

Immediately available:
Postdoctoral fellow position in theoretical physics of cell biology
at Toronto Metropolitan University in Toronto Canada

In the near future, I seek to hire a postdoctoral fellow to work on theoretical and computational physics of cell biology, with a PhD in a related field, to join my research group in the Department of Physics at Toronto Metropolitan University (formerly Ryerson University) in Toronto, Canada. Please pass this announcement to any potential candidates.

This funded position will investigate the nonequilibrium physics controlling the spatial organization of proteins within organelles. This includes exploring the targeting of proteins to organelles overall and to specific sites within organelles, as well as describing the impact of organelle dynamics on the spatial organization of proteins. The position, available immediately, is for an initial appointment of 1 year, with extension to 2 years.

The research group focuses on understanding the physical limits and mechanisms for processes inside living cells. In particular, we focus on how spatial organization and signaling behavior in cell biology are controlled by nonequilibrium conditions and cellular geometry. Our work combines quantitative modeling of cell biology with simulations and analytical theory, as well as close collaboration with experimental researchers. The research group is one of several in the area of Complex Systems in the Department of Physics. More information about the research group is available on the [group website](#).

The ideal candidate will have experience in scientific programming, quantitative modeling of biological systems, and statistical mechanics. The ideal candidate will also have strong communication skills, an appetite for interdisciplinary research, and a drive to push on challenging problems. It is essential that the candidate have a strong interest in theoretical physics and cell biology.

Toronto Metropolitan University is located in downtown Toronto, Canada. Toronto is a multicultural city (2021 population of 2.8 million) on the north shore of Lake Ontario. Toronto offers many cultural, research, and professional opportunities.

Interested candidates should contact Aidan Brown at aidan.brown@ryerson.ca with a CV (including publication list), cover letter summarizing how your expertise and interests fit with this project, and contact information for 2 to 3 references. Applications are particularly encouraged from groups that have been historically disadvantaged and marginalized, including First Nations, Metis and Inuit peoples, Indigenous peoples of North America, racialized persons, persons with disabilities, and those who identify as women and/or 2SLGBTQ+.