

Curriculum Vitae

**NICOLE LARA BEDFORD**

Department of Organismic and Evolutionary Biology  
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**EDUCATION**

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- 2012- Present Ph.D. Organismic and Evolutionary Biology, Harvard University  
Advisor: Dr. Hopi Hoekstra
- 2006-2010 B.Sc. Hon. Marine Biology, University of British Columbia, Vancouver  
Advisor: Dr. Dolph Schluter

**RESEARCH**

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- 2011 Research Assistant/Technician, Supervisor: Dr. Dolph Schluter, Dr. Katie Peichel  
University of British Columbia, Vancouver  
The genetic architecture of mate choice in threespine stickleback (QTL mapping study)
- 2010-2011 Guppy Project Field Intern, Supervisor: Dr. David Reznick, Dr. López-Sepulcre  
University of California, Riverside  
From genes to ecosystems: How do ecological and evolutionary processes interact in nature?  
(Trinidadian guppy mark-recapture study)
- 2008-2009 Undergraduate Honours Thesis, Supervisor: Dr. Dolph Schluter  
University of British Columbia, Vancouver  
Investigating a potential mechanism for ecological speciation: the effects of genes and morphology on the feeding behaviour of an F<sub>2</sub> hybrid stickleback population
- 2009 NSERC Summer Student, Supervisor: Dr. Matthew Arnegard, Dr. Dolph Schluter  
University of British Columbia, Vancouver  
1) The genetic basis of mate choice, and 2) Parallel morphological evolution in the threespine stickleback *Gasterosteus aculeatus*
- 2009 Independent Projects in Marine Ecology, Supervisor: Dr. Christopher Harley  
University of British Columbia, Vancouver  
1) Fluctuating asymmetry and sexual size dimorphism along a salinity gradient in the shore crab *Hemigrapsus oregonensis*, and 2) The effects of temperature and salinity on growth rate of the castrating parasite *Orchitophrya stellarum*
- 2008 NSERC Summer Student, Supervisor: Dr. Rowan Barrett, Dr. Dolph Schluter  
University of British Columbia, Vancouver  
Is the *Ectodysplasin (Eda)* locus associated with salinity preference in the threespine stickleback?
- 2007 Directed Studies Project, Supervisor: Dr. Carolyn Bergstrom  
Bamfield Marine Sciences Centre  
Male mate choice and female competition in the bay pipefish *Syngnathus leptorhynchus*

## OUTREACH

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- 2013-Present Citizen Schools Volunteer Teacher, Boston Public Schools
- 2006-2009 Volunteer Executive Member, UBC Synchronized Swim Club  
Club treasurer for two years, club fund-raising coordinator for one year
- 2006-2009 Volunteer Public Education Instructor, Vancouver Aquarium  
Teaching marine invertebrates class to high-school students, hands-on marine biology program to French immersion students in kindergarten through grade four
- 2005-2006 Volunteer Conservation Ambassador, Calgary Zoo  
Discussing stewardship and conservation initiatives with visitors to the Calgary Zoo

## ACADEMIC AWARDS

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- 2012 James Mills Pierce Fellowship, Harvard University
- 2012 NSERC Postgraduate Scholarship, Harvard University
- 2009 NSERC Undergraduate Student Research Award
- 2008 NSERC Undergraduate Student Research Award
- 2008 Mary and Joseph Bryant Scholarship, University of British Columbia
- 2007 Western Canadian Universities Marine Sciences Society Scholarship
- 2006 University of British Columbia President's Entrance Scholarship
- 2006 Louise McKinney Scholarship, Mount Royal College
- 2005 Mount Royal College Entrance Scholarship

## PRESENTATIONS

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- 2009 Rising Stars of Research: National Undergraduate Science and Engineering Research Poster Competition (sponsored presenter)  
*A genetic basis for feeding behaviour in the threespine stickleback species pair*  
Honourable Mention: Outstanding Poster in Evolutionary Biology
- 2009 30<sup>th</sup> Annual Pacific Ecology and Evolution Conference  
*Trophic morphology and habitat preference explain stable isotope signatures in the threespine stickleback species pair*  
Honourable Mention: Best Undergraduate Talk
- 2007 Bamfield Marine Sciences Centre Directed Studies Symposium  
*Male mate choice and female competition in the bay pipefish *Syngnathus leptorhynchus**

## PUBLICATIONS

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- Arnegard, M.E., McGee, M.D., Matthews, B.W., Marchinko, K.B., Conte, G.L., Kabir, S., Bedford, N., Bergek, S., Jones, F.C., Chan, Y.F., Kingsley, D.M., Peichel, C.L., Schluter, D.  
2013. Genetics of ecologically-based reproductive isolation. *In Prep.*

## **CONFERENCES**

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- 2010 Evolution 2010, Portland OR  
2009 Pacific Ecology and Evolution Conference, Bamfield BC  
2008 Canadian Society for Ecology and Evolution, Vancouver BC

## **AFFILIATIONS**

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Society for the Study of Evolution

## **REFERENCES**

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Dr. Hopi Hoekstra, Harvard University, Cambridge MA  
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Dr. Dolph Schluter, University of British Columbia, Vancouver BC  
schluter@zoology.ubc.ca

Dr. David Reznick, University of California, Riverside CA  
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