>Strongyloides</i> infected in long- tailed macaques in Lao PDR	Tongjit Thanchomnang	Mahasarakham University	Thailand

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P1-076	Characterization of the development of <i>Haemonchus contortus</i> ZJ strain from gerbils	Yi Yang	Zhejiang University	China
P1-077	Microsatellite analysis – the good concept to track transmission of <i>Trichinella</i> spp.?	Ewa Bilska- Zając	National Veterinary Research Institute in Pulawy	Poland
P1-078	Molecular characteristics of the <i>T. spiralis</i> and <i>T. britovi</i> isolated from wild boars	Ewa Bilska- Zając	National Veterinary Research Institute in Pulawy	Poland
P1-079	The molecular identification of <i>Dipetalonema gracile</i> from squirrel monkey in a zoo of Guangzhou	Guoqing Li	South China Agricultural University	China
P1-080	Ultrasonographic investigation of cholangiocarcinoma in Lao PDR	Ju Yeong Kim	Yonsei University College of Medicine	Korea
P1-081	<i>Opisthorchis viverrini</i> (Digenea: Opisthorchiidae) in Myanmar: The first discovery of adult worm in a human case and infection status of metacercariae in fish hosts	Woon Mok Sohn	Gyeongsang National University	Korea
P1-082	Helminth defence molecule of <i>Clonorchis sienensis</i> induces inflammatory responses in RAW 264.7 cells	Jung Mi Kang	Gyeongsang National University College of Medicine	Korea
P1-083	Molecular characteristics and induction profiles of HIF-1 $\alpha$ and other bHLH-PAS domain-containing proteins identified in a carcinogenic liver fluke <i>Clonorchis sinensis</i>	Seon-Hee Kim	Gachon University College of Medicine	Korea
P1-084	Application of a loop-mediated isothermal amplification (LAMP) assay targeting <i>cox1</i> gene for the detection of <i>Clonorchis sinensis</i> in human fecal samples	Min-Ho Choi	Seoul National University	Korea
P1-085	SES model approaches to control of <i>Opisthorchis viverrini</i> in the endemic areas of Thailand	Soraya Kaewpitoon	Suranaree University of Technology	Thailand
P1-086	Experimental life cycle and biological characteristics of <i>Echinostoma revolutum</i> (Digenea: Echinostomatidae)	Kittichai Chantima	Chiang Rai Rajabhat University	Thailand
P1-087	<i>Centrocestus formosanus</i> Nishigori, 1924 (Digenea: Heterophyidae): Epidemiology and molecular identification in freshwater fishes, upper Northern Thailand	Chalobol Wongsawad	Chiang Mai University	Thailand
P1-088	Geographical distribution of heterophyid trematodes in freshwater fishes from the upper part of Ping river basin, Thailand	Monruedee Chaiyapo	Chiang Mai University	Thailand
P1-089	Prevalence of <i>Gymnophalloides seoi</i> metacercariae in natural and cultured oysters ( <i>Crassostrea gigas</i> ) from west coast of Korea	Taehee Chang	Institute of Parasitic Diseases Association of Health Promotion	Korea
P1-090	Life history of <i>Brachylaima koreana</i> n. sp. (Digenea: Brachylaimidae)	Woon Mok Sohn	Gyeongsang National University	Korea

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P1-091	Worm expulsion of <i>Gymnophalloides seoi</i> from C57BL/6 mice: Role of metacercarial exosomes in upregulating TLR2 and MUC2 expression in intestinal tissues	Hyemi Song	Korea Association of Health Promotion	Korea
P1-092	FLOTAC technique as an alternativeto Kato Katz for accurate detection of soil transmitted helminthiasis and other parasitic infections in selected provinces with low intensity of infection	Dave Tangcalagan	Research Institute for Tropical Medicine	Philippines
P1-093	Recent trends in the incidence of foodborne helminthiases in Japan	Hiromu Sugiyama	National Institute of Infectious Diseases	Japan
P1-094	Screening for bio-markers reflecting the progression of <i>Babesia microti</i> infection	Wei Hu	Fudan University	China
P1-095	High seroprevalence of <i>Babesia</i> antibodies among previously <i>Borrelia</i> infected humans in Sweden	Joel Svensson	Lunds University	Sweden
P1-096	Molecular evidence of <i>Babesia canis vogeli, Anaplasma platys</i> and <i>Ehrlichia canis</i> in naturally infected dogs in Kalasin, Thailand	Supawadee Piratae	Mahasarakham University	Thailand
P1-097	Clinical <i>Theileria equi</i> infection and serological survey of equine piroplasmosis in Thailand	Saruda Tiwananthagorn	Faculty of Veterinary Medicine, Chiang Mai University	Thailand
P1-098	Characterisation of marsupial piroplasm in kangaroo ticks, <i>lxodes australiensis</i> , in Western Australia	Charlotte Oskam	Murdoch University	Australia
P1-099	Diversity of the sporozoite antigen gene p67 in <i>Theileria parva</i> isolates from cattle and buffalo in southern and eastern Africa	Kgomotso Sibeko-Matjila	University of Pretoria	South Africa
P1-100	Analysis of <i>Babesia rossi</i> transcriptome in dogs diagnosed with canine babesiosis	Tshepo Matjila	University of Pretoria	South Africa
P1-101	Protective immunity induced by <i>Eimeria</i> common antigen 14- 3-3 against <i>Eimeria tenella, Eimeria acervulina</i> and <i>Eimeria</i> <i>maxima</i>	Ruofeng Yan	Nanjing Agricultural University	China
P1-102	Preliminary results on the occurrence of <i>Blastocystis</i> subtypes and correlation with faecal microbiota in HIV patients referred to University Hospital "Umberto I" in Rome	Simona Gabrielli	Sapienza University	Italy
P1-103	First record of <i>Blastocystis</i> cf. <i>hominis</i> (Eukaryota: Stramenopiles) in European hedgehog ( <i>Erinaceus europaeus</i> ) from Poland	Ruslan Salamatin	Medical University of Warsaw	Poland
P1-104	Molecular epidemiology of <i>Blastocystis</i> in domestic and farmed animals in Italy. Preliminary results	Simona Gabrielli	Sapienza University	Italy
P1-105	Presence of zoonotic <i>Blastocystis</i> subtypes in dairy calves in the United States	Monica Santin	USDA	USA

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P1-106	Molecular detection and phylogenetic analysis of <i>Blastocystis</i> in cattle reared in Korea	Haeseung Lee	Kyungpook National University	Korea
P1-107	Occurrence and phylogenetic analysis of <i>Blastocystis</i> in dogs in Korea	Haeseung Lee	Kyungpook National University	Korea
P1-108	Comparative results of IFAT for serological diagnosis of canine leishmaniasis in two different laboratories	Bourdeau Patrick	Veterinary School of Nantes - ONIRIS	France
P1-109	Molecular evidence of concurrent infections with tick-borne pathogens and <i>Rickettsia</i> in dogs from Luzon Island of the Philippines	Remil Galay	University of the Philippines	Philippines
P1-110	Expression of recombinant type II NADH dehydrogenase (NDH-2) from <i>Cryptosporidium parvum</i> for screening inhibitors	Takuya Kawamura	Hirosaki University	Japan
P1-111	Evaluation of the multiplex PCR Allplex <sup>™</sup> Gastrointestinal Panel for protozoa detection	Florence Robert- Gangneux	University Rennes 1	France
P1-112	Detection of <i>Cryptosporidium parvum</i> and <i>Giardia duodenalis</i> antigen and risk factors associated in dairy calves from Curuguaty, Canindeyú Department, Paraguay	Jorge Miret	University National of Asuncion	Paraguay
P1-113	Development of a colloidal gold strip for fecal detection of <i>Cryptosporidium parvum</i> infection in cattle	Xichen Zhang	Jilin University	China
P1-114	Improved diagnostic routines for fecal parasites at Karolinska University Hospital, Stockholm, Sweden	Silvia Botero Kleiven	Karolinska University Hospital Huddinge	Sweden
P1-115	Sensitivity and specificity of dot blot method for diagnosis of <i>Cryptosporidium</i> Infection	Seyedeh Maryam Sharafi	Isfahan University of Medical Sciences	Iran
P1-116	<i>Cryptosporidium meleagridis</i> infection in colon tissue of patient with adenocarcinoma – First report	Żaneta Kopacz	Wroclaw Medical University	Poland
P1-117	<i>Cryptosporidium parvum</i> induced autophagy in HCT-8 cells via mTOR pathway	Pengtao Gong	Jilin University	China
P1-118	Nuclear delivery of parasite Cdg2_FLc_0220 RNA transcript to epithelial cells during <i>Cryptosporidium parvum</i> infection modulates host gene transcription	Guanghui Zhao	Northwest A&F University	China
P1-119	Waterborne protozoan monitoring in Korea major river and water resources	Pyo Yun Cho	Nakdonggang National Institute of Biological Resources	Korea
P1-120	Contamination of the Masurian Lake District water (north- eastern Poland) with protozoan parasites <i>Cryptosporidium</i> spp. and <i>Giardiaduo denalis</i> : Possible role of beavers on the contamination of these parasites	Miroslaw Rozycki	National Veterinary Research Institute	Poland

