

Department of Biology
University of Oklahoma
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Department of Ornithology
Sam Noble Museum
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Norman, OK, 73072, USA

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EDUCATION:

Ph.D., Ecology and Evolutionary Biology
University of Oklahoma (OU); Norman, OK
PI: Matthew J. Miller

Aug. 2016 – Present

M.S., Biological Sciences
Wright State University (WSU); Dayton, OH
PI: Jeffrey L. Peters

May 2014 – Jul. 2016

B. A., Zoology & Latin American Studies
Miami University (MU); Oxford, OH
PI: Richard C. Moore

Aug. 2009 – May 2014

RESEARCH EXPERIENCE:

Sam Noble Oklahoma Museum of Natural History (Norman, OK)
Dissertation title: *To be Determined*.

Aug. 2016 – present

Using next generation sequencing to ask questions associated with genomics of hybridization and speciation in the *Melanerpes* woodpecker complex. **Developing skills** in population genomics, **museum ornithology**, **avian field collection**, **avian tissue collection**, and **avian study skin preparation** for housing at the Sam Noble Oklahoma Museum of Natural History.

Wright State University (Dayton, OH)

May. 2014 – Jul. 2016

Thesis title: *Genomic signatures of population history in a pair of recently diverged Australian teal support strong selection on the Z- sex chromosome*.

Used next generation sequencing (ddRAD-seq) to generate >3,000 loci to scan across the Australian Teal genome for evidence of selection and gene flow. **Developed skills** in **next generation sequencing library preparation**, computer scripting (**Python, R, and Perl** for the purpose of large data manipulation) and **advanced bioinformatics**.

Miami University (Oxford, OH)

Dec. 2009 – Jun. 2013

Undergraduate research project: *The role of selection in Carica papaya genomic evolution*.

SNP genotyped autosomal loci and determined levels of divergence and signatures of selection in target loci along the pseudoautosomal boundary in *Carica papaya*. **Developed basic bench skills** associated with DNA sequencing. Also **developed basic skills in bioinformatics**.

The Jackson Laboratory (Bar Harbor, ME)

Jun. 2008 – Aug. 2008

Project title: *microRNA expression patterns in mouse lung development and cancer*.

Analyzed microRNA expression datasets. **Developed basic skills in data analysis**, and basic computer scripting (e.g., **Matlab**).

PEER – REVIEWED PUBLICATIONS:

Lappin F, Medart M, **Hawkins KK**, Moore RC. 2015 A polymorphic pseudoautosomal boundary in the *Carica papaya* sex chromosomes. ***Molecular Genetics and Genomics***, DOI: 10.1007/s00438-015-1000.

GRANTS, FELLOWSHIPS AND AWARDS:

American Ornithologist's Union Student Travel Award (\$400)	2015
Student Science Education Award, Ohio Avian Research Conference	2014
Summer Hughes Fellowship, MU (\$3,750 Stipend + Research)	2012
Undergraduate Summer Scholars, MU (\$3,600 Stipend + Research)	2015
Miami University Middletown Chemistry Department Award	2012
Choose Ohio First Bioinformatics Scholarship (\$9,000 Tuition)	2011-2013
Proctor and Gamble Research Award (\$700 Research)	2010
Undergraduate Research and Mentor Scholarship (\$22,500 Tuition)	2010-2013

TEACHING EXPERIENCE:

Ecology, Evolution and Diversity (OU freshman-level course) <i>Teaching assistant.</i>	Spring 2017
Human Physiology (OU sophomore-level course) <i>Teaching assistant.</i>	Fall 2016
Human Biology Lab (Clark State Community College, non-majors) <i>Adjunct Instructor</i>	Spring 2015
Introduction to Molecular Biology (WSU sophomore-level course) <i>Teaching assistant.</i>	Fall 2014, 2015 & Summer 2015, 2016
Introduction to Cell Biology (WSU sophomore-level course) <i>Teaching assistant.</i>	Spring 2015, 2016
Cell Biology (Miami University sophomore-level course) <i>Undergraduate teaching assistant.</i>	Aug. – Dec. 2010

PRESENTATIONS AT PROFESSIONAL MEETINGS:

Hawkins KK, Lavretsky P, Peters JL. *Selection drives fast sex-chromosome evolution in a pair of monochromatic / dichromatic Australian Teals*. 2016. Midwest Ecology and Evolution Conference, Oxford, OH.

Hawkins KK, Lavretsky P, Nelson JT, Peters, J.L. *Parallel molecular evolution on the Z-chromosome in species of ducks with parallel transition in sexual dichromatism / monochromatism*. 2015. American Ornithologists' Union / Cooper Ornithological Society Meeting, Norman, OK.

Hawkins KK, Lavretsky P, Peters JL. *Limited gene flow between two allopatric populations of mottled duck*. 2014. Ohio Avian Research Conference, Granville, OH.

Hawkins KK, Brown J, McDermott R, Moore RC. *The role of selection in Carica papaya genomic evolution*. Botanical Society of America Conference, 2012. Columbus, OH. *The role of selection in Carica papaya genomic evolution*. Botanical Society of America Conference, 2012. Columbus, OH

Hawkins, K.K., Brown J, McDermott R, Moore RC. *The role of selection in Carica papaya genomic evolution*. 2011. Undergraduate Research Forum, Oxford, OH

SCIENTIFIC PRESENTATIONS AS A COLLABORATOR:

Peters JL, Lavretsky P, **Hawkins KK**, Nelson J. *Speciation with gene flow in Anas ducks*. 2016. North American Ornithological Conference. Washington, D.C.

Moore RC, Brown J, Lappin F, **Hawkins KK**, McDermott R. *Genomic conflict and the evolution of plant sex chromosomes*. Botanical Society of American Conference. 2013. New Orleans, LA.

Lappin F, Brown J, Weingartner L, **Hawkins KK**, McDermott R, Harkess A, Moore RC. *The investigation of selective sweeps within the Carica papaya X chromosome*. Botanical Society of America Conference, 2012. Columbus, OH

Brown J, Lappin F, Weingartner L, **Hawkins KK**, McDermott R, Harkess A, Moore RC. *Expanding our understanding of the evolution of the Carica papaya X and Y chromosomes*. Botanical Society of America Conference, 2012. Columbus, OH

Brown J, **Hawkins KK**, McDermott R, Moore RC. *The relationship between recombination and genomic diversity in Carica papaya*. Botanical Society of America Conference, 2012. Columbus, OH

MUSEUM EXPEDITIONS:

Expedition member:

Lubbock, TX, USA – Oct. 2016

SNOMNH Expedition near Lubbock, TX and Dickens, TX (2 days)

Altus, OK, USA – Aug. 2016

SNOMNH Expedition to Southern Oklahoma near the Red River (2 days)

Kingston, OK, USA – Aug. 2016

SNOMNH Expedition to the Oklahoma Biological Station (2 days)

PROFESSIONAL MEMBERSHIPS:

American Ornithologists' Society	2015
Society for the Study of Evolution	2015
National Council for Undergraduate Research	2011