

Jeffrey M. DaCosta, Ph.D.

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EDUCATION

- 2014 Ph.D. Biology
Department of Biology, Boston University, Boston, MA
Academic Advisor: Dr. Michael Sorenson
- 2006 M.Sc. Biology
School of Life Sciences, University of Nevada, Las Vegas, NV
Academic advisors: Dr. John Klicka and Dr. Brett Riddle
- 1998 B.S. Biology
Department of Biology, University of Massachusetts, Amherst, MA

PROFESSIONAL APPOINTMENTS

- 2014-Present Post-doctoral Fellow
Dept. Organismic and Evolutionary Biol., Harvard University, Cambridge, MA
Comparative genomics of a species radiation: sequencing the apple tribe
- 2004-Present Research Equipment Program Chair and Board Member
Neotropical Grassland Conservancy
NGO dedicated to the conservation of Neotropical grasslands
- 2007-2014 Research and Teaching Fellow
Department of Biology, Boston University, Boston, MA
- 2005-2006 Research Technician
School of Life Sciences, University of Nevada, Las Vegas, NV
Surveys of flammulated owls (*Otus flammeolus*) in Nevada
- 2003-2006 Research and Teaching Assistant
School of Life Sciences, University of Nevada, Las Vegas, NV
- 2000-2003 R&D Specialist I
Transkaryotic Therapies, Cambridge, MA
Pre-clinical research using a knockout mouse model
- 1999-2000 Field Assistant
Dept. of Ecology and Evolutionary Biol., Cornell University, Ithaca, NY
Worked for PhD candidates in David Winkler's lab at Cornell
- 1998 Intern
US Department of Agriculture, Mapleton, OR
Population monitoring of the northern spotted owl (*Strix occidentalis*)

PUBLICATIONS

- Yant L, Arnold B, Lahner B, **DaCosta JM**, Weisman CM, Hollister JD, Salt DE, and Bomblies K. *Submitted*. Borrowed alleles and convergence: serpentine adaptation in the face of inter- and intraspecific gene flow. Proceedings of the National Academy of Sciences – USA.
- Peters JL, Lavretsky P, **DaCosta JM**, Bielefeld RR, Feddersen JC, Sorenson MD. *Submitted*. Population genomic data delineate conservation units in mottled ducks (*Anas fulvigula*). Biological Conservation.
- DaCosta JM** and Sorenson MD. 2016. ddRAD-seq phylogenetics based on nucleotide, indel, and presence-absence polymorphisms: analyses of two avian genera with contrasting histories. Molecular Phylogenetics and Evolution. 94: 122-135.
- Lavretsky P, **DaCosta JM**, Hernández-Baños B, Engilis A, Sorenson MD, and Peters J. 2015. Speciation genomics and a role for the Z chromosome in the early stages of divergence between Mexican ducks and mallards. Molecular Ecology. 24: 5364–5378.
- Ebel E, **DaCosta JM**, Sorenson MD, Hill R, Briscoe A, Willmott K, and Mullen S. 2015. Rapid diversification associated with ecological specialization in Neotropical *Adelpha* butterflies. Molecular Ecology. 24: 2392-2405.
- DaCosta JM** and Sorenson MD. 2014. Amplification biases and consistent recovery of loci in a double-digest RAD-seq protocol. PLoS One. 9: e106713.
- DaCosta JM** and Sorenson MD. 2014. An experimental test of host song mimicry as a species recognition cue among male brood parasitic indigobirds (*Vidua* spp.). Auk: Ornithological Advances. 131: 549-558.
- Sorenson MD and **DaCosta JM**. 2011. Genotyping HapSTR loci: phase determination from direct sequencing of PCR products. Molecular Ecology Resources. 11: 1068-1075.
- DaCosta JM**, Spellman GM, Escalante P, and Klicka J. 2009. A molecular systematic revision of two historically problematic songbird clades: *Aimiphila* and *Pipilo*. Journal of Avian Biology. 40: 206-216.
- DaCosta JM**, Wehtje W, and Klicka J. 2008. Historic genetic structure and paraphyly within the Great-tailed Grackles. Condor. 110: 170-177.
- DaCosta JM** and Klicka J. 2008. The Great American Interchange in birds: a phylogenetic perspective with the genus *Trogon*. Molecular Ecology. 17:1328-1343.
- DaCosta JM**, Spellman GM, and Klicka J. 2007. Bilateral gynandromorphy in a White-ruffed Manakin (*Corapipo altera*). Wilson Journal of Ornithology. 119:289-291.
- Garcia AR, **DaCosta JM**, Pan J, Muenzer J, and Lamsa JC. 2007. Preclinical dose ranging studies for enzyme replacement therapy with idursulfase in a knock-out mouse model of MPS II. Molecular Genetics and Metabolism. 91:183-190.
- Muenzer J, Lamsa JC, Garcia AR, **DaCosta JM**, Garcia J, and Treco DA. 2002. Enzyme Replacement therapy in mucopolysaccharidosis type II (Hunter syndrome): a preliminary report. Acta Paediatrica Supplement. 91:98-99.