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P1-121	Cryptosporidium ubiquitum and Cryptosporidium coypu genotype in wild coypu (Myocastor coypus)	Martin Kvac	Biology Centre CAS	Czech
P1-122	Susceptibility of chicken embryos and one-day-old chickens to <i>Cryptosporidium parvum</i> and <i>Cryptosporidium baileyi</i> infection	Martin Kvac	Biology Centre CAS	Czech
P1-123	Anti p-23 antibody prevent diarrhea due to <i>Cryptosporidium parvum</i> in calf	Fazle Elahi	ADBiotech Co., Ltd	Korea
P1-124	Anti p-23 egg yolk antibody prevent diarrhea due to <i>Cryptosporidium parvum</i> in calf	Fazle Elahi	ADBiotech Co., Ltd	Korea
P1-125	Occurrence of <i>Cryptosporidium</i> oocysts and <i>Giardia</i> cysts in treated effluent from sewage treatment plant from eastern Poland	Miroslaw Rozycki	National Veterinary Research Institute	Poland
P1-126	Morphological and molecular characterization of <i>Kudoa thyrsites</i> (Myxozoa, Kudoidae) infecting <i>Sardina pilchardus</i> (Actinopterygii, Clupeidae) in the Iberian Peninsula waters: A new host record	Maria João Santos	Porto University	Portugal
P1-127	Prevalence of <i>Kudoa septempunctata</i> in olive flounder ( <i>Paralichthys olivaceus</i> ) from west coast of Korea peninsula and Jeju island	Taehee Chang	Korea Association of Health Promotion	Korea
P1-128	Analysis of infection characteristics of <i>Kudoa septempunctata</i> in human colorectal cell lines and three different strains of inbred mice	Ji Hun Shin	Seoul National University College of Medicine	Korea
P1-129	Molecular characterization of <i>Henneguya mystusia</i> (Sarkar, 1994) (Myxosporea: Myxobolidae), infecting the gills of the freshwater catfish <i>Mystus vittatus</i> (Bloch) from Meerut District, India	Abhishek Gupta	DN PG College, Meerut (UP)	India
P1-130	Amoeba invasion in common carp (Cyprinus carpio) gills	Agnieszka Pekala Safinska	National Veterinary Research Institute	Poland
P1-131	Functional divergence of paralogous proteins of <i>Giardia</i> lamblia	Srimonti Sarkar	Bose Institute	India
P1-132	Diagnosis of <i>Giardia duodenalis</i> infection using dot blot in comparison with microscopy	Seyedeh Maryam Sharafi	Isfahan University of Medical Sciences	Iran
P1-133	Prevalence and multilocus genotyping of <i>Giardia duodenalis</i> in working children of Tehran, Iran	Elham Razmjou	Iran University of Medical Sciences	Iran
P1-134	Assessing the significance of giardiasis in Ugandan school children and strain assemblages of <i>Giardia</i> on the shoreline of Lake Albert	Russell Stothard	Liverpool School of Tropical Medicine	UK
P1-135	Molecular characterization of human isolates of <i>Giardia</i> <i>intestinalis</i> assemblages: A community-based study from Puducherry, India	Dashwa Langbang	Jawaharlal Institute of Postgraduate Medical Education and Research	India

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P1-136	Molecular genotyping of <i>Giardia duodenalis</i> in symptomatic and asymptomatic patients, from Andimeshk County, southwestern Iran	Molouk Beiromvand	Ahvaz Jundishapur University of Medical Sciences	Iran
P1-137	Prevalence and risk factors for intestinal parasitic infection in schoolchildren in Battambang, Cambodia	Chien-Wei Liao	Taipei Medical University	Chinese Taipei
P1-138	Sub-cloning approach should be used for intra-subgenotype diversity study of <i>Giardia intestinalis</i>	Tetsushi Mizuno	Kanazawa University	Japan
P1-139	Development of molecular markers to depict the population genetic structure of four intestinal parasitic protozoa	Juan David Ramírez	Universidad del Rosario	Colombia
P1-140	Innate lymphoid cells of lamina propria produce interleukin-17 upon an incubation with $\it Giardia\ lamblia$	Hye-Yeon Lee	Yonsei University College of medicine	Korea
P1-141	Mouse macrophages capture and kill <i>Giardia lamblia</i> by means of releasing extracellular trap	Jianhua Li	Jilin University	China
P1-142	Functional characterization and localization of a polo-like kinase in <i>Giardia lamblia</i>	Eun Ah Park	Yonsei University College of Medicine	Korea
P1-143	Are zoonotic protist parasites present in the English urban environment?	Haafizah Hoosen	De Montfort University	UK
P1-144	Investigation of <i>Leishmania</i> RNA virus (LRV) in Turkish <i>Leishmania</i> isolates	Yusuf Ozbel	Ege University	Turkey
P1-145	Description of <i>Leishmania</i> species among dogs and humans in Colombian visceral leishmaniasis outbreaks	Juan David Ramírez	Universidad del Rosario	Colombia
P1-146	Canine leishmaniasis in Paraguay, management by the National Program of Zoonoses Control and Rabies National Center, Ministry of Public Health and Social Welfare, 2017	Jorge Miret	University National of Asuncion	Paraguay
P1-147	New epidemiological aspects of cutaneous leishmaniasis in Kohgiluyeh and Boyer-Ahmad Province, South of Iran, 2014 - 2017	Hassan Abidi	Yasuj University of Medical Sciences	Iran
P1-148	Development of a high-throughput RNAi screen to identify host genes involved in modulating intracellular <i>Leishmania</i> <i>amazonensis</i> infection	Nakyung Lee	Institut Pasteur Korea	Korea
P1-149	A preliminary study on serological aspects of human leishmaniasis in Sri Lanka	Nadira Karunaweera	University of Colombo	Sri Lanka
P1-150	Cellular immune response to cutaneous leishmaniasis in Sri Lanka: Evidence from gene expression and proteomic studies	Nadira Karunaweera	University of Colombo	Sri Lanka

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P1-151	Molecular study of subunit Bdp1 from transcription factor TFIIB in <i>Leishmania major</i>	Santiago Martinez-Calvillo	National University of Mexico	Mexico
P1-152	Overexpression effect of the SCD6 and RBP42, two RNA- binding proteins, in <i>Leishmania major</i>	Concepcion Puerta	Pontificia Universidad Javeriana, Faculty of Science	Colombia
P1-153	Cutaneous leishmaniasis in Sri Lanka: Trends over 12 years	Nadira Karunaweera	University of Colombo	Sri Lanka
P1-154	Pomegranate ( <i>Punica granatum</i> ) juice shows antioxidant activity against cutaneous leishmaniasis-induced oxidative stress in female BALB/c mice	Badriah Alkathiri	King Saud university	Saudi Arabia
P1-155	Immunomodulatory potential and antileishmanial efficacy of Arsenicum album 30C against murine visceral leishmaniasis	Jyoti Joshi	Parasitology Laboratory	India
P1-156	Role of domestic dog as a reservoir host of <i>Leishmania</i> donovani in Sri Lanka	Nadira Karunaweera	University of Colombo	Sri Lanka
P1-157	Microsporidian <i>Enterocytozoon bieneusi</i> infection in immunocompetent diarrheal children in Jahrom District, Southern Iran	Mohammad Hassan Davami	Jahrom University of Medical sciences	Iran
P1-158	Immunological analysis of <i>Microsporidia</i> infections in children undergoing allogeneic hematopoietic cell transplantation in Poland	Maria Wesolowska	Wrocław Medical University	Poland
P1-159	Microsporidial respiratory tract infections in renal transplant recipients and patients with various respiratory diseases	Marta Kicia	Wrocław Medical University	Poland
P1-160	Prevalence and molecular characteristic of intestinal protists infection among children with inflammatory bowel diseases	Żaneta Kopacz	Wrocław Medical University	Poland
P1-161	Bovine macrophage-derived extracellular traps act as early effectors against the abortive parasite <i>Neospora caninum</i>	Xichen Zhang	Jilin University	China
P1-162	Prevalence of malaria parasite and the behavioural concepts among child bearing women in Anaocha local government area of Anambra State, Nigeria	Nkeiruka Orji	Chukwuemeka Odumegwu Ojukwu University	Nigeria
P1-163	Morphological observation of parasitophorous vacuole membrane during hemoglobin uptake by <i>Plasmodium</i> gametocyte stages	Hideyuki Iriko	Kobe University	Japan
P1-164	Real-time PCR as a primary diagnostic method for detection of <i>Plasmodium</i> species in a low prevalence setting	Erik Otte	Aalborg University	Denmark
P1-165	Genetic diversity and natural selection of transmission- blocking vaccine candidate antigens Pvs25 and Pvs28 in <i>Plasmodium vivax</i> Myanmar isolates	Le Huong Giang	Gyeongsang National University	Korea

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P1-166	Genetic polymorphism of <i>Plasmodium vivax</i> rhoptry protein, PvRON2 from Korean isolates	Ga Young Lee	Inje University	Korea
P1-167	Next generation sequencing to study genetic diversity of vaccine candidate antigens in Indian <i>Plasmodium falciparum</i>	Sonal Kale	National Institute of Malaria Research	India
P1-168	Assessment of common glucose-6-phosphate dehydrogenase (G6PD) deficiency allelic types in Ethiopia	Bahita Ashenafi Assefa	Addis Ababa University (AAU/EPHI)	Ethiopia
P1-169	Investigating host factors that contribute to red cell tropism by <i>Plasmodium</i>	Renugah Naidu	Singapore University of technology and Design	Singapore
P1-170	Identification of the ligand responsible for the cytoadhesion of <i>Plasmodium knowlesi</i> -infected red blood cells	Miako Sakaguchi	Nagasaki University	Japan
P1-171	Does it take three to tango? An unsuspected coexistence of cutaneous T cell lymphoma, EBV infection and malaria	Cevayir Coban	Osaka University, IFReC	Japan
P1-172	Erythrocyte glycophorins C and D as host specific receptors for $\ensuremath{\textit{Plasmodium}}$	Ewa Jaskiewicz	Hirszfeld Institute of Immunology	Poland
P1-173	Erythrocyte binding tropism characterization of Duffy binding protein region II in <i>Plasmodium vivax</i> and <i>P. knowlesi</i>	Dahye Park	Kangwon National University	Korea
P1-174	Adaptive immunity is essential in preventing recrudescence of <i>Plasmodium yoelii</i> malaria parasites after artesunate treatment	Zi Wei Chang	Singapore Immunology Network, A*STAR	Singapore
P1-175	Simple <i>in vitro</i> assay detecting ABO-blood group-specific rosetting of <i>Plasmodium falciparum</i> infected red blood cells	Jørgen Kurtzhals	University of Copenhagen	Denmark
P1-176	Inhibitory mechanism of Interferon-alpha on cerebral malaria in <i>Plasmodium berghei</i> ANKA infected mice	Ga Young Lee	Inje University	Korea
P1-177	The <i>Plasmodium berghei</i> gametocyte membrane protein Pgmp22 as a candidate for transmission-blocking vaccines	Yaming Cao	China Medical University	China
P1-178	Investigating IgM response to Plasmodium falciparum	Yoonhoo Chang	NYUAD	United Arab Emirates
P1-179	Single-cell genomics as an approach to study human host immune response to malaria	Jian Ryou	New York University Abu Dhabi (NYUAD)	United Arab Emirates
P1-180	Immunological characterization of <i>Plasmodium vivax</i> Pv32, a novel GPI-anchored merozoite surface protein	Yang Cheng	Jiangnan University	China

