

**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 Nouvelle-Calédonie	1	Unité de Recherche et d'Expertise – Dengue et Arboviroses Institut Pasteur de Nouvelle-Calédonie	Catherine INIZAN (cinizan@pasteur.nc)	<b>Caractérisation du profil de neutralisation des anticorps ciblant le virus de la dengue au sein des populations de Nouvelle-Calédonie</b>	6 mois	Stage de Master 2	Janvier 2025	Non
FIOCRUZ Rondônia	2	Cellular Immunology Applied to Healthy Laboratory -	Juliana PAVAN ZULIANI ( <a href="mailto:juliani.juliana@gmail.com">juliani.juliana@gmail.com</a> ; <a href="mailto:juliana.zuliani@fiocruz.br">juliana.zuliani@fiocruz.br</a> )  On line CV: <a href="http://lattes.cnpq.br/9093880214338747">http://lattes.cnpq.br/9093880214338747</a>	<b>Biotechnological tools for prospecting</b> animal toxins: in silico, in vitro and in vivo.  Emphasis: Pro-inflammatory mechanisms induced by toxins and snake venoms -	3 - 4 months	Yes. Doctoral or Master in Biomedical Sciences, Public Health, International Relations or related fields; Working knowledge of English or Portuguese	May 2024	No.  We provide accommodation in Brazilian students home.
Fiocruz Paraná Chagas Institute, Oswaldo Cruz Foundation	3	Laboratory for Applied Science and Technology in Health (LaCTAS) Carlos Chagas Institute, Oswaldo Cruz Foundation	Alexandre DIAS T. COSTA, <a href="mailto:alexandre.costa@fiocruz.br">alexandre.costa@fiocruz.br</a>	<b>Development of paper-based microfluidic devices.</b>  The student will design and print 3D microfluidic devices using different materials aiming the development of diagnostic tests for newborn screening or tropical neglected diseases.	6-10 months	Graduate or master's degree in Biology, Chemistry, Bioengineering, Biomedicine (or related areas) and basic knowledge of Molecular Biology	01/March/24 (negotiable)	Not available

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Oswaldo Cruz Institute - Pernambuco	4	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>	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.	3 to 10 months	Knowledge and experience in statistical analysis and epidemiology	2024	No
Fiocruz-Mata Atlântica	5	Environmental Health Area, Fiocruz Atlantic Forest Development Program	Ricardo MORATELLI MENDONÇA DA ROCHA, <a href="mailto:ricardo.moratelli@fiocruz.br">ricardo.moratelli@fiocruz.br</a>	Biodiversity, Environment and Health	3–10 months	Undergraduate students of Biological Sciences or Veterinary Medicine.	2024	Accommodations are available at Centro de Referência Professor Hélio Fraga, about 15 minutes away from Fiocruz Atlantic Forest Campus ( <a href="https://apgfiocruz.wordpress.com/port folio/alojamento/helio-fraga/">https://apgfiocruz.wordpress.com/port folio/alojamento/helio-fraga/</a> )
Fiocruz - Rio	6	Laboratory of Technological Development in Virology	Marcelo ALVES PINTO ( <a href="mailto:marcelop@ioc.fiocruz.br">marcelop@ioc.fiocruz.br</a> )	Oncolytic effect of ZIKV in experimental Glioblastoma	10 months	<a href="http://lattes.cnpq.br/2986740584365533">http://lattes.cnpq.br/2986740584365533</a> <a href="https://orcid.org/0000-0003-3462-7277">https://orcid.org/0000-0003-3462-7277</a> Web of Science ResearcherID: <a href="https://orcid.org/0000-0003-3462-7277">ABA-3312-2020</a>	January/2024	<a href="https://portal.fiocruz.br/alojamento">https://portal.fiocruz.br/alojamento</a> Schedule : <a href="mailto:casaamarela@fiocruz.br">casaamarela@fiocruz.br</a>

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Fiocruz - Rio	7	Cellular Microbiology Laboratory	Leticia Miranda LERY Santos leticia.lery@ioc.fiocruz.br	<p><b>Characterization of virulence profile of antimicrobial-resistant bacterial isolates</b></p> <p>The intern will compare the virulence profile of isolates, performing microbiological characterization, biofilm formation assays, capsule content and mucoviscosity assays, among others. Quantitative PCR will be performed to evaluate the differential expression of virulence-related genes under the stimuli of selected drugs.</p>	3 to 6 months (depending on previous experience of the student)	<p>Biology, microbiology or biomedical sciences background</p> <p>Knowledge of basic biosafety rules and standard lab procedures (pipetting, preparation of solutions, etc)</p>	From April to September, 2024 (depending on candidate availability)	There is Casa Amarela Residence on campus (for few days, ~R\$ 100/day). There is Alojamento at CRHF (outside the campus, check availability in advance)
Fiocruz - Rio	8	Laboratório de Biologia Molecular de Parasitas e Vetores, Instituto Oswaldo Cruz, Fiocruz	Yara Maria TRAUB-CSEKO ytraub@ioc.fiocruz.br	<p><b>Studies on the interaction between Leishmania and the vector Lutzomyia longipalpis, the main vector of Visceral leishmaniasis in America.</b></p> <p>We are presently developing two projects that aim at blocking the transmission of leishmaniasis. One involves the use of Transmission Blocking Vaccines (TBVs), for which suitable targets are being identified and tested. The other is the development of transgenic sandflies carrying bacteria that secrete molecules capable of killing the parasites inside the insect.</p>	To be discussed	Some knowledge of vector and/or molecular biology technology would be desirable, but the most important factor is enthusiasm and curiosity.	To be discussed	I do not know

