



The Biodiversity Seminar Series is pleased to announce

Dr. Stefaniya Kamenova

from the Integrative Biology department at the University of Guelph
presenting the talk

“High-throughput molecular methods for studying trophic interactions”

Abstract:

Quantitative food webs provide a powerful framework for understanding and sustainably managing fundamental ecological functions. However, drawing a comprehensive picture of trophic interactions in real food webs is challenging because of (i) their inherent complexity; (ii) our limited capacity to empirically quantify trophic interactions. DNA-based methods such as barcoding and metabarcoding are already revolutionizing our capacity to deal with biological complexity and offer a promising and powerful framework for studying complex species interactions. Using species-rich communities of insect generalist predators as a model, I will present the set of molecular methods I developed during the last three years. I will discuss their usefulness for quantifying direct trophic interactions and impacts on ecosystem services as well as their potential as diagnostic tools for informed, data-driven pest management. Furthermore, I will discuss the relative advantages and pitfalls associated with molecular diet analysis and will provide practical guidelines and perspectives for future developments.

Brief Bio:

Stefaniya is a molecular ecologist developing high-throughput sequencing methods for studying trophic interactions. She is currently working on host-parasitoid food webs in boreal forests using a DNA metabarcoding approach as a postdoc at the IB department. She completed her PhD at the National Center for Scientific Research in France where she developed several methods for characterizing the diet of predatory insects.

When: Thursday November 3rd 2016 at 12:00 pm

Where: Visualization Theatre, Room 1009
Biodiversity Institute of Ontario

For scheduling and more information on the seminars, please visit:

<http://biodiversitygenomics.net/resources/seminar-series/>