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P1-181	Establishment of panning method to sort cytoadhesive <i>Plasmodium falciparum</i> infected-RBCs on human endothelial cells	Nam Hyeok Kim	Kangwon National University	Korea
P1-182	Evaluation methods for parasite egress inhibition for <i>Plasmodium falciparum</i>	Kazuhide Yahata	Nagasaki University	Japan
P1-183	Development of high efficacy <i>in vitro</i> drug selection systems for generating transgenic parasite of <i>Plasmodium berghei</i>	Akira Soga	Obihiro University of Agriculture and Veterinary Medicine	Japan
P1-184	Non-woven Fabric Filter filtration for purification of rodent malaria parasite	Zhi Yong Tao	Bengbu Medical college	China
P1-185	3D label-free imaging of parasites and host cells using holotomography	Sumin Lee	Tomocube Inc.	Korea
P1-186	Angiogenic induction by <i>Plasmodium berghei</i> through hypoxia-induced manner	Mi Kyung Park	Kosin university	Korea
P1-187	Identification of a novel merozoite surface protein 1 paralog required for human infection of a zoonotic parasite, <i>Plasmodium knowlesi</i>	Seong-Kyun Lee	Kangwon National University	Korea
P1-188	<i>Plasmodium vivax</i> merozoite surface protein 1 paralog as a mediator of parasite adherence to reticulocytes	Jin-Hee Han	Otago University	New Zealand
P1-189	Molecular characterization of merozoite surface protein gene of <i>Plasmodium vivax</i> from southern Thailand	Nongyao Sawangjaroen	Prince of Songkla University	Thailand
P1-190	Elucidation of the biological function of SET-TA in <i>Plasmodium</i> liver-stage development.	Tamasa Araki	National Institute of Infectious Diseases	Japan
P1-191	Diversity pattern of Duffy binding protein sequence among Duffy-negatives and Duffy-positives in Sudan	Mohammad Rafiul Hoque	Kangwon National University	Korea
P1-192	Study on polymorphisms of microsatellite genotype of <i>Plasmodium vivax</i> in the Republic of Korea	Hyun-II Shin	Korea CDC	Korea
P1-193	Synchronization of the ring-stage of <i>Plasmodium knowlesi in vitro</i> culture	Sutharinee Ngernna	Mahidol University	Thailand
P1-194	Down-regulation of glutathione reductase gene expression is engaged in pyknosis induced by dihydroarthemisinin and an opioid antagonist in <i>Plasmodium falciparum</i>	Hiroko Asahi	Kyorin University School of Medicine	Japan
P1-195	Erythrocytic stage development of <i>Plasmodium falciparum</i> at hypo-hyperthermia	Yutatirat Singhaboot	Mahidol University	Thailand

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P1-196	Parasitic infections in Gabonese pregnant women	Meral Esen	University of Tubingen	Germany
P1-197	Antiplasmodial potential of gefitinib, a tyrosine kinase inhibitor in monotherapy and in combination therapy	Varun Gorki	Panjab University	India
P1-198	Molecular characterization of <i>Sarcocystis</i> spp. in wild birds of several taxonomic classes in Brazil: Preliminary results	Horwald Bedoya Llano	University of São Paulo	Brazil
P1-199	Preliminary data on <i>Sarcocystosis</i> spp. in farm fallow deer ( <i>Dama dama</i> ) in Poland	Sylwia Grzelak	Witold Stefanski Institute of Parasitology, Polish Academy of Sciences	Poland
P1-200	Morphological and molecular characterization of <i>Sarcocystis</i> spp. in goats and sheep in Kunming City, China	Junjie Hu	Yunnan University	China
P1-201	Increasing north-to-south gradient in <i>Toxoplasma gondii</i> seroprevalence in semi-domesticated reindeer ( <i>Rangifer</i> <i>tarandus tarandus</i> ) in Fennoscandian Lapland	Pikka Jokelainen	Statens Serum Institut	Denmark
P1-202	Seroprevalence and risk factors of <i>Toxoplasma gondii</i> infection in horses in Jilin Province and Inner Mongolia Autonomous Region, Northern China	Ye Li	Heilongjiang Bayi Agricultural University	China
P1-203	Comparison of MicroRNA expression profiling in pig spleens between acute and chronic infection by Chinese I genotype strain of <i>Toxoplasma gondii</i>	Jianping Tao	Yangzhou University	China
P1-204	<i>Toxoplasma gondii</i> histone 4 affects some functions of murine Ana-1 macrophages <i>in vitro</i>	Xiangrui Li	Nanjing Agricultural University	China
P1-205	Neuroprotective effect of chronic intracranial <i>Toxoplasma</i> gondii infection in cerebral ischemia	Bong Kwang Jung	Institute of Parasitic Diseases	Korea
P1-206	Inhibition of breast cancer growth by <i>Toxoplasma gondii</i> through down-regulating MMP2 and induction of autophagy	Hei-Gwon Choi	Chungnam National University	Korea
P1-207	Is there relationship between <i>Toxoplasma gondii</i> IgG seropositivity and idiopathic Parkinsonism and does it have correlation with cortisol blood level?	Ahmed Daoud	Tanta university	Egypt
P1-208	Involvement of P2X7R/NLRP3 pathway for regulating Toxoplasma gondii- induced IL-1 $\beta$ secretion in human small intestinal epithelial cells	Juan-Hua Quan	Affiliated Hospital of Guangdong Medical University	China
P1-209	Function and mechanism of TgROP38 in <i>Toxoplasma</i> PRU strain	Jing Liu	China Agricultural University	China
P1-210	The role of PI3K/AKT pathway and NADPH oxidase 4 in host ROS manipulation by protozoan parasite, <i>Toxoplasma gondii</i>	Hei-Gwon Choi	Chungnam National University	Korea

	<b>Tuesday</b>	(Aug.	21)	$\langle$
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	Presentation Title	Presenter	Affiliation	Country
P1-211	CREBH deficiency enhances the antiparasitic defense against <i>Toxoplasma gondii</i> infection by inducing autophagy and mitochondrial function	Jina Lee	Chungnam National University Graduate School	Korea
P1-212	Label-free non-invasive 3D imaging of <i>Toxoplasma gondii</i> infection in live cells using holotomography	Sumin Lee	Tomocube Inc.	Korea
P1-213	Induction of cell-cycle arrest and apoptosis using <i>Toxoplasma gondii</i> derived protein GRA16 and synergetic effects in the combination with anticancer drug in non-small cell lung cancer (NSCLC) cell	Seung Hwan Seo	Seoul National University	Korea
P1-214	<i>Toxoplasma gondii</i> GRA16 protein interacting with HAUSP induces apoptosis through P53-dependent pathway in hepatocellular carcinoma	Sang Gyun Kim	Seoul National University	Korea
P1-215	Characterization and functional analysis of a <i>Toxoplasma</i> ankyrin repeat-containing protein	Qun Liu	China Agricultural University	China
P1-216	Effect of $17\beta$ -estradiol, progesterone and prolactin on the infective capacity of <i>Toxoplasma gondii</i> , cytokine modulation and the expression of hormonal receptors on THP-1 cells	Maria de la Luz Galván-Ramírez	University of Guadalajara	Mexico
P1-217	Brain cysts in mice infected with strain ME49 of <i>T. gondii</i> and their correlation with locomotion kinematics	Maria de la Luz Galván-Ramírez	University of Guadalajara	Mexico
P1-218	Risk factors of <i>Toxoplasma gondii</i> infection in sympatric domestic and free-ranging wild ungulates in Southern Spain	Sonia Almeria	U.S. FDA	USA
P1-219	Does lifestyle predispose to <i>Toxoplasma</i> infection in companion cats? Results of a survey in France	Bourdeau Patrick	Veterinary School of Nantes - ONIRIS	France
P1-220	Characteristics of <i>Toxoplasma</i> seroprevalence in companion cats in western France	Bourdeau Patrick	Veterinary School of Nantes - ONIRIS	France
P1-221	The aspartic protease DDI1 is important for virulence of <i>Toxoplasma</i>	Heng Zhang	China Agricultural University	China
P1-222	Seroprevalence of <i>Toxoplasma gondii</i> in domestic pigs, sheep and cattle in the Nordic-Baltic region: Systematic review to identify common patterns and data gaps	Pikka Jokelainen	Statens Serum Institut	Denmark
P1-223	Antibodies against <i>Toxoplasma gondii</i> in horses in Ukraine: Investigation using two serological methods	Pikka Jokelainen	Statens Serum Institut	Denmark
P1-224	Unexpected function of cytosolic Fe-Fe hydrogenase from <i>Trichomonas vaginalis</i>	Tamara Smutná	Charles University in Prague	Czech
P1-225	The functions of the high molecular weight Myb3-interacting protein (Myb3IP <sub>hmw</sub> ) in the parasitic protozoan <i>Trichomonas vaginalis</i>	Chien-Hsin Chu	Academia Sinica	Chinese Taipei

Day 3 Tuesday (Aug. 21)

