

Denita M. Weeks

Assistant Professor

Colorado Mesa University
Department of Biological Sciences
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EDUCATION

- Ph.D. Biology** • The University of Memphis • 2018
Dissertation: **Potential Mitigation of *Chytridiomycosis* with Biopesticides: A natural, unexplored strategy**
Advisor: Dr. Matthew J. Parris
- M.S. Biology** • California State University, Northridge (CSUN) • 2013
Thesis: **Comparative Thermal Tolerances, Performance Eurythermy, and Energy Budgets of the World's Southernmost Gecko with Implications for Changing Climate**
Advisor: Dr. Robert E. Espinoza
- B.S. Biology (Animal Emphasis)** • Grand Valley State University, Allendale, MI • 2008

CONTINUING EDUCATION

- Ranaviruses: Emerging Pathogens of Ectothermic Vertebrates • 69 credit hours
Global Ranavirus Consortium, Inc. • The University of Tennessee-Knoxville • 2016

TEACHING EXPERIENCE

Teaching

- 2019 Microbiology Lecture & Lab; General Human Biology Lecture; Attributes of Living Systems Lecture & Lab
- 2018 Microbiology Lecture & Lab; Attributes of Living Systems Lecture & Lab; Anatomy & Physiology Lab • Colorado Mesa University
- 2017 Anatomy & Physiology Lecture & Lab Dual Enrollment Course • University of Memphis/Central High School (hybrid course)
- 2017-18 Anatomy & Physiology Lecture • University of Memphis (hybrid course)
- 2017 Principles of Biology Lab • Christian Brothers University
- 2016 & 2018 Herpetology Lecture & Lab (co-instructor) • University of Memphis
- 2016 Biology of Organisms Lab • University of Memphis
- 2015 Microbiology Lab • University of Memphis
- 2009-11 Human Anatomy Lab (Introductory & Advanced) • CSUN

Laboratory Technician

- 2006-08 Biology Department • Grand Valley State University

Undergraduate Research Assistant:

- 2006 Assistant to Dr. Stephen Burton and research student: project assessed the suitability of golf course habitat for amphibian diversity • Grand Valley State University

RESEARCH EXPERIENCE

Graduate Research:

- 2010 • Graduate Assistant • Tropical Biology and Conservation Program, CSUN. Completed two

student research projects in Ecuador; assisted undergraduates with project design & statistical analysis.

2010-2011 • M.S. Thesis research in Argentina on: “**Comparative Thermal Tolerances, Performance Eurythermy, and Energy Budgets of the World’s Southernmost Gecko with Implications for Changing Climate**”

Undergraduate Research:

2008 • **Factors influencing calling male green frogs (*Rana clamitans*) at Pierce Cedar Creek Institute**, Faculty in Residence Intern with Dr. Stephen Burton, funded by Pierce Cedar Creek Institute (PCCI).

2007 • **Green Frog (*Rana clamitans*) calling habitat associations: Are males selecting calling habitat more closely associated with egg-laying or predator protection?**, funded by the GVSU Ronald E. McNair Scholars Program and PCCI Undergraduate Research Grants for the Environment (URGE). Mentor: Dr. Stephen Burton

GRANTS

Survey of the amphibians of McInnis Canyon National Conservation Area and the presence of the pathogenic fungus *Batrachochytrium dendrobatidis* (co-investigator) • US Geological Survey Cooperative Agreement (\$33,298) • 2019

Faculty Professional Development Fund (co-awarded with Paul Hampton) • Colorado Mesa University • 2018

Potential mitigation of amphibian disease with biopesticides: A natural, unexplored strategy • Herpetologists’ League E. E. Williams Research Grant (\$581) • 2015

Impacts of larval stress on development of adult skin defenses in anurans • SICB FGST Grant (\$1300) • 2015

- Received training in: ELISA assays, Antimicrobial Peptide purification

Potential mitigation of amphibian disease with biopesticides: A natural, unexplored strategy • ASIH Gaige Award (\$500) • 2014

