Postdoc positions available at LANGEBIO, Mexico: The Mexican Biobank Project

You are invited to apply to work on the Mexican Biobank Project, which aims to build one of the largest genetics biobanks in Latin America and to build capacity in big data science in medical genomics in admixed populations. The project is funded through CONACYT and the Research Councils UK (RCUK) and integrates teams in Mexico (LANGEBIO), the UK (Oxford) and the US (Stanford). The project will generate genetic data on 10,000 Mexican individuals with linked demographics and medical data, and measure antibody titers on a panel of approximately 20 pathogens that are naturally circulating in the Mexican population. This resource will provide research opportunities in population genetics and genetics of complex traits in an admixed population, and the opportunity to study the genetic determinants of seroreactivity to many common pathogens in Mexico.

We are seeking two exceptional Postdoctoral scientists to work on a range of data analyses including data quality control, phasing, imputation, association analysis and population genetics (such as natural selection, demographic history, and distribution of deleterious alleles). You will be working with data generated from both genotyping arrays and sequencing studies. You will be closely supervised by Dr. Andres Moreno from the National Laboratory of Genomics for Biodiversity (LANGEBIO) in Mexico, with expertise in population genetics of admixed populations; and Dr. Selene Fernandez, with an expertise in genomics and bioinformatics of non-coding RNA. In addition, the project will also be closely supervised by Dr. Alexander Mentzer and Mexican researcher Dr. Adrian Cortes, based at the Wellcome Trust Centre for Human Genetics, Oxford University, with expertise in genetics of complex diseases and immunogenetics, as well as Dr. Carlos Bustamante from Stanford University and Dr. Christopher Gignoux from UC Denver. There will be substantial scope for training across the spectrum of expertise represented in this collaborative network.

This is a great opportunity for advanced trainees to get access to one of the most comprehensive and innovative datasets in Biomedical Data Science from Latin America and build an independent scientific career in medical and/or population genetics where strong quantitative and computational skills are required. LANGEBIO is one of the leading institutions in genomic research not only in Mexico but also internationally (www.langebio.cinvestav.mx). The applicant will have full access to the local infrastructure at LANGEBIO and the Genomics Core Facility (www.langebio.cinvestav.mx/labsergen), the Moreno laboratory (www.moreolab.org), as well as the extended collaborative network in the UK and USA. Previous experience working with large genomic datasets, statistical genetics and computational skills including one or more scripting or programming languages (e.g. R, Perl, Python, C, Java) and complete familiarity in working in a Linux/Unix environment is desired.

If you are interested please send 1) a copy of your CV, 2) copy of your most relevant publications (up to three), 3) a one-page letter of intent describing your research interests and why you would like to join the project, and 4) two letters of recommendation to andres.moreno@cinvestav.mx with the SUBJECT: “Biobank Postdoc Application” and your name. Competitive salaries will be offered according to demonstrated experience and CV. Funds are available to support both positions for two years, ideally starting early 2018. The positions will remain open until filled.