	Presentation Title	Presenter	Affiliation	Country
P1-226	Identification of regulatory elements in untranslated regions of <i>Trichomonas vaginalis</i>	Wei Hung Cheng	Chang Gung University	Chinese Taipei
P1-227	The use of CRISPR/Cas9 technology to insert modifications and perform gene knock out in <i>Trichomonas vaginalis</i>	Augusto Simoes-Barbosa	The University of Auckland	New Zealand
P1-228	Introns in Trichomonas vaginalis revisited	Shuqi Wang	The University of Auckland	New Zealand
P1-229	<i>Trichomonas vaginalis</i> lysosomes – A study on a protist stomach	Nadine Zimmann	Charles University Prague, Faculty of Science	Czech
P1-230	Seroprevalence of anti- <i>Leptospira</i> IgG and IgM among the urban poor communities in Wilayah Persekutuan, Kuala Lumpur	Siti Nursheena Mohd Zain	University of Malaya	Malaysia
P1-231	Enteric parasite among diarrheic cases in Kampong Cham Province, Cambodia	Boren Huot	NAMRU-2	Cambodia
P1-232	Prevalence of parasitic infections in surgically removed appendices: Parasitological and histopathological studies	Alaa Amer	Tanta University	Egypt
P1-233	Enteroparasitism and risk factors associated with clinical manifestations in children and adults of Jalisco state in western of Mexico	Ana Madriz	University Center of the Cienega, University of Guadalajara	Mexico
P1-234	Intraperitoneal administration of the anti-IL-23 antibody prevents the establishment of intestinal nematodes in mice	Antonio Osuna	University of Granada	Spain
P1-235	Evaluation of blood meal source by molecular tools of <i>Rhodnius robustus</i> submitted to starvation	Alena lñiguez	FIOCRUZ	Brazil
P1-236	Zoonotic helminths of urban Norway rats ( <i>Rattus norvegicus</i> ) trapped in the sewage system of Barcelona (Spain)	M. Teresa Galán-Puchades	University of Valencia	Spain
P1-237 (NTD Asia)	Bevacizumab (avastin) as a potential therapy for malangiogenesis in schistosomiasis mansoni and a praziquantel enhancer	Marwa Hasby Saad	Tanta University	Egypt
P1-238 (NTD Asia)	Evaluation of praziquantel treatment by urine antigen assay in opisthorchiasis	Chanika Worasith	Khon Kaen University	Thailand
P1-239 (NTD Asia)	Diagnostic evaluation of two novel genomic DNA sequences (TU502HP-1 and TU502HP-2) for simultaneous detection of <i>Cryptosporidium hominis</i> and <i>C. parvum</i>	Priyadarshi Soumyaranjan Sahu	International Medical University	Malaysia
P1-240 (NTD Asia)	Alteration in NKG2D receptor expression of NKT cell in <i>Opisthorchis viverrini</i> (OV)-associated hepatobiliary abnormality	Prasert Saichua	Khon Kaen University	Thailand

	<b>Presentation Title</b>	Presenter	Affiliation	Country
P1-241 (NTD Asia)	Coinfection of cagA-positive <i>Helicobacter pylori</i> enhances biliary proliferation in opisthorchiasis hamsters – The way to carcinogenesis	Watcharapol Suyapoh	Khon Kaen University	Thailand
P1-242 (NTD Asia)	Structural basis of inhibition of <i>Opisthorchis felineus</i> cytochrome P450 by novel natural compounds	Purna Chetri	North Eastern Hill University	India
P1-243 (NTD Asia)	The spatial clustering of <i>Opisthorchis viverrini</i> infected cats in the endemic area of Thailand	Pornphutthachat Sota	Khon Kaen University	Thailand
P1-244 (APCPZ)	Duodenal ulcer associated with hookworm detected by endoscopy	Wan-Ling Chiu	Taipei City Hospital Yangming Branch	Chinese Taipei
P1-245	<i>In vitro</i> activity of new 1 <i>H</i> -Phenalen-1-one derivatives against <i>Leishmania</i> spp. and studies to elucidate their mechanism of cell death	Ines Sifaoui	University of Carthage	Tunisia
P1-246	Bioguided <i>in vitro</i> activity of <i>Maytenus chiapensis</i> extracts against <i>Leishmania</i> spp. and <i>Trypanosoma cruzi</i>	Ines Sifaoui	University of Carthage	Tunisia

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#### 18:40~19:40

	Presentation Title	Presenter	Affiliation	Country
P2-001	<i>De novo</i> transcriptome sequencing and transcript profile of the <i>Thelazia callipaeda</i> vector <i>Phortica okadai</i>	Zheng Minghui	Zunyi Medical University	China
P2-002	Antibacterial effect of HP/F8 isolated from the extracts of Hermetia illucens larvae against Klebsiella pneumonine	Dong-Hun Lee	KyungHee University	Korea
P2-003	Insecticide susceptibility and biochemical analysis of <i>Phlebotomus argentipes</i> , in leishmaniasis in Sri Lanka	Nadira Karunaweera	University of Colombo	Sri Lanka
P2-004	Relationship between short-term incubation vivax malaria and <i>Anopheles</i> in the Republic of Korea	Eun Hye Kim	Sungkyunkwan University School of Medicine	Korea
P2-005	Molecular phylogeny of the Hyrcanus Group of <i>Anopheles</i> Group	Yi Zhang	National Institute of Parasitic Diseases, (China CDC)	China
P2-006	First molecular identification and phylogenetic analysis of mosquitoes in Nay Pyi Taw Union Territory, Myanmar	Si Thu Aung	University of Veterinary Science	Myanmar (Burma)
P2-007	Genetic polymorphism of <i>Culex quinquefasciatus</i> SAY, 1823 (Diptera: Culicidae) from Central Java Indonesia based on PCR-RAPD marker	Upiek Ngesti Wibawaning Astuti	Faculty of Biology University of Gadjah Mada	Indonesia
P2-008	The identification of <i>Aedes aegypti</i> strains of different vectorial capacity for <i>Dirofilaria immitis</i>	Takahiro Shirozu	Obihiro University of Agriculture and Veterinary Medicine	Japan
P2-009	The identification of phenotypes in <i>Dirofilaria immits</i> - infected <i>Aedes aegypti</i> by comparison with the established strain of the vectorial capacity	Takahiro Shirozu	Obihiro University of Agriculture and Veterinary Medicine	Japan
P2-010	A checklist of scorpions in Iran (By 2017)	Hamid Kassiri	School of Health, Ahvaz Jundishapur University of Medical Sciences	Iran
P2-011	Comparison of various methods of collecting scorpions (Arachnida, Scorpiones), their species composition and abundance in Khuzestan Province, Southwestern Iran	Hamid Kassiri	School of Health, Ahvaz Jundishapur University of Medical Sciences	Iran
P2-012	Ecological risk modelling of cutaneous leishmaniasis based on vector sand fly distribution in endemic areas of Turkey	Yusuf Ozbel	Ege University	Turkey
P2-013	Incidence and epidemiological profile of scorpion stings in northern Khuzestan Province, Southwestern Iran: A descriptive-analytical study	Hamid Kassiri	School of Health, Ahvaz Jundishapur University of Medical Sciences	Iran
P2-014	The identification of IgE binding proteins in non-biting midges ( <i>Cricotopus bicinctus</i> ), potentially potent producers of allergens around the river	Myunghee Yi	Yonsei University College of Medicine	Korea
P2-015	Chromosomal level genome of <i>Pomacea canaliculata</i> revealed massive gene tandem duplications for environmental adaptability and the world-wide invasion	Wei Hu	Fudan University	China

	Presentation Title	Presenter	Affiliation	Country
P2-016	Nematomorpha : Demographic history and phylogeny	Boris Efeykin	Institute of Ecology and Evolution Russian Academy of Science	Russia
P2-017	Tropical bed bug, <i>Cimex hemipterus</i> (Hemiptera: Cimicidae), the new species introduced into territory of the Russian Federation	Mikhail Alekseev	Scientific Research Disinfectology Institute	Russia
P2-018	The initial detection of Toscana virus in phlebotomines and flies from Turkey	Yusuf Ozbel	Ege University	Turkey
P2-019	A case of co-infection of <i>Taenia saginata</i> in a patient with hidden <i>Clonorchis sinensis</i> infection in Republic of Korea	Eun Jeong Won	Chonnam National University Medical School	Korea
P2-020	Molecular characterization and diagnostic potential of serine proteinase inhibitors from <i>Taenia solium</i>	Xuenong luo	Lanzhou Veterinary Research Institute	China
P2-021	Taeniasis and cysticercosis solium: parasitological survey, immunological and molecular identification in Thasong yang District, Tak Province, Thailand	Teera Kusolsuk	Mahidol University, Faculty of Tropical Meidicine	Thailand
P2-022	Molecular identification of human taeniid cestodes in northern Lao PDR	Dong Hee Kim	Seoul National University	Korea
P2-023	Molecular diagnosis of <i>Taenia saginata</i> tapeworm infection in 2 schoolchildren, Myanmar	Bong Kwang Jung	Institute of Parasitic Diseases	Korea
P2-024	Neurocysticercosis in Korea: A single center experience for 28 years	Min-Jae Kim	Asan Medical Center	Korea
P2-025	Taenia solium excretory secretory proteins induces Th2 phenotype in macrophages through host miRNAs and decreases their phagocytic potential	Naina Arora	Indian Institute of Technology Mandi	India
P2-026	Development of <i>Taenia solium</i> specimens in non- immunosuppressed golden hamster ( <i>Mesocricetus auratus</i> ) and subsequent culture in enriched medium	Ada Nelly Martínez Villalobos	UNAM	Mexico
P2-027	<i>Taenia solium</i> neurocysticercosis: The pig as an experimental animal model for the investigation of the pathological mechanisms of seizures	Chiara Trevisan	Institute of Tropical Medicine	Belgium
P2-028	A simple and effective multiplex PCR technique for detecting human pathogenic <i>Taenia</i> eggs in houseflies	Akkarin Poodeepiyasawat	Mahidol University	Thailand
P2-029	Intra- and interspecific genetic variation found in <i>Taenia saginata</i> and <i>T. asiatica</i>	Hansol Park	Chungbuk National University	Korea
P2-030	Zoonotic ocular-dirofilariasis caused human subconjunctivitis	Thawatchai Ketboonlue	Mahidol University	Thailand

