

**BOURSES FONDATION PIERRE LEDOUX – JEUNESSE INTERNATIONALE**

**Propositions de Stages**

Institut	N°	Labo/Service d'accueil	Responsable (nom, e-mail)	Thématique	Durée	Formation initiale	Date d'arrivée souhaitée	Hébergement sur le campus et coût
Institut Pasteur de Corée	1	Laboratoire de Biochimie Moléculaire Appliquée (AMBL)	Kyu-Ho Paul PARK <a href="mailto:Kyuhopaul.park@ip-korea.org">Kyuhopaul.park@ip-korea.org</a>	<b>Validation de méthodes haut-débit de production, calibration par ultrason, et optimisation de la composition lipidique pour la formulation de drogues hydrophobes en cours de développement</b> (potentiel antiviral ou antibiotique).	6 mois souhaitée	A partir de L3 Chimie, Biotechnologie, virologie, ou microbiologie	Février 2025 à Mars 2025	Chambre en « Guest-house » accessible (~150 EUR/mois)
Institut Pasteur de Madagascar	2	Unité de Virologie – Institut Pasteur de Madagascar	Vincent LACOSTE <a href="mailto:vlacoste@pasteur.mg">vlacoste@pasteur.mg</a>	<b>Recherche de paramyxovirus et de coronavirus chez les petits mammifères terrestres et volants</b> d'Ifanadiana et de Morondava, Madagascar : analyses moléculaires et phylogénétiques.	Six mois	Master 2	Janvier 2025	Oui, 150€/mois
Institut Pasteur de Montevideo	3	Laboratory of Molecular and Structural Microbiology – Institut Pasteur de Montevideo (Uruguay)  Webpage: <a href="https://pasteur.uy/en/laboratories/molecular-and-structural-microbiology/">https://pasteur.uy/en/laboratories/molecular-and-structural-microbiology/</a>	Sonia MONDINO <a href="mailto:smondino@pasteur.edu.uy">smondino@pasteur.edu.uy</a>	<b>Unravelling the molecular puzzle of <i>Leptospira</i> endoflagellar motility</b> <i>Leptospira</i> species are responsible for leptospirosis, one of the most important and prevalent zoonoses worldwide. These bacteria move by rotating endoflagella confined within the periplasmic space, between the peptidoglycan and the outer membrane, distinguishing them from known exoflagellated bacteria. At a global level, the structure of the flagellum is conserved between both groups of bacteria. However, <i>Leptospira</i> endoflagella are noticeably more complex, and little is known about the role of such	6-10 months	- Pursuing or holding a Master's degree in Microbiology or Biology  - Basic knowledge of Molecular Biology and/or Microbiology is desirable. But most importantly: enthusiasm, curiosity and willingness to work in a	February-March 2025 (Depending on the candidate's availability)	On-campus accommodation is not available.  If needed, advice when looking for housing will be provided.

				<p>complexity in bacterial motility and infection.</p> <p>Homologs of certain proteins that are important for flagella assembly in exoflagellated bacteria are encoded in the genome of <i>Leptospira</i>, but their function remains a mystery. Using a multidisciplinary approach that involves molecular biology, microbiology, structural analysis, interatomic studies by mass spectrometry and bioinformatics, our group is interested in deciphering the role of such flagellar proteins.</p> <p>At present, we are focused on the analysis of two proteins that we hypothesize are involved in the assembly of <i>Leptospira</i> endoflagella, and we are looking for motivated and curious students that would like to join our project! Students will have the opportunity to work in a collaborative environment, handling <i>Leptospira</i> cultures and learning different techniques. Depending on the time that will be spent in our laboratory, a detailed program of activities will be defined.</p>		<p>collaborative environment!</p> <p>- Proficiency in Spanish is advantageous for city life</p>		
<p><b>FIOCRUZ</b> <b>Rondônia</b></p>	<p><b>4</b></p>	<p><b>Cellular Immunology Applied to Healthy Laboratory -</b></p>	<p>Juliana PAVAN ZULIANI (<a href="mailto:zuliani.juliana@gmail.com">zuliani.juliana@gmail.com</a>; <a href="mailto:juliana.zuliani@fiocruz.br">juliana.zuliani@fiocruz.br</a>)</p> <p>On line CV: <a href="http://lattes.cnpq.br/9093880214338747">http://lattes.cnpq.br/9093880214338747</a></p>	<p><b>Biotechnological tools for prospecting animal toxins: in silico, in vitro and in vivo.</b></p> <p>Emphasis: Pro-inflammatory mechanisms induced by toxins and snake venoms -</p>	<p>3 - 4 months</p>	<p>Yes. Doctoral or Master in Biomedical Sciences, Public Health, International Relations or related fields; Working knowledge of English or Portuguese</p>	<p>May 2025</p>	<p>No.</p> <p>We provide accommodation in Brazilian students home.</p>

