ACADIA UNIVERSITY
COMPUTER SCIENCE

Advancing Fruit Breeding using Computational Tools

Talk by **Zoë Migicovsky**
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Date: Wednesday, November 6th
Time: 2:30-3:30pm
Location: CAR113

Abstract: Fruit flavour, nutritional value, shape, color, and ripening time are critical targets for fruit breeders. However, breeding new perennial fruit crops like apples and strawberries is a slow and costly process. This talk will explore the use of computational tools to measure these traits and link them to genetic data through genetic mapping. By identifying genetic markers associated with fruit quality traits, we aim to enhance the efficiency of fruit breeding. Ultimately, genomics-assisted plant breeding will allow fruit breeders to select plants with desirable traits before fruit is produced.

Short Bio: Dr. Zoë Migicovsky (she/her) is an Assistant Professor in Biology and Canada Research Chair (Tier II) in Agri-Food and Sustainable Agriculture at Acadia University. She draws on a decade of experience with perennial fruit crops to study variation in plant diversity at both a trait and genomic level. Of particular interest are consumer perception related traits such as fruit quality and appearance. Her research program is at the intersection of data analytics and plant agriculture, using computational tools to advance breeding and conservation of perennial fruit species.