

Day 2 Elevator Talks (Moderator: Germain Collinge)

15:20 Michelle Su (Parins-Fukuchi Lab)
Meredith Omer (Rochman Lab)
Noam Harris (Kotanen Lab)
Nehal Naik (Johnson Lab)
Katie Maunder (Stinchcombe Lab)
Aidan Godin (Claramunt Lab)
Shelley Wang (Baines/Fortin Lab)
Valmic Mukund (Frederickson Lab)

15:40 Break

Keynote: Atwood Memorial Lecture

(Moderator: Mete Yuksel)

16:00 **Dr. Mercedes Pascual**
Hyper-diversity, frequency-dependent selection and tipping points in a host-pathogen system

17:20 Closing remarks

18:30 Graduate Student Appreciation Night at Faculty Club

Dr. Carl Atwood was a respected forest entomologist, ecologist, and naturalist, who taught at the University of Toronto from 1946 to 1972. Each year, the EEB graduate students select a scientist of high distinction whose work embodies Dr. Atwood's dedication to the ecological sciences to give a lecture in his honour. This lecture series is made possible by a generous endowment from the Atwood family.

The 2024 Atwood Colloquium in Ecology & Evolution was organized by:

Celina Baines, Tomomi Parins-Fukuchi, Gavia Lertzman-Lepofsky, Tolulope Babalola, Mete Yuksel, Irtaqa Arif, Louisa Bartkovich, Hannah Bodmer, Alan Bui, Germain Collinge, Maia Dall'Acqua, Sherry Du, Tom Dudgeon, Noam Harris, Rob Hechler, Arthur Leung, Michelle Liu, Vivien Luu, Esme Macpherson, Katie Maunder, Chloe Melo-Gavin, Pooja Nathan, Ellen Nikelski, Shegfuta Rahman, Michelle Su, Xiaoshuo Tang, Gloria Wang, Gihyun Yoo, Vicki Zhang

Artwork & Design by Youngseo Jeong, Asawari Albal, & HuiMei Yang



2024 ATWOOD

Colloquium in Ecology & Evolution



Wed. April 24 &
Thurs. April 25
Koffler House
University of Toronto

Keynote:
Mercedes Pascual

Rising Star in Evolution:
Luis Zaman

Rising Star in Ecology:
Lauren Shoemaker

Wednesday, April 24

- 13:00** **Opening remarks**
Celina Baines & Tomomi Parins-Fukuchi
- Day 1 Session 1 Talks (Moderator: Tom Dudgeon)**
- 13:10** **Chloe Melo-Gavin (Agrawal Lab)**
The Genomics of Intralocus Sexual Conflict
- 13:30** **Chris Carlson (Osmond Lab)**
Genotype-by-environment interactions maintain variation in mutualisms
- 13:50** **Ellen Nikelski (Weir Lab)**
Understanding genomic signals of mitonuclear coevolution: A case study in the *Pipra* manakin system
- 14:10** **Dr. Wilson Ramirez-Duarte (Rochman Lab)**
Are pollutants breaking reproductive barriers and facilitating fish hybridization? A toxicological perspective
- 14:30** **Louisa Barkovich (Bontrager Lab)**
Assessing the influence of local climatic conditions on flowering strategies in the wildflower *Clarkia pulchella*
- 14:50** **Break**
- Day 1 Session 2 Talks (Moderator: Michelle Su)**
- 15:05** **John English (McIvor Lab)**
24-hour microclimate conditions and their effects on the pollination community
- 15:25** **Dr. Mathieu Videlier (Sztepanacz Lab)**
The effect of asymmetry in cross-sex genetic covariances on the evolution of sexual dimorphism
- 15:45** **Anika Tan (Lujan Lab)**
Do anatomical linkages influence skull diversification in a hyperdiverse clade of Amazonian armored catfishes, plecos, and candirus?
- 16:05** **Eniolaye Balogun (Ness Lab)**
The effects of *de novo* mutation on gene expression and the consequences for fitness in *Chlamydomonas reinhardtii*
- Day 1 Elevator Talks (Moderator: Katie Maunder)**
- 16:25** **Thomas Wildeboer (Sztepanacz Lab)**
Eric McHugh (Bontrager Lab)
Nicole Gutierrez-Ramos (Molnar Lab)
Irtaqa Arif (Ness Lab)
Anthony Rajkumar (Chang/Lovejoy Lab)
Jessica Cho-Ah-Ying (Wang Lab)
Germain Collinge (Fortin Lab)
Kieran Guimond (Riskin Lab)
- 16:45** **Break**

Keynote: Rising Star in Ecology

- 17:00** **Dr. Lauren Shoemaker**
Ecological communities in transition: Testing theory in global change and restoration contexts

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- 18:30** **Pub Night Social at the Madison Avenue Pub (14 Madison Ave)**

Thursday, April 25

- 8:30** **Breakfast**
- Day 2 Session 3 Talks (Moderator: Hannah Bodmer)**
- 9:00** **Dr. Kara Layton**
Phylogenomic tools enable a deeper understanding of nudibranch evolution
- 9:20** **Ella Martin (Johnson Lab)**
Urban socioeconomic variation influences the ecology and evolution of trophic interactions
- 9:40** **HuiMei Yang (Wang Lab)**
Investigation on genome size variation in Harpellales
- 10:00** **Arthur Leung (Sage Lab)**
CO2 effects on leaf anatomy in plant species differing in photosynthetic pathway
- 10:20** **Jessie Wang (Frederickson Lab)**
Host feedbacks shape community assembly in the plant microbiome
- 10:40** **Maia Dall'Acqua (Cutter Lab)**
Turning back time: constructing a "Speciation Clock" for *Caenorhabditis* nematodes
- 11:00** **Break**

Keynote: Rising Star in Evolution

- 11:20** **Dr. Luis Zaman**
Complexity, creativity, and a case for unnatural histories

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- 12:30** **Lunch**

Day 2 Session 4 Talks (Moderator: Tom Dudgeon)

- 13:40** **Elise Bull (Dillon Lab)**
Pan-GWAS identifies a mobile genetic element associated with convergent evolution of virulence in *Xanthomonas campestris*
- 14:00** **Bianca Sacchi (Wright Lab)**
Y chromosome degeneration at different timescales: gene loss, rearrangement, and expression changes in *Rumex hastatulus*
- 14:20** **Youngseo Jeong (Mideo Lab)**
Investigating the mechanisms behind vaccine-driven virulence evolution of malaria parasites
- 14:40** **Dr. Kuangyi Xu**
When does stronger selection increase or reduce the probability of evolutionary rescue?
- 15:00** **Chris Brimacombe (Fortin Lab)**
On the nature of structure in collections of freely available food webs