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Oswaldo Cruz Institute - Pernambuco	5	GESB: Grupo de Estudos em Saúde Bucal (Research Group on Oral Health)	Rafael da SILVEIRA MOREIRA <a href="mailto:rafael.moreira@fiocr uz.br">rafael.moreira@fiocr uz.br</a>	<b>Research in public data bank, with execution of statistical analysis in various fields of epidemiology, and not only in oral health, including geoprocessing and multilevel analysis.</b>	3 to 10 months	Knowledge and experience in statistical analysis and epidemiology	2025	No
Fiocruz - Rio	6	Laboratório de Biologia Molecular de Parasitas e Vetores	Yara Maria TRAUB-CSEKO <a href="mailto:ytraub@ioc.fiocruz.br">ytraub@ioc.fiocruz.br</a>  Antonio Tempone <a href="mailto:tempone@ioc.fiocrua.br">tempone@ioc.fiocrua.br</a>	<b>Molecular studies of sand fly-Leishmania interactions.</b> Development of alternative leishmaniasis transmission blocking strategies: development of transmission blocking vaccines and paratransgenic vector.	negotiable	Undergraduate, Graduate	negotiable	We do not know
Fiocruz - Rio	7	Laboratory of Structural Biology	Daniel ADESSE <a href="mailto:adesse@ioc.fiocruz.br">adesse@ioc.fiocruz.br</a> <a href="mailto:Daniel.adesse@gmail.com">Daniel.adesse@gmail.com</a>	<b>Cellular and Molecular Neuroinflammation</b>  Our team studies the neuropathological effects induced by infection with the parasite <i>Toxoplasma gondii</i> or following exposure to environmental contaminants. Students will have the opportunity to work with cell culture and animal models of infection with special focus to the Blood-Brain Barrier and the perivascular niche of neural progenitor cells. Other techniques will include immunocytochemistry and confocal microscopy, western blotting and quantitative RT-PCR. Detailed program of activities will depend on the time that will be spent in our laboratory.	At least 3 months	Bachelor degree in Biology, Science, Medicine, Veterinary, Pharmaceutical Sciences, or similar areas	August 2025 (flexible)	On-campus accommodation available for approximately US\$760.00 per month, for up to 45 days. Off-campus accommodation also at no cost, upon availability.

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Fiocruz - Rio	8	Mosquito ecology and pathogen interaction	Rafael MACIEL-DE-FREITAS <a href="mailto:freitas@ioc.fiocruz.br">freitas@ioc.fiocruz.br</a>	<p><b>Unraveling the network of multipartite interactions and its impact on the transmission of vector-borne diseases.</b></p> <p>We would like interested students to deepen their knowledge and become multidisciplinary professionals, being able to develop projects that involve complementary research fields such as field entomology and sequencing, ecology and genetics, physiology and genomics, for example.</p>	6-10 months	Young biologists with background in fields as Biology, Entomology, Ecology, Parasitology, Genetics and/or Virology	When suitable,	The Fiocruz campus in Rio de Janeiro has free accommodation for students, subject to prior reservation and availability of places
Fiocruz - Rio	9	Laboratory of Insect Biochemistry and Physiology	Fernando ARIEL GENTA <a href="mailto:genta@ioc.fiocruz.br">genta@ioc.fiocruz.br</a>	<p><b>Development and testing of insecticides and antiparasitic baits.</b></p> <p>Studies on the impact of natural and chemical compounds in the vectorial competence of sandflies, mosquitoes and kissing bugs. Collections of vectors in the field and analysis of infection using microscopy and molecular biology techniques.</p>	10 months	Graduation (finished or not) in Biology, Pharmacy or Veterinary School	Negotiable	Yes, no fee (Curicica) or US\$700 (Manguinhos)