	Presentation Title	Presenter	Affiliation	Country
P2-031	Molecular identification of human cases due to <i>Dirofilaria</i> repens from Central Italy	Simona Gabrielli	Sapienza University	Italy
P2-032	Onchocerciasis in Ifeloju LGA, Oyo State, Nigeria and the effect of some anthelminthic drugs on the microfilariae of <i>Onchocerca volvulus</i>	Alexander Acholonu	Department of Biology Alcorn State University Lorman	USA
P2-033	<i>Dirofilaria immitis</i> infection prolongation in Japan during the past decade	Yuka Fukase	Meiji University	Japan
P2-034	Immunolocalization and extraction optimization of thioredoxin reductase (TrxR) from bovine filarial parasite <i>Setaria cervi</i>	Nikhilesh Joardar	Visva-Bharati University	India
P2-035	Clinical features of gnathostomiasis in full sequence with completefollow-up	Dorn Watthanakulpanich	Mahidol University	Thailand
P2-036	Retrospective and prospective analyses of 24 kDa-diagnostic band for gnathostomiasis spinigerum and other species of <i>Gnathostoma</i> infections	Lssariya Leamsuwan	Mahidol University	Thailand
P2-037	Update evaluation of 24-kDa antigen of <i>Gnathostoma spinigerum</i> for detection of human gnathostomiases	Paron Dekumyoy	Mahidol University	Thailand
P2-038	Review and retrospective study of <i>Gnathostoma</i> in the province of Guayas - Ecuador: 2009-2017	Glenda Llaguno	Universidad Agraria del Ecuador	Ecuador
P2-039	Human ocular parasites found in Myanmar (2009-2017)	Thi Thi Htoon	National Health Laboratory	Myanmar (Burma)
P2-040	Bacillary bands – The forgotten organ of the Trichinelloidea	Wieslaw Kozek	University of Puerto Rico	Puerto Rico
P2-041	Cloning, expression and identification of <i>Trichinella britovi</i> 14-3-3-like protein 2 (14-3-3-LP2)	Anna Stachyra	Witold Stefański Institute of Parasitology, Polish Academy of Sciences	Poland
P2-042	Cloning, expression and identification of <i>Trichinella britovi</i> multi-cystatin-like domain protein (CLP)	Anna Stachyra	Witold Stefański Institute of Parasitology, Polish Academy of Sciences	Poland
P2-043	<i>Trichinella britovi</i> muscle larvae and adult worms: Stage- specific and common antigens detected by two dimensional gel electrophoresis (2-DE) based immunoblotting	Sylwia Grzelak	Witold Stefański Institute of Parasitology, Polish Academy of Sciences	Poland
P2-044	The use of recombinant <i>Trichinella papuae</i> tissue type plasminogen activator protein as a species-specific diagnostic antigen for serodiagnosis of human trichinellosis papuae	Panupong Sahaisook	Mahidol University	Thailand
P2-045	The effect and mechanism of <i>Trichinella spiralis</i> proteins from different stages on collagen-induced arthritis in mice	Qiang Fang	Bengbu Medical College	China

	Presentation Title	Presenter	Affiliation	Country
P2-046	Improvement of collagen synthesis and wound healing process in the skin by parasite derived collagen inducing factor (PCIF)	Da In Lee	Pusan National University	Korea
P2-047	Trichinella spiralis infection mitigates collagen-induced arthritis via PD-1-mediated immunomodulation	Xinping Zhu	Capital Medical University	China
P2-048	Molecular cloning of enolase from <i>Trichinella spiralis</i> and the protective immunity in mice	Ruofeng Yan	Nanjing Agricultural University	China
P2-049	<i>Trichinella spiralis</i> infection ameliorated obesity of mice by M1 macrophage inhibition	Shin Ae Kang	Pusan National University	Korea
P2-050	The role of IL-17 in Trichinella spiralis infection	Masaya Takamoto	Shinshu University	Japan
P2-051	Trichinella muscle larvae distribution in naturally infected pigs	Miroslaw Rozycki	National Veterinary Research Institute	Poland
P2-052	Molecular characterization of the antigen targeted by protective antibodies of <i>Trichinella spiralis</i> and its elicited protective immune	Gege Sun	Zhengzhou University	China
P2-053	Cloning, expression and characterization of a cysteine protease from <i>Trichinella spiralis</i>	Jing Cui	Zhengzhou University	China
P2-054	The first report of <i>Falcaustra affinis</i> and <i>Spiroxy contortus</i> from turtles in Isfahan provenience, Iran	Azar Balouti Dehkordi	Isfahan University of Medical Sciences	Iran
P2-055	Intestinal parasites diagnosed by gastrointestinal endoscopy of patients who visited Korea Association of Health Promotion for health checkup (2016-2018)	Jaeeun Cho	Korea Association of Health Promotion	Korea
P2-056	Genetic characterization and helminth infrapopulation dynamics in arthropods from Indo-Gangetic plains	Anshika Yadav	University of Allahabad	India
P2-057	Application of high-throughput 18S rRNA gene amplicon sequencing to parasite detection using a mock parasite sample	Ju Yeong Kim	Yonsei University College of Medicine	Korea
P2-058	Study on pinworms of cockroaches	Hong-Kean Ooi	Azabu University	Japan
P2-059	Can we combat anthelmintic resistance in ruminants?	Laura Rinaldi	University of Napoli Federico II	Italy
P2-060	About the fauna of bird trematodes in the northeast of Kazakhstan	Diana Maralbayeva	Pavlodar State University after S.Toraigyrov	Kazakhstan

	Presentation Title	Presenter	Affiliation	Country
P2-061	Characterization of the complete ITS rDNA sequences of three trematodes in duck	Chun-Ren Wang	Heilongjiang Bayi Agricultural University	China
P2-062	Evaluation of ferritin (fhftn-1) recombinant antigen for serodiagnosis of human fascioliasis	Zarrintaj Valadkhani	Pasteur Institute of Iran	Iran
P2-063	Proteomic analysis of <i>Fasciola gigantica</i> excretory and secretory products (FgESPs) involved in interacting with host in different infection periods by shotgun LC-MS/MS	Si-Yang Huang	Yangzhou University	China
P2-064	Assessment of allelic diversity in vaccine candidate genes of <i>Fasciola hepatica</i> isolated from different geographical areas	Mar Siles Lucas	Institute of Natural Resources and Agrobiology of Salamanca	Spain
P2-065	Identification of <i>Fasciola hepatica</i> glycoproteins interacting with host-specific galectin 11 and galectin 14	Jaclyn Swan	La Trobe University	Australia
P2-066	Immunomodulatory effect of recombinant <i>Fasciola hepatica</i> cathepsins on human macrophages	Anna Stachyra	Witold Stefański Institute of Parasitology, Polish Academy of Sciences	Poland
P2-067	Recognition pattern of the <i>Fasciola hepatica</i> vaccine candidate cathepsin I1 during the course of a vaccination trial in sheep assessed by 2D immunoproteomics	Javier González-Miguel	Institute of Natural Resources and Agrobiology of Salamanca (IRNASA - CSIC)	Spain
P2-068	Two distinct lineages of hybrid <i>Fasciola</i> flukes strongly inherit the characteristics from their maternal ancestor	Tadashi Itagaki	Iwate University	Japan
P2-069	Oxfendazole repurposing as a flukicidal compound	Carlos Lanusse	CONICET, UNCPBA	Argentina
P2-070	Prevalence of fish-borne trematode infection in freshwater fishes in Heilongjiang Province, China	Chun-Ren Wang	Heilongjiang Bayi Agricultural University	China
P2-071	Molecular characterization and ITS2 secondary morphometrics of three digenetic metacercariae infecting freshwater fishes of North-east, India	Philayung Zimik Awungshi Shimrei	North-Eastern Hill University	India
P2-072	ITS2 sequence analysis of the 3 species of genus <i>Antorchis</i> Linton, 1911: <i>A. tsushimaensis, A. pomacanthi</i> and <i>A. nasonis</i>	Yeseul Kang	Chungbuk National University	Korea
P2-073	First record of <i>Hurleytrematoides japonicus</i> Kamegai, 1970 in Korea	Yeseul Kang	Chungbuk National University	Korea
P2-074	Diversity of parasites from marine fish in the coastal ecosystem of the Andaman Sea, Thailand	Wallop Pakdee	Mahidol University	Thailand
P2-075	Prevalence of <i>Centrocestus armatus</i> metacercariae in freshwater fish from seven large rivers of Korea (2016-2017)	Hyemi Song	Korea Association of Health Promotion	Korea

	Presentation Title	Presenter	Affiliation	Country
P2-076	Veterinary-sanitary evaluation of mutton with mixed invasions	Sagynbek Shermatov	Naryn State University	Kyrgyzstan
P2-077	Various imaging features of paragonimiasis in the south area of Korea	Kyung Nyeo Jeon	Gyeongsang National University Changwon Hospital	Korea
P2-078	Evaluation of cathepsin L-like cysteine protease derived from <i>Paragonimus pseudoheterotremus</i> for immunodiagnosis	Tippayarat Yoonuan	Faculty of Tropical Medicine, Mahidol University	Thailand
P2-079	Prevalence of <i>Paragonimus</i> metacercariae in the freshwater crabs, <i>Geothelphusa dehaani</i> in Iwate prefecture, northeast region of Japan, and their molecular identification	Yuma Ohari	Iwate University	Japan
P2-080	Exploring druggable hot spots in <i>Schistosoma mansoni</i> cathepsin B1 for structure-based design of vinyl sulfone inhibitors	Michael Mareš	Institute of Organic Chemistry and Biochemistry	Czech
P2-081	Transcriptomic analysis of male and female <i>Schistosoma mekongi</i> adult worms	Orawan Phuphisut	Mahidol University	Thailand
P2-082	Usefulness of specific <i>Schistosoma japonicum</i> circulating DNA serum detection in the diagnosis of schistosomiasis in the Philippines	lan Kim Tabios	University of the Philippines Manila	Philippines
P2-083	Should we worry about praziquantel resistance in <i>Schistosoma japonicum</i> ? A nation-wide assessment of the sensitivity of S. <i>japonicum</i> to praziquantel in China	Wei Wang	Jiangsu Institute of Parasitic Diseases	China
P2-084	Breg in murine schistosomiasis is characterized by high expression of TGF-beta and IL-10	Wenqi Liu	Tongji Medical College, Huazhong University of Science and technology	China
P2-085	The role and the underlying mechanisms of HMGB1 in <i>Schistosoma japonicum</i> egg-induced hepatic granuloma and fibrosis	Quan Gong	Yangtze University	China
P2-086	Studies on population dynamics of the intermediate hosts snails and their infection rates in White Nile River, Khartoum State, Sudan	Hassan Ahmed Ismail	Federal Ministry of Health	Sudan
P2-087	Viability of developmental stages of <i>Schistosoma mansoni</i> quantified with xCELLigence worm real-time motility (xWORM) assay	Michael Smout	JCU	Australia
P2-088	Screening of differentially expressed genes of female <i>Schistosoma japonicµm</i> before and after pairing by gene chip	Qingli Luo	Anhui Medical University	China
P2-089	Recombinant P40 protein from <i>Schistosoma japonicum</i> increases PPARy expression in hepatic stellate cells via microrna-27b	Yinong Duan	Nantong University	China
P2-090	A new approach for detection of <i>Schistosoma</i> egg using MALDI-TOF MS	Tipparat Thiangtrongjit	Mahidol University	Thailand