Potential mitigation of amphibian disease with biopesticides: A natural, unexplored strategy • Sigma Xi Grants-in-Aid of Research (\$975) • 2014

Impacts of larval stress on development of adult skin defenses in anurans • Chicago Herpetological Society (\$1000) • 2014

Fundamental niche modeling and implications of global climate change for the world’s southernmost gecko • SSAR Grant-in-Herpetology Travel Award (\$500) • 2011

Fundamental niche modeling and implications of global climate change for the world's southernmost gecko, *Homonota darwinii* • ASIH Gaige Award (\$500) • 2010

Fundamental niche modeling and implications of global climate change for the world’s southernmost gecko, *Homonota darwinii* • CSUN D.H. Norris Field Trip Minigrant (\$250) • 2010

Fundamental niche modeling and implications of global climate change for the world's southernmost gecko, *Homonota darwinii* • Sigma Xi Grants-in-Aid of Research (\$1000) • 2010

Fundamental niche modeling and implications of global climate change for the world's southernmost gecko, *Homonota darwinii* • CSUN Thesis Support Grant (\$1000) • 2009

Green Frog (*Rana clamitans*) calling habitat associations: Are males selecting calling habitat more closely associated with egg-laying or predator protection? • PCCI Undergraduate Research Grants for the Environment (URGE) (\$3000) • 2007

PROFESSIONAL AFFILIATIONS

Sigma Xi, The Scientific Research Society • 2012-present
Chicago Herpetological Society • 2011-present
American Society of Ichthyologists and Herpetologists • 2010-present
Herpetologists League • 2010-present
Society for the Study of Amphibians and Reptiles • 2010-present
Society for Integrative and Comparative Biology • 2010
Toastmasters International • 2007-2008
Ronald E. McNair Scholar Program • 2005-present
Michigan Society of Herpetologists • 2005
Indiana Declining Amphibian Population Task Force (DAPTF) • 2004

AWARDS

Mack I. Johnson Memorial Research Award for Outstanding Graduate Student, California State University-Northridge (\$2000) • 2014

University of Memphis Society Doctoral Fellowship, The University of Memphis (\$1770) • 2014

Van Vleet Memorial Doctoral Award, The University of Memphis (\$16000) • 2013

The Herpetologists' League Graduate Research Award (Best Oral Presentation), The Herpetologists' League, Joint Meeting of Ichthyologists and Herpetologists, Minneapolis, MN • 2011

CSUN Achievement Award (\$2000) • 2010

Seibert Award (Best Oral Presentation) in Physiology/Morphology, Society for the Study of Amphibians and Reptiles, Joint Meeting of Ichthyologists and Herpetologists, Providence, RI • 2010

CSUN Graduate Fellowship for Outstanding Research Promise in Science and Mathematics (\$5000) • 2010

CSUN Associated Students Northridge Achievement Award (\$2000) • 2010

CSUN Graduate Equity Fellowship (\$2000) • 2009

Toastmasters Competent Communicator Award • 2008

PROFESSIONAL SERVICE

Peer-review for *Biocontrol Science & Technology* • 2019

Assessment Committee, Colorado Mesa University
Vice Chair • 2019-20
Member • 2018

Joint Meeting of Ichthyologists and Herpetologists Session Moderator • Austin, TX • 2017

Tennessee Academy of Sciences Oral Presentation Judge • The University of Memphis • 2015

Graduate Women in Science • The University of Memphis
President • 2017-present
Vice President & Cofounder • 2014-2016

Biological Sciences Graduate Student Association • The University of Memphis
President • 2015-16
Secretary • 2014-15

FrogWatch USA, Memphis Chapter, Co-coordinator • Wolf River Conservancy • 2014-2016

Biology, Ecology, and Evolution Reading Club Secretary • CSUN • 2009-2011

PRESENTATIONS

Weeks, D. M. and M. J. Parris. 2018. **Potential mitigation of an amphibian fungal disease with microbial pesticides**
Ecological Society of America Annual Meeting, New Orleans, LA

