



**Jean-Robert Ioset, PhD**  
**Senior Discovery Manager**

Drugs for Neglected Diseases Initiative (DNDi), Switzerland

Dr. Jean-Robert Ioset is a pharmacist by training, with a PhD in Plant Chemistry from the University of Lausanne. Before completing a post-doctoral fellowship at the London School of Hygiene and Tropical Medicine (Prof. Simon Croft's lab), Dr Ioset earned a diploma in Public Health and Tropical Medicine from Humboldt University in Berlin. Prior to joining DNDi, Dr. Ioset acted as a scientific collaborator and lecturer at the School of Pharmacy of the University of Geneva and the University of Lausanne where his academic research focused on the discovery of new antiprotozoal drugs from plants and included the supervision of several PhD, Master and undergraduate students. Dr Ioset joined DNDi in 2005. He is currently responsible for the management of the global early discovery portfolio including the supervision of the DNDi screening network (4 laboratories, 8 full time employees) and the daily collaboration with numerous stakeholders from the Pharma, Biotech and academic areas. Dr Ioset's mission is to deliver novel lead series to the DNDi preclinical programs for Visceral Leishmaniasis and Chagas Disease. Dr Ioset authored around 50 publications in the fields of natural product chemistry, anti-infective drug discovery (notably in relation with neglected diseases) and counterfeit drugs.

**List of selected Publications**

Addressing the Most Neglected Diseases through an Open Research Model: the Discovery of Fenarimols as Novel Drug Candidates for Eumycetoma (2018) Lim W, Melse Y, Konings M, Duong HP, Eadie K, Laleu B, Perry B, Todd M, Ioset JR, van de Sande W. PLoS NTD, submitted, preprint version available [www.biorxiv.org/content/early/2018/02/02/258905](http://www.biorxiv.org/content/early/2018/02/02/258905)

Chatelain E, Ioset JR. Phenotypic screening approaches for Chagas disease drug discovery (2018), Expert Opin Drug Discov. 13(2):141-153. doi: 10.1080/17460441.2018

Yang G., Lee N., Ioset JR, No JH. Evaluation of parameters impacting drug susceptibility in intracellular Trypanosoma cruzi assay protocols (2017), Journal of Biomolecular Screening. SLAS Discov. 22(2):125-134 doi: 10.1177/1087057116673796.

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Veerman J, van den Bergh T, Orling KM, Jansen C, Cos P, Maes L, Chatelain E, Ioset JR, Edink EE, Tenor H, Seebeck T, de Esch I, Leurs R, Sterk GJ. (2016) Synthesis and evaluation of analogs of the phenylpyridazinone

NPD-001 as potent trypanosomal TbrPDEB1 phosphodiesterase inhibitors and in vitro trypanocidals. *Bioorganic and Medicinal Chemistry*. 1;24(7):1573-81. doi: 10.1016/j.bmc.2016.02.032.

Nühs A, De Rycker M, Manthri S, Comer E, Scherer CA, Schreiber SL, Ioset JR, Gray DW. (2015) Development and Validation of a Novel *Leishmania donovani* Screening Cascade for High-Throughput Screening Using a Novel Axenic Assay with High Predictivity of Leishmanicidal Intracellular Activity. *PLoS Neglected Tropical Diseases* 25;9 (9): e0004094. doi: 10.1371/journal.pntd.0004094

Kaiser M, Mäser P, Tadoori LP, Ioset JR, Brun R. (2015) Antiprotozoal Activity Profiling of Approved Drugs: A Starting Point toward Drug Repositioning. *PLoS One*. 13;10 (8): e0135556.doi:10.1371/journal.pone.0135556.

Faria J, Moraes CB, Song R, Pascoalino BS, Lee N, Siqueira-Neto JL, Cruz D JM, Parkinson T, Ioset JR, Cordeiro-da-Silva A, Freitas-Junior LH (2015) Drug discovery for Human African Trypanosomiasis: identification of novel scaffolds by the newly developed HTS SYBR Green assay for *Trypanosoma brucei*, *Journal of Biomolecular Screening* 20 (1):70-81. doi: 10.1177/1087057114556236.

Papadopoulou MV, Bloomer WD, Rosenzweig HS, O'Shea IP, Wilkinson SR, Kaiser M, Chatelain E, Ioset JR. (2015). Discovery of potent nitrotriazole-based antitrypanosomal agents: In vitro and in vivo evaluation. *Bioorganic Medicinal Chemistry*; 23 (19): 6467-76. doi: 10.1016/j.bmc.2015.08.014.

Don R, Ioset JR. (2014) Screening strategies to identify new chemical diversity for drug development to treat kinetoplastid infections. *Parasitology*, 28:1-7.

Keenan M, Alexander PW, Chaplin JH, Abbott MJ, Diao H, Wang Z, Best WM, Perez CJ, Cornwall SM, Keatley SK, Thompson RC, Charman SA, White KL, Ryan E, Chen G, Ioset JR, von Geldern TW, Chatelain E. (2013) Selection and optimization of hits from a high-throughput phenotypic screen against *Trypanosoma cruzi*. *Future Medicinal Chemistry*; 5(15):1733-52. doi: 10.4155/fmc.13.139.

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Orrling K.M., Jansen C., Vu X.L., Balmer V., Bregy P., Shanmugham A., England P., Bailey D., Cos P., Maes L., Adams E., van den Bogaart E., Chatelain E., Ioset J.-R., van de Stolpe A., Zorg S., Veerman J., Seebeck T., Sterk G.J., de Esch I.J., Leurs R. (2012) Catechol pyrazolinones as trypanocidals: fragment-based design, synthesis, and pharmacological evaluation of nanomolar inhibitors of trypanosomal phosphodiesterase B1. *Journal of Medicinal Chemistry*. 25;55 (20):8745-56.

Vargas, S., Ioset Ndjoko, K., Hay, A.E., Ioset J.-R., Wittlin, S., K Hostettmann, K. (2011). Screening medicinal plants for the detection of novel antimalarial products applying the inhibition of beta-hematin formation. *Journal of Pharmaceutical and Biomedical Analysis*, 2011, 56, 880-886.

Ioset J.-R and Chang, S. (2011). DNDi Model of Drug Development for Neglected Diseases: Current Status and Future Challenges. *Future Medicinal Chemistry* 3, 1361-1371.

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Ioset J.-R. and Kaur, H. (2009). Simple field assays to check quality of current artemisinin-based antimalarial combination formulations. *PLoS One*, 4, e7270.

Ioset JR. (2008). Natural products for neglected diseases: a review. *Current Organic Chemistry* 12, 643-666.

Ioset JR., Urbaniak B, Ndjoko K, Wirth, J, Martin F, Grisse, W, Sautter C, Hostettmann K. (2007). Flavonoid profiling among wild type and related GM wheat varieties. *Plant Molecular Biology*, 65, 645-654.

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#### **Patent**

Kaur H. and Ioset JR. (2007). Assay, kit and apparatus for the detection of artemisinin derivatives, *PCT Int. Appl.* WO2007077444.

#### **Other scientific contributions of interest**

Jean-Robert Ioset, Reto Brun, Tanja Wenzler, Marcel Kaiser, Vanessa Yardley (2009) Drug Screening for Kinetoplastid Diseases, A Training Manual for Screening in Neglected Diseases, ([www.dndi.org/media-centre/scientific-publications/2009.html](http://www.dndi.org/media-centre/scientific-publications/2009.html)), research manual.