

RECRUTAMENTO ALUNOS

2 alunos de PhD (psicometria crenças/motivação e saúde mental/bem-estar)

1 Lab Fischer

1 Lab Moll

CHAMADA ALUNOS DOUTORADO

Jorge Moll (www.moll-lab.org) and Ronald Fischer (<https://scholar.google.com/citations?user=TKVviNUAAAAJ&hl=en>) are seeking applications for TWO PhD positions in Medical Sciences at the D'Or Institute for Research and Education (<https://w1.solucaoatrio.net.br/somos/idor-ppgcm/index.php/pt/>) with full-scholarship.

The successful candidates will be members of both the Cognitive and Neuroscience Unit and the Culture, Mind and Behavior Lab at the D'Or Institute for Research and Education, both located in Rio de Janeiro, Brazil.

Dr. Moll's work focuses on the psychological and neural mechanisms governing human decisions, perception and social preferences and how they are shaped by morals and values and modified by experience, culture and neurotechnological interventions. This work is tightly connected with Dr. Fischer's Lab, centered on the interplay between psychological and biological approaches to studying minds and culture, in particular human values, personality and well-being, as well as the cultural evolution of prosocial behavior, rituals and religion.

The students will develop projects under the broad scope of "Psychology and Neuroscience: Cognition, Motivation and Artificial Intelligence"

There will be two related project lines, but with a different emphasis:

Project line 1 "Beliefs, values and mental health" (supervised by Dr. Fischer): in this project line you will 1) develop studies for online and field research, with a particular focus on validating psychometric and behavioral measures of belief in a non-Western (non-WEIRD) context; 2) analyze quantitatively (e.g. network analysis, NLP) and qualitatively (e.g. thematic analysis) the relationship between belief dimensions; 3) design and conduct longitudinal studies on the relationship between beliefs and well-being/mental health.

Requirements for Project line 1:

- Intrinsic motivation and a passion for experimental psychology;
- Knowledge of basic concepts and techniques of psychometrics and experimental psychology;
- Experience with online and/or field data collection;
- Advanced written and spoken English;

Desirables

- Experience in multivariate statistics;
- Experience in scientific data analysis and programming (preferably R or Python), or motivation to learn;
- Experience in NLP / text mining, or motivation to learn;

Project line 2 "Human cognition, perception and motivation" (supervised by Dr. Moll): in this project line candidates may choose between two (not mutually exclusive) paths: 1) design and conduct experiments in the field of affective and social neuroscience, aiming at mapping decisions, affiliative emotions using physiological methods (fMRI, EEG, peripheral physiology, neurofeedback); and/or 2) work in computational neuroscience or physics,

optimizing analytical tools to characterize, model and decode cognitive and sensory (especially visual) experiences or emotional states using physiological methods (fMRI, EEG, psychophysics, peripheral physiology, neurofeedback) and analytical methods (e.g., machine learning, deep neural networks).

Requirements for Project line 2:

- Intrinsic motivation and a passion for neuroscience and/or computational/statistical methods;
- Experience with machine learning techniques and/or physiological signals analysis, or experience with optical physics;
- Experience and a profound interest in scientific data analysis and programming (preferably Python or Matlab);
- Advanced written and spoken English;

Desirables

- Background on neurobiology and/or neuroanatomy and/or neurophysiology and/or physics.

Options for specific training pre-enrolment are also available, please inquire with lab directly.

The applications should include a statement of research interests and reasons for applying to the preferred project line (400 words max, in English), a curriculum vitae including a list of publications (if available) and research experience, and the names and e-mail addresses of two individuals who could provide recommendation letters upon request. Please send applications to claudio.moreira@idor.org until **15/01 (or until vacancies are filled)**.

About IDOR

The IDOR is a Brazilian private, non-profit research organization headquartered in Rio de Janeiro, São Paulo and Salvador. IDOR's research has a strong emphasis in human neuroscience/neurology, stem cells/organoids, clinical oncology, intensive care medicine and extends to other clinical areas as well. IDOR has established scientific research collaborations with a number of international institutions such as the King's College, London, Okinawa Institute of Science and Technology, UCSF, Caltech, University of Melbourne, as well as Stanford University. IDOR's infrastructure includes access to state of the art brain imaging 3T MRI scanner equipped for fMRI/DTI, a data processing lab, a neuromodulation and peripheral neurophysiology equipments (TMS, tDCS, GSR/EKG, 64ch EEG/fMRI).