Weeks, D. M. and M. J. Parris. 2017. **Immunity is Skin Deep: Considering Microbial Pesticides as a Disease Mitigation Strategy for Chytridiomycosis**
Joint Meeting of Ichthyologists and Herpetologists, Austin, TX

Weeks, D. M. and M. J. Parris. 2017. **Bacteria used in organic agriculture inhibit growth of a pathogenic amphibian fungus in vitro**
The University of Memphis, Student Research Forum (poster) • 2017

Weeks, D.M. 2011. **When warmer isn't better: Subzero Tolerances and Performance Eurythermy for the World's Southernmost Gecko**
Joint Meeting of Ichthyologists and Herpetologists, Minneapolis, MN

Weeks, D.M. 2011. **Eurythermy, subzero tolerances, and the potential for range expansion following global warming in the world's southernmost gecko**
California State University Northridge, Student Symposium • 2011

Weeks, D.M. and R. E. Espinoza. 2010. **Geckos on ice: unexpected thermal tolerances and temperature-dependent performance of the world's southernmost gecko**
Joint Meeting of Ichthyologists and Herpetologists, Providence, RI

Weeks, D.M. 2010. **Geckos on ice: unexpected thermal tolerances of the world's southernmost gecko.**
California State University Northridge, Sigma Xi Symposium • 2010

Implications of global climate change for the world's southernmost gecko
California State University Northridge, Student Symposium • 2010

What does your pyramidalis muscle do for you?
Grand Valley State University, Student Scholars Day (poster) • 2008

Green Frog (*Rana clamitans*) calling habitat associations: Are males selecting calling habitat more closely associated with egg-laying or predator protection?
Grand Valley State University, Student Scholars Day • 2008
West Michigan Regional Undergraduate Science Research Conference (poster) • 2007
PCCI, *URGE* 2007 Report Meeting • 2007
Pennsylvania State University, Ronald E. McNair 2007 Summer Research Conference • 2007

Factors influencing calling male green frogs (*Rana clamitans*) at Pierce Cedar Creek Institute
PCCI, *Faculty in Residence* Report Meeting • 2008

NON-PEER-REVIEWED PUBLICATIONS

Weeks, D.M. and S.R. Burton. 2007. Green Frog (*Rana clamitans*) calling habitat associations: are males selecting calling habitat more closely associated with egg-laying or predator protection? *GVSU McNair Scholars Journal* Vol.11:91-101.
(also as final report to PCCI)

Burton, S., D. Weeks, R. Fouty, and B. Lodewyck. 2008. Factors influencing calling male Green Frogs (*Rana clamitans*) at Pierce Cedar Creek Institute. Final Report to PCCI.

PEER-REVIEWED PUBLICATIONS

Weeks DM, Parris MJ, Brown SP. In review. Recovery and resiliency of skin microbial communities on the southern leopard frog (*Lithobates sphenoccephalus*) following two biotic disturbances. *Animal Microbiome*.

Weeks DM, Espinoza RE. In revision. Performance eurythermy in a cold climate gecko. *Journal of Experimental Biology*.

Weeks DM, Parris MJ. 2019. A *Bacillus thuringiensis* subsp. *kurstaki* biopesticide at environmentally relevant concentrations does not reduce hatching success or tadpole survival in *Lithobates sphenoccephalus*. *Environmental toxicology and chemistry*.

Hanlon SM, Henson JR, Patillo B, **Weeks DM**, Kerby JL, Moore JE. 2016. No occurrence of ranaviruses in reptiles from Wapanocca National Wildlife Refuge in Arkansas, USA. *Herpetological Review* 47: 606-607.

Weeks DM, Espinoza RE. 2013. Lizards on ice: comparative thermal tolerances of the world's southernmost gecko. *Journal of Thermal Biology* 38: 225-232.