

Postdoctoral position Bioinformatics

European Institute of Chemistry and Biology
INSERM U1212, CNRS UMR 5320, Bordeaux, France
<http://www.innislab.org>



A postdoctoral position in bioinformatics is available in the lab of Dr. Axel Innis (www.innislab.org) at the European Institute for Chemistry and Biology (IECB) in Bordeaux (<http://www.iecb.u-bordeaux.fr>). We are seeking a highly motivated candidate with a PhD in Bioinformatics or in a related field, an excellent track record and fewer than 2 years postdoctoral experience. Excellent programming skills in C/C++ and Python are a must. Moreover, we are particularly interested in candidates with strong expertise in genomic data mining, comparative genomics approaches and/or NGS data analysis. Candidates should speak English fluently.

Ribosome-arresting peptides are nascent polypeptides that regulate gene expression by forcing the ribosome that is translating them to stall, often in response to a specific metabolite (Seip & Innis (2016) *J Mol Biol* 428, 2217-2227). Although biochemical and structural studies have yielded key insights into their mode of action, the impact of ribosome-arresting peptides as regulators of gene expression and their ability to sense different types of small molecules are largely unexplored. As a result, the successful applicant will be expected (i) to develop a comparative genomics pipeline for the *in silico* identification of ribosome-arresting peptides and (ii) to collaborate with other group members to analyze NGS data derived from *in vitro* evolution experiments seeking to create novel ribosome-arresting peptides. The peptide sequences identified will be further characterized through biochemical and structural means, as part of a lab-wide collaborative effort.

The IECB is a thriving interdisciplinary research institute located on the campus of the University of Bordeaux, in the southwest of France. It is equipped with state-of-the-art facilities for computational and structural biology. The Innis lab provides a highly dynamic international environment, where cutting edge research on bacterial translation and its regulation by peptides and antibiotics is carried out using structural, molecular and computational biology approaches. The successful applicant will benefit from access to a dedicated 192-core computational cluster to carry out his/her projects.

The start date is flexible, but no earlier than March 1st, 2018. The position is full time, 38.5 hours per week, with an initial fixed term of 1 year that can be further extended. The initial gross salary will begin at 30,352 euros per year and will be dependent on the skills and experience of the successful applicant. Funding for this position will be provided through an ERC Consolidator grant (Project acronym: NascenTomiX).

Contact

Candidates interested in applying for this position should send a cover letter and a CV describing their research experience and publication list to Dr. Axel Innis (axel.innis@inserm.fr) no later than March 1st, 2018. They should also provide the names and contact details for at least two referees.