

Postdoctoral position in structural biology at the University of Texas Medical Branch (UTMB) to study the translation machinery

We have an immediate opening for a talented, highly motivated postdoctoral scholar in my laboratory at the University of Texas Medical Branch (UTMB) located in Galveston, TX, USA, to study the structure and function of ribosome functional complexes during protein synthesis (<https://microbiology.utmb.edu/faculty/matthieu-gagnon>). In particular, the successful candidate will be involved in the characterization of prokaryotic and eukaryotic ribosomes and other RNA/protein complexes involved in translation and its regulation using a combination of cryo-electron microscopy (cryo-EM), X-ray crystallography and biochemical techniques.

Basic qualifications:

- Ph.D. in structural biology, biochemistry, biophysics or a related field
- Practical skills in molecular biology, protein expression, purification and biochemical characterization
- Experience in structural biology, specifically cryo-EM and X-ray crystallography

The successful candidate will have an excellent track record and is expected to drive forward the projects, act semi-independently, compile, analyze and write up data for publication, and work co-operatively with others. More specifically, the candidate will:

- Establish the cryo-EM platform to image ribosome complexes
- Assist with the training of graduate students and postdocs and maintain laboratory inventory

Structural biology facilities at UTMB are outstanding (<https://www.utmb.edu/core>). Cryo-EM resources include a JEOL 2200FS cryo-EM microscope equipped with a DE20 direct electron detector for high-resolution imaging work and a liquid nitrogen autofilling system allowing at least week-long experiments, a cryo-microscope JEOL 2100, an FEI vitrobot cryo-plunger, a Leica EM-GP2 cryo-plunger, a Gatan Solarus plasma cleaner, and a soon-to-be available FEI Titan Krios microscope. X-ray crystallography resources include two X-ray area detector systems, a Phoenix crystallization robot, a Minstrel crystal imaging robot, and the Alchemist and epMotion liquid handling robots. Other state-of-the-art facilities include NMR, next-generation sequencing, molecular genomics, high-throughput screening, solution biophysics, optical microscopy and computational biology.

Ample opportunities exist at UTMB for interactions with centers of scientific excellence in structural biology and molecular biophysics, biodefense, molecular medicine, cancer biology, infectious diseases, environmental health, aging, and translational sciences (<https://www.utmb.edu/centers>). Moreover, UTMB boasts a renowned, vibrant and highly active community of infectious disease researchers and clinicians, providing ample opportunities for broader collaborations and development.

Review of applications will begin immediately and will continue until the position is filled. Interested applicants should e-mail their CV along with a cover letter briefly describing their research accomplishments, current research interests and contact information for three references in one PDF document to Dr. Matthieu Gagnon at [magagnon\[at\]sym\[utmb.edu\]](mailto:magagnon[at]sym[utmb.edu]).

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