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Fiocruz - Rio	9	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>	<p><b>Cellular and Molecular Neuroinflammation</b></p> <p>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.</p>	At least 3 months	Bachelor degree in Biology, Science, Medicine, Veterinary, Pharmaceutical Sciences, or similar areas	August 2024 (flexible)	<p>On-campus accommodation available for approximately US\$760.00 per month, for up to 45 days.</p> <p>Off-campus accommodation also at no cost, upon availability.</p>
Fiocruz - Rio	10	Insect vectors: ecology and genetics of tripartite vector-pathogen-microbiota interactions	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, after	The Fiocruz campus in Rio de Janeiro has free accommodation for students, subject to prior reservation and availability of places

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Fiocruz - Rio	11	Laboratory of Insect Biochemistry and Physiology	Fernando ARIEL GENTA genta@ioc.fiocruz.br	<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	1 April or 1 December	Yes, no fee (Curicica) or US\$700 (Manguinhos)
Gonçalo Muniz Institute (IGM)/Fiocruz - Bahia	12	Laboratory of Host-Pathogen Interaction and Epidemiology	Patrícia S T VERAS patricia.veras@fiocruz.br	<p><b>Study of the efficacy of 17-DMAG, intraperitoneally or topically, in controlling in vivo infection by <i>Leishmania braziliensis</i></b></p> <p>Cutaneous leishmaniasis (CL) is considered one of the most common Socially Determined Diseases (DDS), with Brazil being one of the 9 countries with the highest prevalence of the disease in the world. Current treatments for cutaneous leishmaniasis (CL) are mostly applied intravenously, are toxic, cause serious side effects or are expensive. Therapeutic schemes are of prolonged use, favoring treatment abandonment, the emergence of therapeutic failure and the occurrence of mucosal leishmaniasis. New therapeutic regimens for CL are urgent. Thus, in the present project, we propose the development of a new technology for the topical treatment of this disease based on an HSP90 inhibitor, which is in technological development phase 5 (TRL5).</p>	3 to 10 months	Undergraduate or master's degree in Biology, Chemistry, Biomedicine (or related areas) and basic knowledge of Pharmacology	From April 2024 (depending on candidate availability)	No

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Fiocruz - Bahia	13	Laboratory of Host-Pathogen Interaction and Epidemiology	Patrícia S T VERAS patricia.veras@fiocruz.br	<p><b>Investigation of mechanisms associated with entry, establishment, and dissemination of <i>Leishmania</i> spp: parasite involvement in the development of different clinical forms.</b></p> <p><i>Leishmania</i> spp. infect various vertebrate hosts, including humans. In this ongoing international project 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 2024 (depending on candidate availability)	No

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Gonçalo Muniz Institute (IGM)/ Fiocruz - Bahia	14	Laboratory of Host-Pathogen Interaction and Epidemiology	Juliana P B DE MENEZES juliana.fullam@fiocruz.br	<p><b>Study of the modulation of host cell migration induced by <i>Leishmania</i> and its impact on parasite dissemination in the host.</b></p> <p>Leishmania spp. infect several vertebrate hosts, including humans. The dissemination and homing of infected cells containing Leishmania antigens are crucial for the parasite's survival in the host and the establishment of the lesions. However, the understanding of the mechanisms underlying host cell adhesion and migration during infection by this protozoan remains limited. Therefore, this study aims to evaluate the migration of human monocytes, macrophages, and dendritic cells in Leishmania infection, and the mechanisms involved in this process. Studies to better understand the process of migration of infected host cells and its relationship with disease dissemination are essential for the development of new therapeutic and preventive strategies to prevent the development of severe and disfiguring forms of leishmaniasis.</p>	3 to 10 months	Undergraduate or master's degree in Biology, Biomedicine (or related areas)	From April 2024 (depending on candidate availability)	No

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Fiocruz - Amazônia	15	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>		<p>No.</p> <p>Housing close to lab available.</p>

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Fiocruz - Minas Instituto René Rachou	16	Biosystems Informatics and Genomics	Laila Alves NAHUM E-mail: <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)