

Postdoctoral Research Fellow

Department of Biochemistry and Molecular Biology

[Lab of Dr. Fadia Ibrahim](#)

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### **Job Summary**

A postdoctoral fellow position is immediately available in the laboratory of Dr. Fadia Ibrahim in the Department of Biochemistry and Molecular Biology, at Thomas Jefferson University. Our research program is focused on studying the molecular mechanism of co-translational mRNA decay, and investigating the role of RNA dysregulation in neurodegenerative diseases including amyotrophic lateral sclerosis. We use a combination of molecular biology, cell biology, and biochemistry techniques, and advanced and novel high-throughput RNA sequencing methods. This position seeks a highly motivated computational biologist to provide bioinformatics support for ongoing studies, setup/develop and implement bioinformatics tools and pipelines, and manage all aspects of data analysis and processing of complex short- and long-sequencing reads

### **Required Qualifications**

- Ph.D. in computational biology, bioinformatics, biomedical/biological engineering, computational sciences, or related disciplines.
- Proficiency in R and Python, other programming languages are an advantage.
- Knowledge of fundamental concepts in biology, and/or knowledge of techniques commonly used in biological labs, such as nucleic acids electrophoresis, PCR, and cell culture.
- Knowledge of statistics to properly apply and perform relevant statistical tests.

### **Preferred Qualifications**

- Knowledge of high-throughput sequencing technologies (e.g. Illumina, ONT) and their application to specific biological problems, and awareness of their strength and weaknesses.
- Experience in -omics data processing and analysis (e.g. RNA-Seq, small RNA-Seq, RiboSeq) and data interpretation/evaluation (e.g. differential expression, ribosome occupancy, peak calling).

- Ability to integrate, mine, and analyze complex biological data.
- Experience with common bioinformatics resources, tools, and databases, such as ENCODE, UCSC Genome Browser, Bioconductor, and NCBI databases.
- Efficiency in Linux/Unix environment. • Experience with management of server and data storage is an advantage.
- Development of scientific hypothesis related to ongoing research in the laboratory.
- Commitment to delivering high-quality results.
- Strong analytical skills and ability to plan analysis steps independently.
- Strong organization, time management, communication and presentation skills.
- Ability to work effectively in a team environment.
- Publication record in peer-reviewed journals.

This is a great opportunity for an individual to contribute to our understanding of RNA regulation in health and disease settings. Please submit a CV, cover letter describing your research experience and interests, and contact information of three references with the online application to Job ID# 9293310.