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Fiocruz - Bahia	10	Laboratory of Host-Pathogen Interaction and Epidemiology	Patrícia S T Veras patricia.veras@fiocruz.b	<p><b>Investigation of mechanisms associated with entry, establishment, and dissemination of Leishmania spp: parasite involvement in the development of different clinical forms.</b></p> <p>Leishmania spp. infect various vertebrate hosts, including humans. The World Health Organization classifies leishmaniasis as one of the most important neglected tropical diseases, which is endemic in almost all continents, with an estimated 700,000 to 1 million new cases and 30,000 deaths annually. Mechanisms involved in the entry and survival of Leishmania spp. within the host cell, as well as those related to the dissemination of the parasite to different tissues, influence the course of the infection depending on the parasite species. In this ongoing international projects involving teams from Brazil and Canada, the aim is to investigate the initial events of parasite-host cell interaction, such as the formation of the phagocytic cup, biogenesis of the parasitophorous vacuole, activation of the autophagic pathway in macrophages/monocytes infected with <i>L. amazonensis</i>, <i>L. braziliensis</i>, or <i>L. infantum</i>, activated signaling pathways in the parasite-host cell interaction, and their role in the parasite's survival and dissemination within the host.</p>	3 to 10 months	Undergraduate or master's degree in Biology, Chemistry, Biomedicine (or related areas) and basic knowledge of Cellular Biology	From April 2025 (depending on candidate availability)	No

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Fiocruz - Amazônia	11	Lab. Infectious diseases and Immunology-UFAM/ILMD-Fiocruz Amazônia	Pritesh Jaychand LALWANI <a href="mailto:Pritesh.lalwani@fiocruz.br">Pritesh.lalwani@fiocruz.br</a>	<p><b>Emerging Virus Research Internship: Epidemiology and Immune Response in the Amazon Region</b></p> <p>This internship offers a unique opportunity to contribute to cutting-edge research focusing on epidemiology and immune response mechanisms against emerging viruses.</p> <p><b>Key Activities</b></p> <ol style="list-style-type: none"> <li>1. Field Research: Assist in field expeditions to collect human or animal samples from diverse ecological niches within the Amazon region, including remote areas, to identify potential emerging viruses.</li> <li>2. Data Analysis: Analyze collected samples using advanced molecular biology and serological techniques to identify and characterize viruses.</li> <li>3. Epidemiological Studies: Contribute to epidemiological investigations by analyzing data on virus transmission dynamics, host reservoirs, and potential spillover events in the Amazon ecosystem.</li> <li>4. Immune Response Analysis: Investigate host immune responses to emerging viruses through serological assays, cytokine profiling, and immunohistochemistry techniques.</li> <li>5. Collaboration: Collaborate with interdisciplinary teams including virologists, epidemiologists, ecologists, and immunologists to integrate findings and develop comprehensive insights into emerging virus dynamics.</li> </ol>	03 to 12 months	<p>- Pursuing or holding a Bachelor's or Master's degree in Biology, Microbiology, Immunology, Epidemiology, Veterinary, Medicine or a related field.</p> <p>- Excellent organizational skills and ability to work effectively in a collaborative research environment.</p> <p>- Proficiency in English (spoken and written) is required; proficiency in Spanish or Portuguese is advantageous.</p>	Negotiable	<p>No.</p> <p>Housing close to lab available.</p>

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Fiocruz - Minas	12	Biosystems Informatics and Genomics	Laila Alves Nahum <a href="mailto:laila@nahum.com.br">laila@nahum.com.br</a> <a href="mailto:laila.nahum@fiocruz.br">laila.nahum@fiocruz.br</a>	<p><b>Phylogenetics and Evolution of Genes and Proteins from Parasites that Cause Neglected Diseases.</b></p> <p>This multidisciplinary project involves experimental (molecular biology) and computational (bioinformatics) approaches. We are looking for graduate students and postdoctoral researchers.</p>	Up to 10 months	Background in Biological Sciences, Health Sciences, or Computational Sciences. Previous experience with phylogenetics is a plus (but not mandatory)	Anytime	Not available (see comments)