



We are hiring!

Interdisciplinary Research Fellow in wound healing

The Zhulyn lab at The Hospital for Sick Children and University of Toronto, is seeking a postdoctoral fellow interested in comparative genomics and tissue regeneration.

Project: The axolotl is a species of aquatic salamander that readily regenerates damaged organs and tissues. Axolotls also show a remarkable ability to scarlessly heal wounds by activating migration of epithelial cells. This migration seals wounds within hours and is preceded by a burst of protein synthesis. Our goal is to apply cutting edge imaging and -omics tools to identify and characterize the role of these newly synthesized proteins in wound healing. Furthermore, by comparing this process to dorsal closure in the fly, we also hope to understand the evolution of shared and species-specific mechanisms of wound healing, as a foundation for developing future therapeutic interventions.

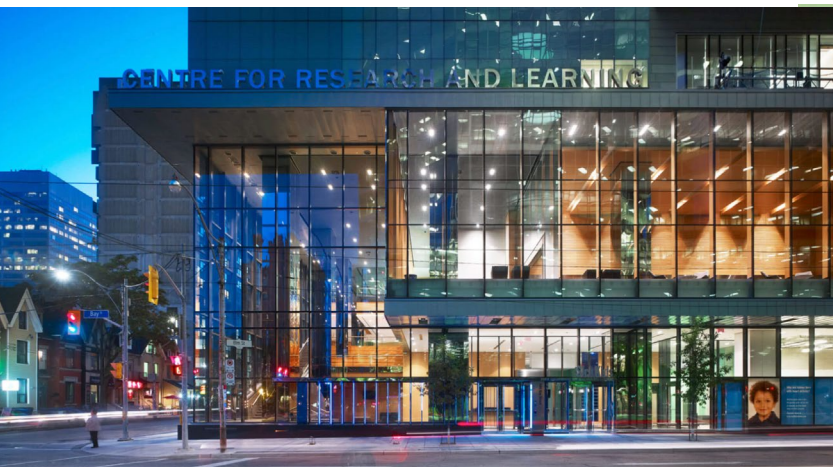
Funding: This project is supported by a Human Frontier Science Foundation Program research grant.

Team: This project is carried out across four partner sites and brings together complementary expertise of each team to address our research goals:

- **Zhulyn lab** (SickKids Research Institute and the University of Toronto, Canada),
key project expertise: axolotl regeneration; mRNA translation
- **Lagha lab** (University of Montpellier, France)
key project expertise: single molecule imaging and quantitation of translation; fly development
- **vanOudenaarden lab** (Hubrecht Institute, Netherlands),
key project expertise: single-cell Ribo-seq
- **Kelleher lab** (Northwestern University, United States),
key project expertise: spatial mass spectrometry

Successful applicants will work closely with an international team of postdocs to support sample preparation, experiment optimization and application. Key tasks will include integration of axolotl single-cell Ribo-seq and proteomics data to identify newly synthesized proteins at the site of wound closure and validating their function in vitro or in vivo, and development and application of novel reporters to assess dynamics of mRNA translation during wound closure.

Please refer to pg. 2 for the requirements.





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What we offer: an opportunity to learn and implement cutting-edge techniques on a fascinating model while working as part of a vibrant international team of faculty mentors and trainees. The Zhulyn lab is located in the Peter Gilgan Centre for Research and Learning (PGCRL) – a 21-storey research tower of the Hospital for Sick Children (the world's leading pediatric hospital). The PGCRL houses more than 2,000 researchers, state-of-the-art core facilities and is situated in the heart of Toronto's Discovery District – a globally ranked biomedical research hub which encompasses the University of Toronto (ranked by Nature in the top 10 global academic institutions for health sciences research) and 14 research hospitals comprising the Toronto Academic Health Science Network, providing a highly collaborative and collegial environment to challenge and develop the next generation of innovators. In addition, successful applicants will have opportunities to travel and work closely with our team members in the United States, Netherlands and France. Preferred start date is fall of 2026. The appointment is for 3 years with possibility of extension depending on funding and performance. Salary is competitive and in accord with SickKids Research Institute standards.

Who we are looking for: we are looking for a curious and collaborative individual with an interest in tissue regeneration, axolotl biology, evo-devo and experience with comparative genomics, to lead this work.

Required qualifications:

- recent Ph.D. in Molecular, Cell or Computational Biology, Genetics, Biophysics or a related field
- proficiency in computational analysis and statistics
- hands-on experience with standard molecular biology techniques
- driven to learn and innovate and work both independently and as part of a team
- at least one first-author publication in a peer-reviewed journal
- fluent in English (native or bilingual proficiency)

Competitive candidates will have experience in one of the following areas:

- high-resolution imaging in live or fixed organisms, cells or tissues
- sample preparation and data analysis for ribosome profiling, mass spectrometry, scRNA-Seq, CHIP-Seq or other common 'omics' approaches
- experience with cell or animal models (particularly, non-standard model organisms)
- experience with data integration or comparative genomics
- experience with *in vitro* or *in vitro* reporter assay design, development and implementation

Qualified applicants are invited to submit a CV and cover letter by **September 1st, 2026** via e-mail to zhulynlab.hiring@sickkids.ca with "HFSP Post doc application" in the subject line.

Please include in your cover letter a brief, point-form summary explaining how your experience and skills match the requirements listed in the job posting.