

Christina M Schmidt

Assistant Professor of Biology, Wells College, Stratton Hall 213, 170 Main St, Aurora, NY 13026
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Education

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| PhD Biological Sciences
Ecology, Evolution, Behavior
Auburn University, Auburn AL
Dissertation: The effects of dietary and skeletal calcium availability on reproductive performance of mammals | 2011 |
| MS Ecology and Organismal Biology
Indiana State University, Terre Haute IN
Thesis: Utilization of dietary calcium during reproduction in big brown bats | 2007 |
| BS Ecology, Evolution and Behavior
University of Minnesota Twin Cities,
Minneapolis and St Paul MN | 2004 |

Professional Employment

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| Assistant Professor
Department of Biology
Wells College, Aurora, NY | 2014 - present |
| Postdoctoral Research Fellow
Department of Zoology and Entomology
University of Pretoria, Gauteng, South Africa | 2012 - 2014 |

Publications

- Schmidt CM**, Chiba LI and Hood WR. 2018. Maternal characteristics and reproductive output influence bone metabolic activity in pregnant and lactating sows. *Journal of Animal Physiology and Animal Nutrition* 102:1651-1656
- Schmidt CM** and Hood WR. 2016. Female white-footed mice (*Peromyscus leucopus*) trade off offspring skeletal quality for self-maintenance when dietary calcium intake is low. *Journal of Experimental Zoology Part A* 325:581-587

Publications* (cont)

Schmidt CM, Blount JD and Bennett NC. 2014. Reproduction is associated with a tissue-dependent reduction of oxidative stress in eusocial female Damaraland mole-rats (*Fukomys damarensis*). PLoS One 9: e103286

Schmidt CM and Hood WR. 2014. Bone loss is a physiological cost of reproduction in white-footed mice (*Peromyscus leucopus*). Mammalian Biology 79: 96-100

Schmidt CM, Jarvis JUM and Bennett NC. 2013. The long-lived queen: reproduction and longevity in female eusocial Damaraland mole-rats (*Fukomys damarensis*). African Zoology 48: 193-196

Schmidt CM and Hood WR. 2012. Calcium availability influences litter size and sex ratio in white-footed mice (*Peromyscus leucopus*). PLoS ONE 7: e41402

Graham SP, Soehren EC, Cline GR, **Schmidt CM**, Sutton WB, Rayburn JR, Stiles SH and Stiles JA. 2011. Conservation Status of Hellbenders (*Cryptobranchus alleganiensis*) in Alabama, USA. Herpetological Conservation and Biology 6: 242-249

Schmidt CM. 2011. *Hyla chrysoscelis* (Cope's Gray Treefrog). Geographic Distribution. Herpetological Review 42: 107

Booher CM and Hood WR. 2010. Calcium utilization during reproduction in big brown bats (*Eptesicus fuscus*). Journal of Mammalogy 91: 952-959

Morehouse NI, Nakazawa T, **Booher CM**, Jeyasingh PD and Hall MD. 2010. Sex in a material world: why the study of sexual reproduction and sex-specific traits should become more nutritionally-explicit. Oikos 119: 766-778

Booher CM. 2007. Effects of calcium availability on reproductive output of big brown bats. Journal of Zoology 274: 38-43

In Prep

Liver lipid content varies with reproductive status in Damaraland mole-rats (*Fukomys damarensis*)

*(published under last name Booher until 2010)

Presentations

Schmidt CM. Physiological costs of reproduction in vertebrates. Ithaca College Biology Department Seminar Series. Ithaca, NY. April 4, 2019

Schmidt CM. The biology of sex. Guest lecturer for Women and Gender studies course, Body Politics. November 7, 2018

Heisey AC*, Case R*, and **Schmidt CM.** Reproductive trade-offs associated with mounting an immune response in female brown anoles (*Anolis sagrei*). Oral presentation at the Rochester Academy of Science Annual Fall Scientific Paper Session. Rochester, NY. November 12, 2016. *Undergraduates

Schmidt CM, Arbi S, Blount JD and Bennett NC. Measurements of oxidative stress vary with tissue type and reproductive status in Damaraland mole-rats (*Fukomys damarensis*). Poster presentation at Evolution 2016. Austin, TX. June 17-21, 2016

Schmidt CM. Life history trade-offs: animal strategies for dealing with the costs of reproduction. Oral presentation at the Wells College 'Reunion College'. Aurora, NY. June 3, 2016

Schmidt CM. Perceiving the price of procreation: a physiological perspective. Oral presentation for the Wells College Science Colloquium. Aurora, NY. November 21, 2014

Schmidt CM, Blount JD and Bennett NC. Oxidative stress in females of the eusocial Damaraland mole-rat: is there an advantage to being a reproductive female? Oral Presentation at the Zoological Society of Southern Africa Annual Symposium. Tshipise, South Africa. July 14-17, 2013

Schmidt CM. Presentation Boot Camp: how to create an effective scientific presentation. Oral presentation and guided discussion for the University of Pretoria, Department of Zoology and Entomology Post-grad Discussion Group. Pretoria, South Africa. October 23, 2012