	Presentation Title	Presenter	Affiliation	Country
P2-091	Avian schistosomes found from wild birds in Korea	Seongjun Choe	Chungbuk National University	Korea
P2-092	Intestinal helminthic infection among migrant workers in Thailand	Natthawut Kaewpitoon	Suranaree University of Technology	Thailand
P2-093	Prevalence of <i>Clonorchis sinensis</i> and intestinal helminth infections among examinees persons of health checkup centers in Korea Association of Health Promotion, 2010-2017	Bong Kwang Jung	Institute of Parasitic Diseases	Korea
P2-094	<i>In vitro</i> evaluation of the acaricides against red mites ( <i>Dermanyssus gallinae</i> )	Miroslaw Rozycki	National Veterinary Research Institute in Pulawy, Poland	Poland
P2-095	The parasite fauna of the introduced Chinese giant salamander <i>Andrias davidianus</i> (Blanchard, 1871) and the hybrids of Japanese giant salamander <i>A. japonicus</i> (Temminck, 1837) and <i>A. davidianus</i> in Japan	Karin Tsuchida	University of Shiga Prefecture	Japan
P2-096	Transitional changes in the incidence of parasites in dog feces collected on metropolitan Tokyo streets and neighboring areas in 1985-2015	Tohru Fukase	Katsuragi Institute of Life Sciences	Japan
P2-097	Effects of host invasive stage on immunity and parasite community: The spot-legged tree frog ( <i>Polypedates megacephalus</i> ) cases in Taiwan	Meng-Jhen Li	National Chiayi University	Chinese Taipei
P2-098	Parasitic helminths in red foxes ( <i>Vulpes vulpes</i> ) in Poland - Comparison of different regions	Miroslaw Rozycki	National Veterinary Research Institute in Pulawy, Poland	Spain
P2-099	Biodiversity of parasites in Lake Biwa	Misako Urabe	University of Shiga Prefecture	Japan
P2-100	Transmission of intestinal helminths in the food chain of cod ( <i>Gadus morhua</i> ) from the Southern Baltic Sea	Joanna Pawlak	National Marine Fisheries Research Institute	Poland
P2-101	Evaluation and optimization of <i>Cyclospora cayetanensis</i> detection in fresh produce and prepared food dishes linked to outbreaks using the U.S. FDA Bacteriological Analytical Manual method	Sonia Almeria	U.S. FDA	USA
P2-102	<i>Eimeria tenella</i> stimulated the maturation of dendritic cells isolated from chicken bone-marrow	Jianmei Huang	Nanjing Agricultural University	China
P2-103	Presence of coccidian human parasites in animal faecal samples from an English urban environment	Haafizah Hoosen	De Montfort University	UK
P2-104	Vaccination with pVAX1.0-TA4-IFN- $\gamma$ induces protective immunity against <i>Eimeria tenella, E. maxima, E. necatrix</i> and <i>E. acervulina</i> infections	Lixin Xu	Nanjing Agricultural University	China
P2-105	Functional analysis of PI3P effector candidate SNX in Entamoeba histolytica	Natsuki Watanabe	The University of Tokyo	Japan

	Presentation Title	Presenter	Affiliation	Country
P2-106	Frequency of <i>Trichomonas tenax</i> and <i>Entamoeba gingivalis</i> , in patients with gingivitis, chronic periodontitis and periodontally healthy individuals	Ana Maria Fernández-Presas	National Autonomous University of Mexico	Mexico
P2-107	Transcriptomic and proteomic analyses reveal the action of the chloroquine in <i>Acanthamoeba</i>	Ko Pin-Ju	National Cheng Kung University	Chinese Taipei
P2-108	Identification and functional characterization of <i>Acanthamoeba</i> secretory m28 peptidase for using as a potential diagnostic marker	Huang Jian Ming	National Cheng Kung University	Chinese Taipei
P2-109	Functional characterization and proteomic profiling of exosome-like vesicles secreted from <i>Acanthamoeba</i>	Chia-Yun Tsai	National Cheng Kung University	Chinese Taipei
P2-110	Anti-allergic drugs effect for experimental induced conjunctivitis by excretory-secretory proteins of <i>Acanthamoeba</i>	Jun Ho Choi	Pusan National University School Of Medicine	Korea
P2-111	Cytopathic change and inflammatory response of corneal epithelial cells by <i>Acanthamoeba castellanii</i> trophozoites and cysts	Kim Si Eun	Ajou University School of Medichine	Korea
P2-112	Determination of IgE and eosinophils in patients with acanthamoebas	Jose de la Torre Fernandez	Parasitologist	Spain
P2-113	Determination of hidden blood in faeces in patients with acanthamoebas	Jose de la Torre Fernandez	Parasitologist	Spain
P2-114	Intestinal disease of the Axarquía area	Jose de la Torre Fernandez	Parasitologist	Spain
P2-115	Identification and genotypic characterization of potentially pathogenic <i>Acanthamoeba</i> isolated from tap water in Wuxi, China	Yinghua Xuan	Jiangnan University	China
P2-116	Values of IgG, IgA, IgM and total leukocytes in patients with acanthamoebas in heces	Jose de la Torre Fernandez	Parasitologist	Spain
P2-117	Survey of <i>Naegleria fowleri</i> in Korean raw water using real-time PCR	Min-Jeong Kim	K-water	Korea
P2-118	Autophagy inhibitor increased the amoebicidal effects of MPDS against <i>A. castellanii</i>	Hyun-Hee Kong	Donga University College of Medicine	Korea
P2-119	PHMB and chloroquine treatment induces apoptosis in Acanthamoeba castellanii	Eun-Kyung Moon	Kyung Hee University	Korea
P2-120	Identification of natural inhibitors against potential drug target protein MAPK4 in <i>L. donovani</i> using in-silico approach	Prakash Saudagar	National Institute of Technolofy Warangal	India

	Presentation Title	Presenter	Affiliation	Country
P2-121	Evaluation of inflammatory biomarkers changes follow pentavalent antimony therapy to <i>L. major</i> isolated from patients with unsuccessful treatment background	Sedigheh Saberi	lsfahan University of Medical Sciences	Iran
P2-122	The effect of new nanostructured Fe <sub>3</sub> O <sub>4</sub> @bio-MOF as an efficient anti-leishmanial <i>in vitro</i> and <i>in vivo</i> conditions	Fatemeh Ghaffarifar	Tarbiat Modares University	Iran
P2-123	A new meglumine antimoniate nanogel formulation for topical applicationin cutaneous Leishmaniasis by <i>Leishmania infantum</i>	Diana Berenguer	University of Barcelona	Spain
P2-124	A SNP in the RagC GTPase contributes to the attenuation in visceral infection for the <i>Leishmania donovani</i> parasite which causes atypical cutaneous Leishmaniasis in Sri Lanka	Wenwei Zhang	McGILL University	Canada
P2-125	Evaluation of the expression of opioid receptors and pro- inflammatory cytokines by quantitative real time-PCR in macrophages infected with <i>Leishmania major</i> treated with morphine	rs and pro- me-PCR in Fatemeh Tarbiat Modares r treated with Ghaffarifar University		Iran
P2-126	Immunomodulatory properties of $\beta\text{-}D\text{-}octylgalactofuranose}$ in experimental visceral leishmaniasis	Florence Robert-Gangneux	University Rennes 1	
P2-127	Efficacy of garlic extract and the gum of <i>Pistacia atlantica</i> var. <i>Kurdica</i> on <i>Leishmania major</i> in Morin model	Fariba Khoshzaban	Shahed University	Iran
P2-128	Efficacy of garlic extract and the gum of <i>Pistacia atlantica</i> var. <i>Kurdica</i> on <i>Leishmania major</i> in BALB/c mice	Fariba Khoshzaban	Shahed University	Iran
P2-129	Identification and characterization of a novel <i>Plasmodium vivax</i> exported protein Pv EXP100	Zhang Xinxin	JiangNan University	China
P2-130	Anti-parasitic effect of a furanosidic compound against intramacrophagic <i>Leishmania donovani</i> is correlated with an AMPK activation: An intelectin-1 mediated mechanism?	Jean-Pierre Gangneux	University Rennes	France
P2-131	Immunization of BALB/c mice by the fusion of three important genes of <i>Leishmania major</i> LeIF-LACK-TSA in eukaryotic plasmid and comparison with cocktail of these three genes as DNA vaccines	nt Fatemeh Tarbiat Modares Ghaffarifar University		Iran
P2-132	A new fusion construction for Leishmania major DNA vaccine	Abdolhossein Dalimi Asl	Medical Sciences Faculty, Tarbiat Modares University	Iran
P2-133	The effect of hydro-alcoholic extract of <i>Acroptilon repens</i> on <i>Plasmodium berghei</i> compared with chloroquine in Sourian mice	Abbasali Eskandarian	Isfahan University of Medical Sciences	Iran
P2-134	The possible effects of <i>Alstonia congensis</i> crude extracts on <i>Plasmodium berghei</i> in albino mice <i>Mus musculus</i>	Chinyere Ukaga	Imo State University Owerri	Nigeria
P2-135	Deciphering the potential of "pathogen box chemical library" (mmv) as an antimalarial tool box to study egress (exit) of malaria parasite	Alok Patra	Singapore University of Technology and Design	Singapore

