

Job Opening

Open position for a biostatistician/computational biologist at the Molecular Data Analysis Area - Bioinformatics Unit

Center for Research in Agricultural Genomics (CRAG). Barcelona, Spain.

The Centre for Research in Agricultural Genomics (CRAG) is currently seeking a biostatistician/computational biologist to join its Bioinformatics Core Unit, in the Molecular Data Analysis area. The main focus of the area is to perform and help the analyses undertaken as part of the research by the laboratories at CRAG, which are organized into the following research programs: Plant development and signal transduction, Plant responses to stress, Plant metabolism and metabolic engineering, and Plant and animal genomics (<https://www.cragenomica.es/research-programs>). This is an exciting opportunity to develop and apply systems biology and bioinformatics approaches, mainly biostatistics, mathematical modelling and genomic analyses, to the understanding of novel, diverse molecular biology questions. The successful candidate is expected to be skilled, eager, communicative, collaborative and innovative.

Key responsibilities

- Work both independently on CRAG's research projects and collaboratively with other members of the area, under the supervision of the Head of the Molecular Data Analysis area.
- Develop robust data analysis pipelines.
- Provide ad hoc analytical and bioinformatics support.
- Process, normalise and integrate multiple types of molecular biology data rigorously to allow unbiased analyses. Data types include NGS, proteomic, imaging and others both at the single cell and population level
- Use Systems Biology approaches such as physicochemical modelling to characterize novel molecular mechanisms.
- Map, assemble and analyse NGS data.
- Consult on experimental design, data quality control and statistical analyses.
- Combine newly acquired experimental data with publicly available databases, including non-mainstream model organisms.
- Work on multiple projects simultaneously in a documented and collaborative manner, implementing code to generate reports.
- Foster the awareness and use of current and emerging computational biology approaches to leverage data-derived knowledge at CRAG, by assisting, preparing and teaching courses or other initiatives.
- Present and openly discuss the results of research, both to the head and other members of the molecular data analysis area as well as the researchers of the institute

Scientific requirements

- PhD in bioinformatics, computational biology, biostatistics, genomics, molecular biology or related fields, applied mathematics or biostatistics.
- Preferred degree or M.Sc. in Mathematics, Physics, Statistics or other theoretical background. Applicants with a biological degree and strong theoretical background acquired afterwards will also be considered.
- Experience in scientific computing and programming/scripting languages in UNIX platforms (e.g. Bash) and high-performance computer clusters.
- Experience in development/maintenance of scientific software and pipelines.
- Proficiency in statistical computing (e.g. R/Bioconductor and Python).

- Experience in mathematical approaches using physicochemical modelling and in general systems biology.
- Experience using version control tools, especially Git.
- Experience in plant biology is not mandatory.

Other skills required

At CRAG, there are thrilling opportunities to work with a large number of collaborators. Hence, we seek a collaborative, fun-with-data-science, curious person, who enjoys working in new questions and good organizational and communication skills, as well as capable of working under defined timelines. As indicator of curiosity and creativity, scientific communications and projects additional to publications will be considered. Such indicators could be e.g. enjoying Open Science, other revolutions in scientific standards, teaching, participation in Science and Society events, data visualization data story-telling and scientific figure design.

We offer

A full time position, initially until Dec 31st 2019, with the possibility of renewal. Salary depending on the candidate's experience and qualifications.

The position will be funded by Severo Ochoa award.

Applications

Interested applicants should submit:

- Presentation letter describing past and current positions, motivation, and economic aspirations (2 pages max.)
- Full CV detailing experience and education.
- Three references (including email address and phone number)

Please submit all the application materials through CRAG website: <http://www.cragenomica.es/jobs>

Applications will be accepted and the position will remain open until it is filled. Review of applications will begin on **February 15, 2017**.

About CRAG

CRAG is an independent research institution established as a Consortium that includes the Spanish National Research Council (CSIC), the Institute of Agrifood Research and Technology (IRTA), the Autonomous University of Barcelona (UAB), and the University of Barcelona (UB). CRAG facilities, located at the UAB campus, were inaugurated in 2011: an ample and well-equipped building designed for modern plant biology and genomics research. CRAG brings together -under a unified management and operational structure- basic research groups in plant development, physiology, metabolism and genetics; groups in bioinformatics and genomics working on plants and animals; and applied projects developed together with Agbio, Biotech, and Breeding companies.

CRAG has been recognized in 2015 with the "Severo Ochoa Center of Excellence" award. The "Severo Ochoa" Program, from the Spanish MINECO, recognizes Centers that perform cutting-edge research and are among the world's best in their respective areas. CRAG has also received the "Human Resources Excellence in Research" award from the European Commission. The award reflects CRAG's commitment to conduct transparent and merit-based recruitment and appraisal procedures and to provide attractive working conditions in alignment with the

European Charter and Code. CRAG is an equal opportunity / affirmative action employer and encourages women and underrepresented minorities to apply.

For more information about CRAG, visit:

<http://www.cragenomica.es>

<https://biannualreport2014-2015.cragenomica.es>