Schmidt CM. Repercussions of reproduction: assessing physiological costs of reproduction in mammals. Oral presentation for the University of Pretoria, Department of Zoology and Entomology seminar series. Pretoria, South Africa June 27, 2012

Schmidt CM and Hood WR. Dietary calcium, maternal skeletal condition and lifetime reproductive performance of white-footed mice (*Peromyscus leucopus*). Oral presentation at the Eighth Annual Southeastern Ecology and Evolution Conference. Auburn, AL. March 25-27, 2011

Presentations* (cont)

Booher Schmidt CM and Hood WR. Dietary calcium, maternal skeletal condition and lifetime reproductive performance of white-footed mice (*Peromyscus leucopus*). Oral presentation at The Society for Integrative and Comparative Biology Annual Meeting. Salt Lake City, UT. January 3-7, 2011

Schmidt CM and Hood WR. Calcium as currency for assessing reproductive costs in white-footed mice. Oral presentation at the Eighth Biennial Symposium of the Comparative Nutrition Society. Tucson, AZ August 6-10, 2010

Booher CM and Hood WR. Turning bones into babies: how calcium availability drives costs of reproduction in white-footed mice. Oral presentation at Auburn University Graduate Scholars Forum. Auburn, AL March 6, 2010

Booher CM and Hood WR. Calcium intake, bone metabolism and reproductive output of white-footed mice (*Peromyscus leucopus*). Poster presentation at The Society for Integrative and Comparative Biology Annual Meeting. Boston, MA January 3-7, 2009

Hood WR and **Booher CM**. Mineral dynamics during reproduction in insectivorous bats: skeletal integrity is favored over increased reproductive output. Oral presentation at The Society for Integrative and Comparative Biology Annual Meeting. Boston, MA January 3-7, 2009

Booher CM. Effects of calcium intake on reproductive output of big brown bats. Oral presentation at the Seventh Biennial Symposium of the Comparative Nutrition Society. Liscomb Mills, Nova Scotia August 8-13, 2008

Booher CM. Calcium availability and bone resorption: implications for reproductive performance of mammals. Poster presentation at the Alabama EPSCoR Annual Conference. Montgomery, AL July 22-24, 2008

Booher CM. Effects of calcium intake on reproductive output of big brown bats. Oral presentation at the 87th Annual Meeting of the American Society of Mammalogists. Albuquerque, NM. June 6-10, 2007

Booher CM. Effects of calcium intake on reproductive output of big brown bats (*Eptesicus fuscus*). Poster presentation at the 36th Annual National Symposium for Bat Research. Wilmington, NC. October 18-21, 2006

Booher CM. Effects of calcium intake on reproductive output of big brown bats (*Eptesicus fuscus*). Oral presentation at the Indiana Academy of Science Annual Meeting. Muncie, IN. November 2-3, 2006

*(presented under last name Booher until 2010-2011)

Grants and Fellowships

Endeavor Foundation – Professional Development Funds - \$1,500	2019
Endeavor Foundation – Professional Development Funds - \$1,800	2017
Wells College Summer Research Grant - \$4,500	2016
University of Pretoria, Postdoctoral Fellowship	2012 - 2014
Auburn University Graduate School, Graduate Research Award - \$1,000	2011
The Society for Integrative and Comparative Biology, Grant in Aid of Research - \$1,000	2010
American Society of Mammalogists, Grant-in-Aid of Research - \$1,000	2009
Alabama Commission on Higher Education Graduate Research Scholarship - \$25,000/year stipend	2008 - 2009
American Society of Mammalogists, Grant-in-Aid of Research - \$1,500	2008
Auburn University Graduate School, Travel Grant - \$500	2008
Indiana State University School of Graduate Studies, Travel Grant - \$500	2006
Indiana Academy of Sciences, Research Grant - \$2,500	2005

Research

PI for Undergraduate Research Reproductive output and immune response in brown anoles Wells College, Aurora NY	May 2016 - present
Visiting Researcher Analyses of biomarkers of oxidative stress Centre for Ecology and Conservation College of Life and Environmental Sciences University of Exeter, Cornwall Campus Penryn, Cornwall, UK	November - December 2012
Postdoctoral Research Fellow Relationship between oxidative stress and reproduction in Damaraland mole-rats Department of Zoology and Entomology University of Pretoria, Gauteng, South Africa	May 2012 - June 2014
Selected Participant WoodStoich 2009 The Global COE Program Center for Ecosystem Management Adapting to Global Change Tohoku University, Sendai, Japan	March - August 2009
Graduate Research Scholar Alabama Commission on Higher Education Alabama EPSCOR Graduate Research Scholars Program Auburn University, Auburn AL	January 2008 - August 2009
Graduate Research Assistant Department of Biological Sciences Auburn University, Auburn AL	January 2008 - August 2009
Undergraduate Research Assistant PCR and sequencing of BRCA in didelphid marsupials Dr Sharon A Jansa Department of Ecology, Evolution and Behavior University of Minnesota Twin Cities, St Paul MN	October 2003 - March 2004