	Presentation Title	Presenter	Affiliation	Country
P2-136	Antimalarial activity of herb extracts from Korean plants on rodent and human <i>Plasmodium</i>	Sylvatrie Danne Dinzouna Boutamba	Kyungpook National University	Korea
P2-137	What are the more prevalent mutations that confer resistance to <i>Plasmodium vivax</i> against sulfadoxine-pyrimethamine in Iran?	Abbasali Eskandarian	Isfahan University of Medical Sciences	Iran
P2-138	Characterisation of artemisinin-induced dormancy using a controlled human malaria infection	Christopher Peatey	Australian Defence Force	Australia
P2-139	Dormancy in <i>Plasmodium falciparum</i> isolates from Angola and Dominican Republic after pressure with artemisinin- based combined therapy	Rosa Del Carmen Miluska Vargas Rodriguez	National University of the Peruvian Amazon	Peru
P2-140	Antimalarial drugs and DNA damage response in <i>P. falciparum</i>	Daisy Hjelmqvist	Karolinska Institute	Sweden
P2-141	Target identification of <i>Plasmodium falciparum</i> egress and invasion inhibitors from MMV malaria box using drug affinity responsive target stability	Trang Chu	Singapore University of Technology and Design	Singapore
P2-142	Development of advanced self-nanoemulsifying systems of antimalarial drug with improved biopharmaceutical and antimalarial attributes	Ripandeep Kaur	UGC Centre of Excellence in Nanobiomedical Applications, Panjab University	India
P2-143	Cerebral malaria caused by <i>Plasmodium falciparum</i> in a Filipino seafarer returning from South Africa: A reemerging infectious threat	Jenny Mae Quinivista-Yoon	St. luke's medical center-Global City	Philippines
P2-144	Malaria risk factors and knowledge, attitudes and practices (KAP) of selected barangays in Rizal, Palawan, Philippines	Pauline Joy Lorenzo	Research Institute for Tropical Medicine	Philippines
P2-145	Positive effect of vitamin E derivatives on rodent malaria	Aiko Kume	Obihiro University of Agriculture and Veterinary Medicine	Japan
P2-146	Perillyl alcohol reduces cerebrovascular inflammation and parasite sequestration preventing experimental cerebral malaria development	Adriana Alejandra Marin Rodriguez	University of Sao Paulo, Institute of Biomedical Science	Brazil
P2-147	Azadirachta indica (neem) extracts affect early erythrocytic schizogony of <i>Plasmodium berghei</i> and pro-inflammatory response in inbred mice	Fabrizio Bruschi	PISA	Italy
P2-148	Identification of PfRipr_5 as a potent blood-stage malaria vaccine candidate	Hikaru Nagaoka	Ehime University	Japan
P2-149	The vaccine candidate peptide antigen which inhibits AMA1-RON2 interaction in <i>P. vivax</i>	Ga Young Lee	Inje University	Korea
P2-150	The <i>Plasmodium berghei</i> gametocyte protein is a candidate for transmission-blocking vaccines	Yaming Cao	China Medical University	China

	Presentation Title	Presenter	Affiliation	Country
P2-151	Evalution of the effect of morphine with imiquimod in comparison to pyrimethamine and sulfadiazine on tachyzoites of <i>Toxoplasma gondii in vitro</i>	Leila Zaki	Tarbiat Modares University	Iran
P2-152	Anti-parasite effect of 4-hydroxyacetophenone is mediated by regulation of HIF-1 $\!\alpha$ and GSK3 $\!\beta$	Gao Feifei	Chungnam National University	Korea
P2-153	Evaluation of protectiveefficacy and functional characterization of rhoptry neck protein 10 in <i>Toxoplasma gondii</i>	Dong-Hui Zhou	Fujian Agriculture and Forestry University	China
P2-154	Construction of recombinant BCG with Rhomboid-IL-2 and its immunoprotection on challenged by <i>Toxoplasma gondii</i> in pigs	Pengtao Gong	Jilin University	China
P2-155	Virus-like particles expressing <i>Toxoplasma gondii</i> rhoptry protein 18 induces better protection than rhoptry protein 4	Haeji Kang	Kyunghee university	Korea
P2-156	PKC-mediated surface translocation of BLT1 and NOX2 are essential for migration and degranulation in human mast cells induced by <i>Trichomonas vaginalis</i> -secreted LTB <sub>4</sub>	Arim Min	Yonsei university College of Medicine	Korea
P2-157	Th17 cells induced by prostate epithelial cells stimulated with <i>Trichomonas vaginalis</i> promote progression of prostate cancer cells	lk-Hwan Han	Hanyang University	Korea
P2-158	Involvement of adipocyte leptin in proliferation of prostatic cells induced by <i>Trichomonas vaginalis</i> infection	Jung-Hyun Kim	Hanyang University	Korea
P2-159	Proliferation of prostatic stromal cell infected with <i>Trichomonas vaginalis</i> via crosstalk with mast cell tryptase	Hyo-Yeoung Chung	Hanyang University	Korea
P2-160	Trichomoniasis: One parasite, many microorganisms	Augusto Simoes-Barbosa	The University of Auckland	New Zealand
P2-161	Protective mechanisms of vaginal <i>Lactobacillus gasseri</i> towards inhibition of <i>Trichomonas vaginalis</i> adhesion to host cells	Augusto Simoes-Barbosa	The University of Auckland	New Zealand
P2-162	The Bermuda Triangle - interactions between the vaginal microbiota and <i>Trichomonas vaginalis</i> and their effect on the human vaginal epithelial cells	Annabel Hinderfeld	The University of Auckland	New Zealand
P2-163	The RNA cargo of extracellular vesicles from <i>Trichomonas</i> vaginalis	Anastasiia Artuyants	The University of Auckland	New Zealand
P2-164	<i>Lactobacillus gasseri</i> is host protective and inhibits cytotoxicity of <i>Trichomonas vaginalis</i>	Ann-Katrein Bär	The University of Auckland	New Zealand
P2-165	The protozoan <i>Trichomonas vaginalis</i> targets bacteria with laterally-acquired NIpC/P60 peptidoglycan hydrolases	Augusto Simoes-Barbosa	University of Auckland	New Zealand

	Presentation Title	Presenter	Affiliation	Country
P2-166	The effect of lavender essential oil and nanoemulsion on <i>Trichomonas vaginalis in vitro</i>	Hajar Ziaei Hezarjaribi	Molecular and Cell Biology Research Center, Mazandaran University of Medical Sciences	Iran
P2-167	Procyclin associated gene regulates the differentiation of <i>Trypanosoma brucei</i>	Yan-Zi Wen	Sun Yat-Sen University	China
P2-168	Characterization of <i>Trypanosoma brucei</i> 20S proteasome and its inhibitors	Yen Liang Chen	Novartis Institute for Tropical Diseases	USA
P2-169	Molecular characterization of <i>Trypanosoma cruzi</i> transmission from the naturally infected rodent host to the sylvatic vector <i>Mepraia Spinolai</i> in Chile: Preliminary results	Catalina Muñoz	Universidad de Chile	Chile
P2-170	Detection of an "epimastigote-like" intracellular stage of <i>Trypanosoma cruzi</i> in Vero cells and in infected mouse heart	Ana Maria Fernández-Presas	National Autonomous University of Mexico	Mexico
P2-171	Enveloped and non-enveloped viral-like particles in <i>Trypanosoma cruzi</i> epimastigotes	Ana Maria Fernández-Presas	National Autonomous University of Mexico	Mexico
P2-172	Profile of Th17cytokines in Chagasic childhood cardiomyopathy	Paz Maria Salazar Schettino	UNAM	Mexico
P2-173	Distribution of CD8+ T-cell subsets in mice immunized and challenged with <i>Trypanosoma cruzi</i>	Concepcion Puerta	Pontificia Universidad Javeriana, Faculty of Science	Colombia
P2-174	<i>Trypanosoma cruzi</i> genotyping by PCR real time in dejections of <i>Triatoma infestans</i> from human xenodiagnosis	Ines Zulantay	University of Chile	Chile
P2-175	Serological evaluation in prolonged follow-up of patients with chronic Chagas disease treated with nifurtimox	Ines Zulantay	University of Chile	Chile
P2-176	Treatment of chronic Chagas disease: Parasitological assessment by conventional PCR with blind external evaluation	Ines Zulantay	University of Chile	Chile
P2-177	Genotyping of <i>Trypanosoma cruzi</i> DTUs in individuals with chronic Chagas disease treated with nifurtimox	Ines Zulantay	University of Chile	Chile
P2-178	Effect of temperature on <i>Trypanosoma cruzi</i> infection and phenoloxidase activity in <i>Meccus pallidipennis</i>	Berenice González Rete	National Autonomous University of Mexico	Mexico
P2-179	New nitroaromatic candidats for trypanosomiasis therapeutics	Clotilde Boudot	Limoges University, Institute of Neurological Epidemiology and Tropical Neurology	France
P2-180	Dynamic distribution of <i>Histomonas meleagridis</i> in yellow feather broilers post infection	Jinjun Xu	Yangzhou University	China

