



BiophysTO Lunchtime Seminar Series

Date

**Thursday, Oct 8 2020
12:00 – 1:00 pm**

Dr. Sidhartha Goyal

Department of Physics, University of Toronto

Beyond the *yin* and *yang* of cell competition in mammals

Cell competition, the sensing and elimination of less fit 'loser' cells by 'winner' cells, is an old concept that has resurged because of development of new experimental tools to track fate of individual cells. Competitive dynamics among cells on the one hand can drive cancer progression and on the other sculpt developing organs. I will describe how computational ideas from physics allows us to go beyond the simple binary of winner and loser cells, focussing on two examples. In the first, I will present a model for blood regeneration, which allows us to understand 1000-fold variation in contribution from individual blood stem cells. The second example shows how cell competition during reprogramming gives rise to dominant clones.

Host: Wilson Zeng

Zoom Link:

<https://us02web.zoom.us/j/82372694826?pwd=aXBhVnhNL3VOaFlrTGntZGFCa2hvQT09>



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