

Amy L. Dapper

Assistant Professor
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Education & Appointments

Assistant Professor

Department of Biological Sciences, **Mississippi State University**, Mississippi State, MS 39759
2018 - Present.

Postdoctoral Traineeship

Laboratory of Genetics, **University of Wisconsin - Madison**, Madison, WI 53706
Advisor: Dr. Bret Payseur. 2015 - 2018.

PhD

Evolution, Ecology & Behavior (EEB), **Indiana University**, Bloomington, IN 47405
Advisors: Dr. Michael Wade & Dr. Curt Lively. 2009 - 2015.

B.S. Biology

summa cum laude, **The College of William & Mary**, Williamsburg, VA 23185
Advisor: Dr. George Gilchrist. 2004 - 2008.

Training

Genomic Sciences Training Program (GSTP) Postdoctoral Traineeship 2015 - Present

Laboratory of Genetics, University of Wisconsin - Madison, Madison, WI 53706
NIH Training Grant

Common Themes in Reproductive Diversity (CTRD) Predoctoral Traineeship 2010 - 2011

Department of Biology, Indiana University, Bloomington, IN 47405
NIH Training Grant

Research Associate 2008 - 2009

Department of Biology, Indiana University, Bloomington, IN 47405
Advisor: Dr. Ellen Ketterson

Smithsonian Tropical Research Institute (STRI) Internship 2007

Smithsonian Tropical Research Institute, Gamboa, Panama.
Advisor: Dr. Michael Ryan

NSF REU 2006

Biology Department, The College of William & Mary, Williamsburg, VA 23185
Advisor: Dr. George Gilchrist

Fellowships & Awards

The Allied Genetics Conference (TAGC) Travel Award 2016

The Genetics Society of America (GSA)

National Science Foundation (NSF) Postdoctoral Fellowship in Biology 2015

National Plant Genome Initiative (NPGI) - Declined

National Science Foundation (NSF) Graduate Research Fellowship (GRFP) 2010 - 2015**Center for the Integrative Study of Animal Behavior (CISAB) Summer Fellowship 2014**

Indiana University

Provost's Travel Award for Women in Science 2014

Indiana University

Phi Beta Kappa 2007

The College of William & Mary

Bruce Grant Award 2007

Excellence in Undergraduate Research in Evolutionary Biology

The College of William & Mary

Monroe Scholar 2004 - 2008

The College of William & Mary

Publications

Dapper, AL, & BA Payseur (*In Prep*) Molecular Evolution of the Meiotic Recombination Pathway in Mammals.

Dapper, AL, & BA Payseur (2018) Effects of Demographic History on the Detection of Recombination Hotspots from Linkage Disequilibrium. *Molecular Biology and Evolution*. 35(2): 335-353.

Dapper, AL, & BA Payseur (2017) Connecting Theory and Data in Recombination Rate Evolution. *Philosophical Transactions of the Royal Society B*. 372: 20160469.

Drury, DW, **AL Dapper**, DJ Siniard, GE Zentner, and MJ Wade (2017) CRISPR/Cas9 gene drives in genetically variable and non-randomly mating wild populations. *Science Advances* 3(5): e1601910.

Dapper, AL, & MJ Wade (2016) The evolution of sperm competition genes: The effect of mating system on levels of genetic variation within and between species. *Evolution* 70: 502-511.

Suzuki, H, **AL Dapper**, C Jackson, H Lee, V Pejaver, T Doak, M Lynch, and J Preer Jr. (2015) Draft genome sequence of *Caedibacter varicaedens*, a Kappa killer endosymbiont bacterium of the ciliate *Paramecium bicaurelia*. *Genome Announcements* 3(6): e01310-15

Dapper, AL, & CM Lively (2014) Interlocus sexually antagonistic coevolution can create indirect selection for increased recombination. *Evolution* 68: 1216-1224.

Whittaker, DJ, **AL Dapper**, MP Peterson, JW Atwell, & ED Ketterson (2012) Maintenance of MHC Class IIB diversity in a recently established songbird population. *Journal of Avian Biology* 43: 109-108.

Dapper, AL, AT Baugh, & MJ Ryan (2011) The Sounds of Silence as an Alarm Cue in *Túngara* Frogs, *Physalaemus pustulosus*. *Biotropica* 43: 380-385.

Whittaker, DJ, DG Reichard, **AL Dapper**, & ED Ketterson (2009) Behavioral responses of nesting female dark-eyed juncos *Junco hyemalis* to hetero- and conspecific passerine preen oils. *Journal of Avian Biology* 40: 579-583.

Funding

Doctoral Dissertation Improvement Grant (DDIG) 2013-2015

National Science Foundation (NSF)

Monroe Scholar Research Grant 2007

The College of William & Mary

Undergraduate Research Grant 2005-2008

NIH Undergraduate Biological Sciences Education Program

The College of William & Mary

Presentations

2018

Second Joint Conference on Evolutionary Biology (Talk) Evolution of the Recombination Pathway in Mammals. Montpellier, France.