TEACHING EXPERIENCE

- 2015 Lecturer
College of General Studies, Boston University, Boston, MA
CGS NS201: Biology 1
- 2014 Lecturer (course designer)
Experimental College, Tufts University, Medford, MA
EXP-0032-F: Renewable Energy: The Ecological Impacts
- 2007-2013 Teaching Fellow and Guest Lecturer*
Department of Biology, Boston University, Boston, MA
CAS BI 302: Vertebrate Zoology
CAS BI 303: Evolutionary Ecology*
CAS BI 407: Animal Behavior
CAS BI 508: Behavioral Ecology*
ZOOL 733: Behavioral Ecology* (University of New Hampshire)
- 2003-2005 Teaching Assistant
School of Life Sciences University of Nevada Las Vegas, Las Vegas, NV
BIOL 189: Fundamentals of Life Science

GRANTS AND AWARDS

- 2013: 1st Place (poster): BU Biology Graduate Student Association student symposium.
- 2011: Boston University Department of Biology Outstanding Teaching Fellow.
- 2010: NSF DDIG – RAD phylogenetics: harnessing next-generation sequencing for molecular systematics (\$13,223).
- 2008: American Museum of Natural History Chapman Memorial Grant (\$2,100).
- 2005: UNLV Graduate Research Assistantship Training Grant (\$3,600).
- 2005: 1st Place (oral): UNLV Graduate and Professional Student Organization research forum.
- 2004-2006: UNLV Graduate and Professional Student Association grant (x4) (\$2,250).

PRESENTATIONS & WORKSHOPS

Invited Speaker:

- 2014: University of Massachusetts Lowell, Lowell, MA.
- 2013: Louisiana State University Museum of Natural History, Baton Rouge, LA.
- 2013: Wright State University, Dayton, OH.
- 2012: American Museum of Natural History, New York, NY.
- 2009: University of Dar es Salaam & Houghton College (Tanzania campus), Tanzania.
- 2008: Colby College, Waterville, ME.

Professional Meetings:

- 2014: Evolution, Raleigh, NC.
- 2012: North American Ornithological Conference, Vancouver, BC.

2009: American Ornithologists' Union, Philadelphia, PA.
2009: Society of Integrative and Comparative Biology, Boston, MA.
2008: Evolution, Minnesota, MN.
2005: American Ornithologists' Union, Santa Barbara, CA.

Professional Workshops:

2011: Evolutionary Genomics of Non-Model Species: Next Generation Sequencing, Data Management, and Hypothesis Testing. – American Genetics Association, Irapuato, Mexico.
2010: Genetics and Genomics of Speciation. – EU Marie Curie Initial Training Network, Speciation, Sheffield, Great Britain.

SERVICE AND COMMUNITY OUTREACH

Grant Reviewer: National Science Foundation, Portuguese Foundation of Science and Technology.

Journal Reviewer: African Journal of Ecology, Auk: Ornithological Advances, BMC Evolutionary Biology, Evolution, Journal of Biogeography, Molecular Ecology, Molecular Phylogenetics and Systematics, PeerJ, Wilson Journal of Ornithology.

Guest Lecturer: Boston University GK-12 program, 5th grade, Pierce School, Brookline, MA.

Volunteer Scientist: Hunkle Elementary School ScienceFest; Biology Inquiry and Outreach with Boston University Graduate Students (BIOBUGS).

Judge: The English High School Science Fair.