

- **Title:** Postdoctoral Scholarship in Molecular Biology/Molecular Parasitology
- **Field of knowledge:** Genetics/Parasitology
- **FAPESP process:** 2018/14398-0
- **Project Title:** Epigenetic regulation of *Leishmania* gene expression
- **Network:** UK:Brazil Joint Centre Partnership in leishmaniasis (JCPiL)
- **Working area:** Genetics / Molecular Biology/Molecular Parasitology
- **Principal Investigator:** Angela Kaysel Cruz
- **Unit/Institution:** Department of Cell and Molecular Biology, Ribeirão Preto School of Medicine, University of São Paulo, FMRP/USP
- **Partner Institution:** Department of Biology, University of York, UK
- **Deadline for submissions:** October/25/2019
- **Publishing Date:** September/20/2019

A Post-Doctoral Scholarship is available to work on the project "Epigenetic regulation of *Leishmania* gene expression" in the laboratory of molecular parasitology under the supervision of Angela K. Cruz. This project is a partnership between Brazilian (Angela Cruz, FMRP/USP) and UK laboratories (Pegine Walrad and Michael Plevin, Dept of Biology University of York), part of the *UK:Brazil Joint Centre Partnership in leishmaniasis (JCPiL)*, which involves 12 different research groups from UK and Brazil. The postdoctoral fellow will study "*non-coding RNAs putative regulatory role*" at the Brazilian laboratory.

Applicants must have a Ph.D. in Parasitology, Biochemistry, Genetics, Molecular Biology or related fields. Preference will be given to highly motivated individuals with a proven experience on molecular parasitology/microbiology. Applicants should have previous experience with mouse handling and *in vivo* and *in vitro* infection procedures. Candidates should be creative, personally motivated, have excellent oral and written communication skills and a sense of teamwork. It is mandatory that applicants are fluent in English. The selected candidate will receive a Post-Doctoral Fellowship from FAPESP (explicit details are at [www.fapesp.br/en/5427](http://www.fapesp.br/en/5427))

**Summary:** *Leishmania* gene expression control occurs mainly at the post-transcriptional level. At the centre of the regulatory complexes are cis- and trans-regulatory elements, mainly represented by mRNA elements (cis-elements) and RNA binding proteins (RBPs) which may well include a thus-far unexplored content of non-coding transcripts (ncRNAs), recently detected in these parasites. Cruz and co-workers have demonstrated that ncRNAs seems to be a common feature of *Leishmania* transcriptomes and hundreds of putative ncRNAs were identified as differentially expressed (DE) transcripts. The DE *L. braziliensis* ncRNAs and interacting RBPs will be functionally investigated. The post-doctoral fellow will use state of the art technologies for genome editing to generate knockout (KO) of DE ncRNAs in *L. braziliensis* and to endogenously tag these ncRNAs to evaluate phenotypic changes and identify interacting partners. The post-doctoral fellow from the Brazilian laboratory will be engaged in the complementary studies to be developed in the UoY, under the guidance of Michael Plevin and Pegine Walrad and should spend two 6-months periods in the UK.

**How to apply:** Interested individuals should contact Angela K. Cruz by email ([akcruz@fmrp.usp.br](mailto:akcruz@fmrp.usp.br)) using “PostDoc\_Leishmania\_ncRNAs” as the subject of the email).

Documents requested: 1) a letter of intent stating the candidate motivations and why he/she qualify for the position; 2) a short version of Curriculum Vitae containing a list of publications and previous professional experiences; 3) Two letters of recommendation from previous mentors/supervisors of the applicant should be sent to the same email address. Candidates meeting the requirements will be contacted and interviewed (in-person or via Skype).