Posting Date: November 25, 2025

DEPARTMENT OF PHYSICS University of Toronto JOB POSTING – POSTDOCTORAL FELLOW

Area of Research: Theoretical Biophysics

Description of position: The postdoctoral fellow will work in the <u>Statistical Biophysics group</u> lead by Prof. David Hathcock, with opportunities to collaborate with other <u>Biological Physics groups</u> in the department. Topics of interest include (but are not limited to):

- Modeling cellular signaling and adaptation
- Analysis of nonequilibrium collective dynamics and phase transitions, including development of nonequilibrium field theories and tensor networks algorithms
- Stochastic models of gene expression, noise, correlations, and heterogeneity
- Inference of dynamics and irreversibility from experimental data
- Characterizing stationary distributions, correlations, and first passage statistics in quasi-birth-death processes

Salary: CAD \$60,000-70,000. Determined based on research experience.

Qualifications: Applicants must have a Ph.D. in Theoretical Physics, Applied Mathematics, Systems Biology, or related area by the start of the appointment. Competitive applicants will have a strong track record of published research in statistical physics and/or biological physics. Candidates with both analytical and computational expertise are preferred.

Application instructions: Qualified candidates should submit a CV and a brief cover letter describing research experience and interests to david.hathcock@utoronto.ca. Please also arrange for two letters of recommendation to be sent to this address.

Closing Date: Apply by January 15, 2026 for full consideration. Applications will continue to be reviewed thereafter until the position is filled.

Supervisor: David Hathcock

Expected Start Date: August 1, 2026, flexible.

Term: 2 years, with possibility of extension for an additional 1-2 years.

FTE: The normal hours of work are 40 hours per week for a full-time postdoctoral fellow recognizing that the needs of the employee's research and professional development and the needs of the supervisor's research program may require flexibility in the performance of the employee's duties and hours of work.

Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement.

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The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ2S+ persons, and others who may contribute to the further diversification of ideas.