Population, Evolutionary and Quantitative Genetics (PEQG) Conference (Poster) Evolution of the recombination pathway in mammals. Madison, WI.

Evolution Seminar Series (**Invited Seminar**) Evolution of the Recombination Pathway in Mammals. University of Wisconsin - Madison, WI.

Department of Biological Sciences Seminar Series (**Invited Seminar**) The Evolutionary Dynamics of Reproductive Genes. Mississippi State University - Mississippi State, MS.

EEB Seminar Series (**Invited Seminar**) The Evolutionary Dynamics of Reproductive Genes. University of Arizona - Tucson, AZ.

2017

Evolution 2017 (Talk) Demography influences the detection of recombination hotspots. Portland, OR.

Genomic Sciences Seminar Series (Talk) Molecular Phylogenetic Analysis of the Recombination Pathway. University of Wisconsin - Madison, WI.

The Biology of Genomes (Poster) The Effects of Demographic History on the Detection of Recombination Hotspots. Cold Spring Harbor Laboratories, NY.

National Human Genome Research Institute (NHGRI) Research Training and Career Development Meeting (Poster) The Effect of Demography on the Detection of Recombination Hotspots. St. Louis, MO.

2016

National Human Genome Research Institute (NHGRI) Research Training and Career Development Meeting (**Platform Presentation**) Demography and the Evolution of Recombination Hotspots. Bethesda, MD.

Evolution Seminar Series. (**Invited Seminar**) Demography and the Evolution of Recombination Hotspots. University of Wisconsin - Madison, WI.

Genomic Sciences Seminar Series (Talk) The Effect of Demography on the Detection of Recombination Hotspots. University of Wisconsin - Madison, WI.

The Allied Genetics Meeting (TAGC) (Poster) The Effects of Demographic History on the Detection of Recombination Hotspots. Orlando, FL.

The Biology of Genomes (Poster) The Effect of Demographic History on the Detection of Recombination Hotspots. Cold Spring Harbor Laboratories, NY.

2015

Genomic Sciences Seminar Series (Talk) Rapid Evolution & Relaxed Selection: Understanding the elevated levels of genetic variation among reproductive genes. University of Wisconsin - Madison, WI.

EEB Brown Bag Seminar Series (Talk) Rapid evolution and relaxed selection: understanding the elevated levels of genetic variation among reproductive genes. Indiana University, Bloomington, IN.

2014

Evolution 2014 (Talk) The role of selection in the rapid evolution of reproductive genes: are we using the correct null hypothesis? Raleigh, North Carolina.

2013

Evolution 2013 (Talk) The population genetics of rapidly evolving reproductive genes: How much variation should we expect to find? Snowbird, Utah.

2012

1st Joint Conference on Evolutionary Biology (Poster) Understanding Patterns of Diversity in Reproductive Genes. Ottawa, Canada.

2011

Seminario del Departamento de Ciencias Biológicas (**Invited Seminar**) Sexually Antagonistic Coevolution & The Evolution of Recombination Rate. Universidad de los Andes, Bogotá, Colombia.

Evolution 2011 (Talk) A Solution to the Paradox of Recombination: Sexually Antagonistic Coevolution. Norman, OK.

EEB Brown Bag Seminar Series (Talk) Sexual Conflict and the Evolution of Recombination Rate. Indiana University, Bloomington, IN.

CISAB Animal Behavior Conference (Poster) The effects of extra-pair preen oil on parental care in the dark-eyed junco (*Junco hyemalis*). Bloomington, IN.

2010

Evolution 2010 (Poster) Linkage and the Dynamics of Sexually Antagonistic Coevolution. Portland, OR.

2008

Evolution 2008 (Poster) Effects of Selection for Thermotolerance on the Cost of Mating in *Drosophila melanogaster*. Minneapolis, MN.

2007

Undergraduate Science Symposium (Talk) Fitness Effects of Artificial Selection on Thermotolerance in *Drosophila melanogaster*. The College of William and Mary, Williamsburg, VA.

Teaching

Instructor - Introduction to Biology
 Foundations in Science and Mathematics (FSM)
Summer Course for High School Students
 Indiana University - 2013

Assistant Instructor - Entomology
 Instructor : Dr. Armin Moczek
 Indiana University - 2009

Service

Undergraduate Student Research Mentor 2010-2015

Mentees: Rebecca Rice, Ingrid Feustal, Alli James, Colette Ciresi
Indiana University

Graduate Student Advisory Committee Member 2011, 2014

EEB Faculty Job Search
Indiana University

Reading Group Organizer 2011, 2012

Indiana University