Courses Taught

Course	Institution
Biology of Organisms Lecture	Wells College
Biology of Organisms Lab	Wells College
Principles of Biology Lab	Auburn University
Anatomy and Physiology I Lecture	Wells College
Anatomy and Physiology I Lab	Wells College, Auburn University, Indiana State University
Anatomy and Physiology II Lecture	Wells College
Anatomy and Physiology II Lab	Wells College, Auburn University, Indiana State University
Forensic Science Lecture	Wells College
Forensic Science Lab	Wells College
Human Aspects Biology Lab	Indiana State University
Seminar: Thought for Food	Wells College
Animal Diversity Lecture	University of Pretoria
Comparative Anatomy Lab	Auburn University
Animal Physiology Lecture	University of Pretoria
Ecology Lab	Auburn University
Vertebrate Zoology Lecture	Wells College
Vertebrate Zoology Lab	Wells College
Animal Behavior Lecture	Wells College
Animal Behavior Lab	Wells College
Developmental Biology Lecture	Wells College
Senior Seminar	Wells College
Independent Study in Biology	Wells College
Advanced Research	Wells College

Academic Service at Wells College

Faculty Member Planning Group for New Student Transition	June 2019 – present
Chair Academic Standing, Advising and Admissions Committee	August 2018 - present
Faculty Member Hiring committee	November 2017 - April 2018
Coordinator Assessment of student learning outcomes for the Biology major	May 2017 - present
Chair Wells College Institutional Animal Care and Use Committee (WC-IACUC)	April 2016 - present
Coordinator Biology minor	March 2016 - present
Faculty Advisor IES Abroad – South Africa	October 2016 - present
Chair Inclusive and Intercultural Excellence and Off-Campus Studies Committee	August 2015 - present
Coordinator Science Colloquium visiting speaker series	August 2015 - present
Faculty Member Safety and Security Committee	January 2015 - May 2017
Biology Major Representative Admissions events	September 2014 - present
Academic Advisor	August 2014 - present

Professional Development

Summer Institute on Scientific Teaching. University of California San Diego, San Diego, CA. June 17 – 21, 2019

The Equity Equation: How to Help Underserved Students Succeed. McGraw Hill webinar. March 29, 2019

Developmental Biology Teaching Workshop. Darling Marine Center, Walpole, ME. June 27 - July 1, 2017

Learning for Every Body: Inclusive Teaching and Curricular Design. Wells College, Aurora, NY. April 8, 2016

Outreach and Service

Lecturer Mock Anatomy and Physiology Class Girl Scouts, 9 th -12 th Grade Wells College Aurora, NY	November 2017
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Delegate Representative of Wells College NYCC Presidential Investiture Seneca Falls, NY	October 2017
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Presenter Science Showtime! Sciencenter Ithaca, NY	August 2016
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Presenter AU Explore, Science and Math Open House for local schools, 5 th – 8 th Grade Auburn University Auburn, AL	April 2011
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Presenter AU Explore, Science and Math Open House for local schools, 5 th – 8 th Grade Auburn University Auburn, AL	May 2010
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Outreach and Service *(cont)*

Coordinator Physiological and Nutritional Ecology Reading Group (P-Nut) Auburn University Auburn, AL	January 2009 - September 2010
Technical Support Seventh Biennial Symposium of the Comparative Nutrition Society Liscomb Mills, Nova Scotia	August 2008
Coordinator Indiana State University Bat Information Line Center for North American Bat Research and Conservation Department of Ecology and Organismal Biology Indiana State University Terre Haute, IN	March - June 2007
Visiting Speaker 'Bats and Bat Research' Girl Scouts Annual Camporee Poland, IN	April 2007
Visiting Speaker 'Bats and Bat Research' Pittsboro Elementary School, 2nd Grade Pittsboro, IN	November 2006
Visiting Speaker 'Bats of Indiana' Riley Elementary School, 2nd Grade Riley, IN	October 2005
Intern Avian Nursery Wildlife Rehabilitation Center of Minnesota Roseville, MN	May - September 2003
Wildlife Information Correspondent Wildlife Information Hotline College of Natural Resources University of Minnesota Twin Cities Minneapolis, MN	July 2004 - May 2005
Natural History Interpreter Bell Museum of Natural History University of Minnesota Twin Cities, Minneapolis MN	September 2002 - May 2005

Reviewer

Biology Letters
Functional Ecology
Reproduction, Fertility and Development
Acta Theriologica
Mammalian Biology
Open Biology

Awards

Outstanding Student Presentation, the Eighth Biennial Symposium
of the Comparative Nutrition Society. Tucson, AZ August 6-10, 2010

2nd Place - Best presentation, Auburn University Graduate Scholars Forum,
Auburn, AL. March 2010

Foreign Language Skills

Proficient in written and spoken Spanish