

Job offer: Postdoctoral researcher in “Biomedical Data Science and Artificial Intelligence”

Female candidates are encouraged to apply

Description

The Barcelona Institute for Global Health (ISGlobal) is a cutting-edge institute addressing global public health challenges through research, translation to policy and education. ISGlobal has a broad portfolio in communicable and non-communicable diseases including environmental and climate determinants, and applies a multidisciplinary scientific approach ranging from the molecular to the population level. Research is organized in three main areas, Malaria and other Infectious Diseases, Child and Maternal Health, and Urban Health, Climate & Non-Communicable Diseases. ISGlobal is the first global public health centre to have received the Severo Ochoa distinction, a seal of excellence of the Spanish Science Ministry.

What we are looking for

We are seeking a **postdoctoral researcher to join the new Biomedical Data Science Research Group of Dr. Paula Petrone at ISGlobal, created in the framework of the Severo Ochoa Program**, with the vision of leveraging **data analytics and artificial intelligence** to improve health care outcomes. This is a unique opportunity for a motivated data scientist to contribute to the digital transformation of biomedicine and carry out research that has social impact and responds to unmet medical needs.

The postdoctoral researcher will develop novel research that applies advanced analytics and machine learning approaches to biomedical data and real-world evidence, IoT and digital therapeutics, bioinformatics and health informatics. An ambition of this team is to implement predictive modelling as well as explainable AI methods to understand disease drivers leading to early disease diagnosis.

Previous experience in the biomedical field is not a requirement but highly desirable. Interest is additionally expressed for candidates with demonstrated experience in at least one of the following topics: bioinformatics, health informatics, medical imaging, computer vision, machine learning, natural language processing, deep learning and explainable artificial intelligence.

Main duties

- Development of data science models to predict and to understand human health and disease, to augment clinical decision-making and guide the development of new therapies and diagnostics
- Carry out high-quality research independently
- Help develop robust model training and data infrastructure to support collaborative data science projects at ISGlobal
- Publish research results in scientific journals and in national and international conferences.

Competences

Candidates are expected to:

- Have a completed, or close to completion, PhD with strong analytics expertise in any of the following areas: Biomedical Sciences, Computer Science, Engineering, Mathematics, Statistics, Physics or related fields with focus on AI, ML or Data Science. Additional profiles will be considered if highly motivated researchers in other related disciplines decide to apply
- Experience developing algorithms or building data solutions, and integrating and managing datasets from multiple sources
- Solid programming experience in one or more general purpose programming language: Python, R, Scala
- Hands-on experience using one of the following deep learning libraries: Tensorflow, PyTorch or similar is desirable
- Experience of analyzing clinical/healthcare data is desirable
- Have a solid track record of first-authored publications in peer-reviewed journals.
- Be willing to work in an interdisciplinary team within a highly collaborative research institute
- Be fluent in spoken and written English
- Be willing to apply to individual fellowships to become an independent researcher and define new own lines of research
- Experience with grant applications and fellowships is a plus.

Conditions

- Dedication: Full time.
- Starting date: January 2021.
- Duration: 3 years.

How to apply

Applicants must fill in the [requested form](#) including the following reference: SO_POSTDOC_DATASCIENCE_NOV20.

Applicants should attach the following documents:

- Curriculum Vitae;
- 2-pages supporting statement describing research trajectory, qualifications, experiences and projects, in regards to the competences and duties related to the offer, and research plans at ISGlobal; the inclusion of hyperlinks to online repositories with tangibles codes and preprint is encouraged.
- the names and contact information for three references.

Please contact research.management@isglobal.org for questions about these positions.

The receipt of applications will be open until a candidate is selected. Only shortlisted candidates will be contacted.

This position will be funded through the “Centro de Excelencia Severo Ochoa 2019-2023” Program (CEX 2018-000806-S) from the Spanish Ministry of Science and Innovation.

In ISGlobal we are committed to maintaining and developing a work environment in which the values and principles of our organization are respected and equal opportunities between women and men be promoted in each of the areas in which we operate, not tolerating discrimination based on criteria such as age, sex, marital status, race, ethnicity, disabilities, political leanings, religion or sexual orientation.