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P2-181	The teaching of Medical Protozoology course using electronic flashcards based on Quizlet	Hassan Abidi	Yasuj University of Medical Sciences	Iran
P2-182	Team-based learning (TBL) in flipped classroom model: A case study on the teaching of Medical Protozoology	Hassan Abidi	Yasuj University of Medical Sciences	Iran
P2-183	Tropical remote health centres and telemedicine in parasitology-mycology	Alireza Ensaf	H.S.F.	France
P2-184	The first MD/PhD program in Mexico (PECEM) of the Faculty of Medicine, UNAM $% \mathcal{M}_{\mathrm{M}}$	Ana Flisser	UNAM	Mexico
P2-185	Applicability of DMU e-Parasitology for learning medical parasitology	Haafizah Hoosen	De Montfort University	UK
P2-186	Parasites in fragments: Parasite diversity and distribution in red-listed primates	Liesbeth Frias	Kyoto University	Japan
P2-187	Current conditions of foot and mouth disease in Iran	Fatemeh Malekdar	Razi Vaccine and Serum Institue	Iran
P2-188	Factors affecting the parasite communities of <i>Duttaphrynus melanostictus</i> in Southwestern Taiwan	Kai-Hung Liao	National Chiayi University	Chinese Taipei
P2-189	Parasite communities along the invasion gradient of banded bullfrogs ( <i>Kaloula pulchra</i> ) in Taiwan	Zhao-Hui Lin	National Chiayi University	Chinese Taipei
P2-190	Prevalence and phylogenetic analysis of <i>Anaplasma</i> phagocytophilum in wild and farmed cervids in Korea	Min Goo Seo	Animal and Plant Quarantine Agency	Korea
P2-191	Evidence of <i>Anaplasma</i> spp. exposure from cattle in Gyeongbuk Province, Korea	Min Goo Seo	Animal and Plant Quarantine Agency	Korea
P2-192	Parasitological contamination of dehydrated municipal sewage sludge	Miroslaw Rozycki	National Veterinary Research Institute	Poland
P2-193	Parasitological evaluation of organic fertilizers and waste from biogas plants	Miroslaw Rozycki	National Veterinary Research Institute	Poland
P2-194	Investigation on the contamination of gastrointestinal parasites in mountain goats in the protected area of Tejg in Khosf County, South Khorasan Province, Iran country	Vahid Sharifi	Doctora Veterinary Medicine , Veterinary Department of South Khorasan	Iran
P2-195	High prevalence of amphistome infection in freshwater snails from areas lie along the Mekong river in Ubon Ratchathani province, Thailand	Jittiyawadee Sripa	Ubon Ratchathani University	Thailand

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P2-196	Identify and determine the frequency of fungi isolated from the skin and hair of cats in rural area of Meshkin-shahr, Iran with emphasize on transmission risk of fungal zoonoses	Roshanak Daie Ghazvini	Tehran University of Medical Sciences	Iran
P2-197	Potentially zoonotic gastrointestinal parasites in the main public parks of the city of Guayaquil, Guayas, Ecuador, 2011- 2017	Glenda Llaguno	Universidad Agraria del Ecuador	Ecuador
P2-198	Parasites as indicators of population structure of snoek ( <i>Thyrsites atun</i> ) in the Benguela ecosystem	Irfan Nunkoo	University of Cape Town	South Africa
P2-199	The "invasive" host species <i>Magallana gigas</i> (= <i>Crassostrea gigas</i> ) in the Atlantic Portuguese coast: Free of parasites or susceptible to native parasites?	Maria João Santos	Porto University	Portugal
P2-200	Diversity, distribution and interspecific relationship of gills parasites from white seabream, <i>Diplodus sargus Linnaeus</i> , 1758 from Portugal	Maria João Santos	Porto University	Portugal
P2-201	Introduced alien freshwater fish parasites in South Africa: Are they a threat o fish health and biodiversity?	Wilmien Luus-Powell	University of Limpopo	South Africa
P2-202	Parasites of black seabream ( <i>Spondyliosoma cantharus</i> ) and host ontogeny	Maria João Santos	Porto University	Portugal
P2-203	Metazoan parasites from deep-sea fishes in the South Eastern Pacific Ocean	Marcelo Oliva	Universidad de Antofagasta	Chile
P2-204	CREBH deficiency enhances the antiparasitic defense against <i>Toxoplasma gondii</i> infection by inducing autophagy and mitochondrial function	Jina Lee	Chungnam National University Graduate School	Korea
P2-205	Roles of Omega-3 fatty acid in the activation of host immune response against <i>Toxoplasma gondii</i> infection	Jae-Won Choi	Chungnam National University, College of Medicine	Korea
P2-206	Targeted overexpression of cyclic AMP-dependent protein kinase subunit in <i>Toxoplasma gondii</i> promotes replication and virulence in host cells	Yi Yang	Zhejiang University	China
P2-207	AS160 modulated host glucose uptake is essential for <i>Toxoplasma gondii</i> proliferation	Gao Feifei	Chungnam National University	Korea
P2-208	Development of the FECPAKG2 system to manage fluke infection in sheep and cattle	Claire Reigate	Aberystwyth University	United Kingdom
P2-209	<i>Toxoplasma gondii</i> infection in cats from south-west region of Poland	Miroslaw Rozycki	National Veterinary Research Institute	Poland
P2-210	Does lifestyle predispose to <i>Toxoplasma</i> infection in companion cats?: Results of a survey in France	Bourdeau Patrick	Veterinary School of Nantes - ONIRIS	France

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P2-211	Characteristics of <i>Toxoplasma</i> seroprevalence in companion cats in western France	Bourdeau Patrick	Veterinary School of Nantes - ONIRIS	France
P2-212	Diagnosis of vaginal candidiasis and <i>Trichomonas</i> vaginalis infection by antibody coated latex particles	Seyedeh Maryam Sharafi	Isfahan University of Medical Sciences	Iran
P2-213	Prevalence of trichomoniasis in women referred to clinical centers in south of Tehran, Iran during years 2015-2016	Akram Azambakhtiar	Tehran University of Medical Science	Iran
P2-214	Detection of the prevalence <i>Dientamoeba fragilis</i> in diarrheal fecal samples from immunocompromised and immunocompetent patients using by Real-Time PCR: Preliminary study	Funda Dogruman-Al	School of Medicine, Gazi University	Turkey
P2-215	Prevalence and genetic diversity of <i>Pneumocystis jirovecii</i> in different risk groups in Poland	Marta Kicia	Wroclaw Medical University	Poland
P2-216	Potential complementarities of SjR2 and SjCHGCS19 target sequence for diagnosis and evaluation chemotherapy effectiveness of schistosomiasis japonica	Jing Xu	Soochow University	China
P2-217	Design of a dual-promoter expression vector harboring <i>Sag1</i> and <i>Gra7</i> genes from <i>Toxoplasma gondii</i> (RH strain) and evaluating its immunogenisity and protective efficacy in BALB/c mice	Sara Ayazian Mavi	Tehran University of Medical Sciences	Iran
P2-218	Virus-like particles expressing <i>Toxoplasma gondii</i> rhoptry protein 18 induces better protection than rhoptry protein 4	Musab Albsheer	Sinnar University	Sudan
P2-219	Thirty years after first discovery of intestinal capillariasis in Egypt	Nadia El-Dib	Cairo University	Egypt
P2-220	Biochemical studies of membrane bound <i>Plasmodium falciparum</i> mitochondrial <i>L</i> -malate: Quinone oxidoreductase and identification of potent inhibitor	Endah Dwi Hartuti	Nagasaki University	Japan
P2-221	An <i>in vitro</i> approach to study splenic macrophage hyperplasia during <i>P. falciparum</i> malaria	Jill Dalimot	Sanquin	Nether- lands
P2-222	Misconceptions about malaria: The link between knowledge, attitudes, and practice and existing information, education and communication (IEC) materials in selected barangays in Rizal, Palawan, Philippines	Pauline Joy Lorenzo	Research Institute for Tropical Medicine	Philippines
P2-223	Pathogenicity and diagnostic sensitivity of culture media for identification of <i>Trichomonas gallinae</i> in domestic pigeons of Lahore, Pakistan	Muhammad Fiaz Qamar	University of Veterinary & Animal Sciences	Pakistan
P2-224	Prevalence of malaria parasites among patients attending a hospital in Mangu Local Government Area, Plateau State, Nigeria	Victoria Adamu Pam	Federal University Lafia	Nigeria
P2-225 (SUKO Confe- rence)	Haematouria and proteinuria caused by schistosomiasis among preschool children in Khartoum state: A cross sectional study	Nouh Mohamed	Teaching Assistant, Sinnar University	Sudan

	Presentation Title	Presenter	Affiliation	Country
<b>P2-226</b> (Forum Cheju- 20)	Manipulation of IL-10 gene expression by <i>Toxoplasma gondii</i> and its products	Nader Pestehchian	Isfahan University of Medical Sciences	Iran
P2-227	Viscerotropic leishmaniasis: Current status	Fatemeh Ghaffarifar	Tarbiat Modares University	Iran
P2-228	Molecular detection of Neospora caninum and <i>Toxoplasma gondii</i> in hooded crows (Corvus cornix) in Tehran, Iran	Amir Abdoli	Tarbiat Modares University	Iran
P2-229	<i>Leishmania mexicana</i> PP2C in the pathogenesis of leishmaniasis	Maria Aguirre-Garcia	National Autonomous University of Mexico (UNAM)	Maxico
P2-230	Detection of total IgD in serum samples from healthy and sick dogs with leishmaniosis	Laia Solano-Gallego	School of Veterinary Medicine, Autonomous University of Barcelona	Spain
P2-231	Identifying co-introduced ancyrocephalid monogeneans from invasive Micropterus salmoides (Lacépède, 1802) in South Africa: A multi-disciplinary approach	Marliese Truter	North-West University	Thailand
P2-232	<i>In vitro</i> activity of new 1 <i>H</i> -Phenalen-1-one derivatives against <i>Leishmania</i> spp. and studies to elucidate their mechanism of cell death.	Atteneri López-Arencibia	University of La Laguna	Spain
P2-233	Human <i>Plasmodium simium</i> : Zoonotic malaria transmission in the Rio de Janeiro Atlantic Forest	Anielle Pina-Costa	Fiocruz	Brazil
P2-234	Paper-based point-of-care diagnostic technologies for human echinococcosis	Wei Hu	Fudan University	China
P2-235	Screening for bio-markers reflecting the progression of Babesia microti infection	Wei Hu	Fudan University	China

#### NTD Asia 2018

* Date	Tuesday (Aug. 21)
* Place	Room 306A (10:00-18:00
	Room 306B (10:00-12:30)

#### The 15th Asian-Pacific Congress for Parasitic Zoonoses (APCPZ-15)

\* Date & Time | Tuesday (Aug. 21) 14:00-18:00 \* Place | Room 306B

#### **Forum Cheju - 20** (Trends in Parasitology in Korea and Japan)

\* Date & Time | Wednesday (Aug. 22) 08:00-12:00 \* Place | Room 306B

## The Second SUKO International Conference on Elimination of Schistosomiasis and Other NTDs in Sudan

* Date	August 22 - 23
* Place	Room 306A

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