Kate Crosby

Contact Information
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Education

2009 - 2014, PhD Biology - Ecological Genetics
Dalhousie University, Halifax, Nova Scotia, Canada
Advisor: Dr. Robert G. Latta

2004 - 2006, MSc Integrative Biology - Zoology
University of Guelph, Guelph, Ontario, Canada
Advisor: Dr. Jinzhong Fu

1999 - 2003, BSc Honors, Environmental Science & Biology
Queen's University, Kingston Ontario, Canada

Work Experience

Nov. 2014 - present
Postdoctoral Fellow, Ross-Ibarra Lab, Department of Plant Sciences, University of California, Davis, California

June 2013 - June 2014
Data Manager (Part-time), Canadian Healthy Oceans Network (CHONe), Dalhousie University & Memorial University.

January 2013 - May 2013
Sessional faculty member, Department of Biology, Saint Maryś University, Halifax, Nova Scotia, Canada, course taught: Advanced Biostatistics

January 2007 - May 2008
Research Technician, International Barcode of Life Initiative (iBOL), Biodiversity Institute of Ontario (Guelph, ON)

Peer-reviewed Publications

Crosby K, Stokes TO, Latta RG. Evolving California ecotypes of Avena barbata are derived from multiple introductions that show spatial mixing, but still substantial clinal structure. PeerJ, Vol 2 e633 [pdf - Open Access] [url]

Crosby K, Latta RG. 2013. A test of the reproductive economy hypothesis in plants: more offspring per capita come from large (not small) parents in Avena barbata. *Evolutionary Ecology* 27: 193-203 [pdf][4 citations]

Crosby K, Smith DR. 2012. Does the mode of plastid genome inheritance influence plastid genome architecture? *PLoS ONE*, 7(5) e46260 [url - Open Access] [4 citations]

Smith A, Bertrand C, **Crosby K**, Eveleigh, E., Fernandez-Triana, J., Fisher, B., Gibbs, J., Hajibabaei, M., Hallwachs, W., Hebert, P., Hind, K., Hrcek, J., Huang, D-W., Janda, M., Janzen, D., Li, Y., Longino, J., Miller, S., Packer, L., Quicke, D., Ratnasingham, S., Rodriguez, J., Rougerie, R., Shaw, M., Sheffield, C., Stahlhut, J., Stienke, D., Whitfield, J., Wood, M., Zhou, X. 2012. Wolbachia & DNA Barcoding Insects: Patterns, Potential, & Problems. *PLoS ONE*, 7(5) e36514 [url - Open Accesss][33 citations]

Mora C, Treml EA, Roberts J, **Crosby K**, Roy D, Tittenor DP. 2012 High connectivity among habitats precludes the relationships between dispersal & range size in tropical reef fishes. *Ecography*, 35: 89-96 [pdf][43 citations]

Smith DR, **Crosby K**, Lee RW. 2011. Correlation between Nuclear Plastid DNA Abundance & Plastid Number Supports the Limited Transfer Window Hypothesis. *Genome Biology and Evolution*, 3:365-371 [url - Open Access] [32 citations]

Bi K, Deng D, **Crosby K**, Fu J. 2010. Characterization of microsatellite DNA markers in the Emei moustache toads (Leptobrachium boringii). *Conservation Genetics*, 11: 1135-1137 [3 citations]

Crosby K, Licht LE, Fu J. 2009. The effect of habitat fragmentation on finescale population structure of wood frogs (Rana sylvatica). *Conservation Genetics*, 10:1707-1718 [pdf] [27 citations]

Conference presentations & invited seminars

Phylogeography & contemporary evolution of *Avena barbata* in California. Invited Seminar, Plant Sciences, UC Davis, 12/2014.

CHONe's data management notes. Invited talk, Department of Fisheries & Oceans Canada, Bedford Institute of Oceanography, Halifax, Nova Scotia, Canada, 06/2014 & St. Andrews Biological Station 03/2014.

Different mixtures of maternal haplotypes within populations in California demonstrate more polymorphism than expected in *Avena barbata*. Talk at First Joint Congress on Evolutionary Biology, Ottawa, ON 07/2012.

Phylogeography & colonization history of the invasive Mediterranean annual grass Avena barbata in California. Oral presentation at the Meeting of the Society for the Study of Evolution (SSE), Norman, Oklahoma, 06/2011.

Different landscape features & spatial distance do not limit gene flow between populations of wood frogs. Oral presentation at the Meeting of the Society for the Study of Evolution (SSE), SUNY Stonybrook, 06/2006.

Incorporating population genetics with ecological modeling: methods for obtaining resistance values in suburban populations of wood frogs. Oral presentation at the Midwest Ecology & Evolution Conference, Carbondale, Illinois, USA, 03/2005.

Other Teaching Experience

Dalhousie University (Halifax, NS) Department of Biology Teaching assistant & lecturer (4 lectures) Fall semesters 2010 & 2011 Course: Analysis of Biological Data BIOL 4062/5062

Laboratory Teaching Assistant (65 hrs/semester) Full academic year (2008-09, 2009-10) Course: Evolution 2nd-year undergraduate course, lab TA

University of Guelph (Guelph, ON) Department of Integrative Biology Teaching Assistant for the following courses (laboratory & lecture components):Humans in the Natural World (Fall 2004, Winter 2005, Fall 2006), Conservation Biology (Winter 2006), Ecological Lab & Field Methods (Fall 2005), Mammalogy (Winter 2005)

Awards

Dalhousie University Graduate Scholarship (2008 - 2013, $19,000 CDN/year)
University of Guelph Graduate Scholarship (2004 - 2006, $17,000 CDN/year)
University of Guelph tuition waiver (2004, $2,000 CDN)
Young Professionals International placement at the University of Genoa (2003 - 2004, $11,000 CDN)

Other Skills / Volunteerting

Programming languages

- R, intermediate / advanced
- SQL, intermediate
- CYPHER query language
- Python
- Unix & Bash
- Julia (beginner)

Languages spoken

- English, native speaker
- French, fluent
- German, intermediate
- Italian, intermediate

Professional Societies:

- Society for the Study of Evolution
- Canadian Society of Ecology & Evolution
- Canadian Botanical Association

Reviewer for:

- Molecular Ecology (2)
- G3: Genes, Genomes, Genetics (1)
- BMC Evolutionary Biology (1)
- Annals of Botany Plants (1)

References

Dr. Jeffrey Ross-Ibarra, Associate Professor, Dept. of Plant Sciences,
University of California, Davis, California, USA, **email:** rossibarra@ucdavis.edu

Dr. Robert G. Latta, Associate Professor, Dept. of Biology, Dalhousie University, Halifax, Nova Scotia, Canada, **email:** robert.latta@dal.ca

Dr. David R. Smith, Assistant Professor, Dept. of Biology, University of Western Ontario, London, Ontario, Canada, **email:** dsmit242@uwo.ca

Dr. Jinzhong Fu, Associate Professor, Dept. of Integrative Biology, University of Guelph, Guelph, Ontario, Canada, **email:** jfu@uoguelph.ca