APPENDIX E—BIOLOGY FACULTY VITAE

Edmond J. Bacon

Jessie C. Chappell

Karen P. Fawley

Marvin W. Fawley

John L. Hunt

Glenn J. Manning

Lauren A. Morgan

Christopher G. Sims

Mary J. Stewart

M. Jeffrey Taylor

CurriculumVita Edmond J. Bacon

Interests: Science Education, Ecology, Ichthyology, Marine Biology, and Zoology

Post Secondary Education:

Southern Arkansas University, B.S.E. University of Arkansas, M. S., Zoology University of Louisville, Ph.D. Biology Oregon State University University of Southern Mississippi

Employment at Institutions of Higher Education:

University of Arkansas-Monticello, 1974 – 2007; 2008 - 2015

Courses Taught: Aquatic Biology, Introductory Biology, Ecology, General Zoology, Ichthyology, Invertebrate Zoology, Marine Biology, and Principles of Biology

Non-Teaching Positions and Committees at UAM: Chair of the Pre-professional Advisory

Committee, Chair of General Education Committee, Chair of Program Review Committee,

Scholarship Committee, Coordinator for the Gulf Coast Research Laboratory, Chairman of the

Scientific Review Committee for the Southeast Regional Science Fair, Radiation Safety Office of the UAM Campus, Coordinator of the Saline River Stream Team, Director of the Turner Neal Museum.

Service and Professional Recognition

Scientific Policy Advisory Committee for the
Arkansas Department of Pollution Control & Ecology, 1980 - 1986
Member of UAM Foundation Fund Board, 1984-1986; 2006 - 2014
Radiation Safety Officer at UAM, 1980 - 2000
Gulf Coast Research Lab Coordinator, 1986 - 2015

Vice-President of the Arkansas Academy of Science, 1985
President of the Arkansas Academy of Science, 1986
Member of Acid Deposition Team to Europe, 1986
Associate Editor for Arkansas Academy of Science, 1990 - 2006
Visiting Professor at the Gulf Coast Research Lab, 1994 - 1996
Consultant to the Arkansas Game & Fish Commission, 1996 - 2012
Consultant to the Arkansas Department of Transportation, 1996- 2000
Saline River Stream Team Coordinator, 2000 - 2015
Scientific Advisory Committee on Environmental Policy

University Service:

Chairman of the Department of Natural Sciences, 1981-1985
Member of the UAM Foundation Fund Board, 1984-86; 2006 - 2014
Director of Pre-medical Sciences, 1981-1985
Radiation Safety Office for the Campus, 1980-2000
Gulf Coast Research Laboratory Coordinator, 1986-2015
Chancellor's Senior Faculty Advisory Group, 1988-1994
Chairman of the General Education Committee, 1985-1988
Chairman of the Program Review committee, 1988
Chairman of Dept. of Natural Sciences Scholarship Committee
Founder of the Biology Club, 1987
Sponsor of the Biology Club, 1987-2015
Chairman of the Jack Kent Cooke Scholarship Committee
UAM Chancellor Search Committee, 2014 – 2015
Director of the Turner Neal Museum

COMMUNITY SERVICE:

Member of the Monticello Country Club Board, 1993-1996 President of the Monticello Country Club Board, 1996 Member of the First United Methodist Church Board, 1983-2005 Trustee of the Wesley Foundation, 1990-2001 Volunteer Assistant for the ESL Program
Volunteer for the Justice for Our Neighbors Program
AGFC Stream Team Coordinator
Director of the Turner Neal Museum

Honors and Awards:

Alpha Chi Teacher of the Year, 2003 and 2007, University of Arkansas at Monticello UAM Faculty Excellence Silver Award Winner, 1994

Professional Organizations:

Arkansas Academy of Science Arkansas Entomological Society American Fisheries Society

Professional Publications:

- Bacon, E. J. 1978. Primary productivity, water quality, and limiting factors in Lake Chicot. Arkansas Water Resources Research Center Publ. No. 56. 99 pp.
- Bacon, E. J. 1981. Productivity of plants in lakes and streams in southern Arkansas. Discovery Univ. of Ark. Agr. Exp. Sta. Bull., pp. 13-14.
- Bacon, E. J. 1983. The effects of forest harvest on water quality and aquatic life (Phase I). Arkansas Water Resources Research Center Publ. No. 100. 65 pp.
- Bacon, E. J. and S. E. Neff. 1974. Seasonal changes in water quality and primary productivity in Doe Valley, Lake. Water Resources Res. Rept. No. 72, 107 pp.
- Bacon, E. J. and S. E. Neff. 1982. Bottom fauna in Doe Valley Lake, Meade County, Kentucky. Trans. of Kentucky Acad. of Sci. 43(3-4):158-167.

- Cochran, B., E. J. Bacon, and G. H. Harp. 1993. Larval chironomids of the St. Francis sunken lands in Arkansas. Ark. Acad. Sci. Proc. 47:31-33.
- Cooper, C. M. and E. J. Bacon. 1980. Effects of suspended sediments on primary productivity in Lake Chicot. Proc. of the Symposium of Surface Water Impoundments. ASCE. Pp. 1357-1367.
- Cooper, C. M., E. J. Bacon, and J. R. Ritchie. 1984. Biological cycles in Lake Chicot, Arkansas. pp. 49-61 In J. F. Nix and F. R. Schiebe. Eds. Limnological Studies in Lake Chicot, Arkansas. Arkansas Lakes Symposium. 146 pp.
- Miller, A. C., D. C. Beckett, and E. J. Bacon. 1989. The habitat value of aquatic macrophytes for macroinvertebrates: benthic studies in Eau Galle Reservoir, Wisconsin. Proc. 23rd Annual Meeting Aquatic plant Control Research Program, US Army Engineer Waterways Experiment Station, Vicksburg, MS, pp 190-201.
- Miller, A. C., D. C. Beckett, C. M. Way, and E. J. Bacon. 1989. The habitat value of aquatic macrophytes for macroinvertebrates. Aquatic plant Control Research Program, Technical Report A-89-3, US Army Engineer Waterways Experiment Station, Vicksburg, MS, 66 pp.
- Miller, A. C., E. J. Bacon, and D. C. Beckett. 1990. The habitat value of aquatic macrophytes in lentic and lotic habitats. Aquatic Plant Control Research Program Research Program, Technical Report A-90-3, US Army Engineer Waterways Experiment Station, Vicksburg, MS, 66 pp.
- Miller, A. C. and E. J. Bacon. 1991. The habitat value of aquatic macrophytes for macroinvertebrates in the Saline River. Aquatic Plant Control Research Program, Technical Report A-91-3, US Army Engineer Waterways Experiment Station, Vicksburg, MS, 66 pp.
- Lockhart, B. R., J. E. Kellum, L. C. Thompson, P. A. Tappe, R. C. Weih, Jr., E. J. Bacon, H. O. Liechty. 1998. Impacts of reproduction cutting methods in a bottomland hardwood ecosystem: a multi-disciplinary study. The ASB Bulletin: 45: 84-85.

RESEARCH GRANTS: \$335,000

<u>Grant Title</u>	Funding Agency	<u>Funding</u>
Water Quality and Primary Productivity in Doe Valley Lake	Office of Water Research and Technology	\$ 20,000
Environmental Assessment of the Paintsville-Yatesville Basins	U. S. Army Corps	\$ 50,000
Primary Productivity, Water Quality, and Limiting Factors in Lake Chicot	Office of Water Research and Technology	\$ 20,000
Primary Productivity in Lake Chicot	USDA/SEA	\$ 18,500
Effects of Forest Harvest on Water Quality and Aquatic Life	Office of Water Research and Technology	\$ 52,500
Habitat Value of Aquatic Macrophytes in the Saline River	U. S. Army Corps Waterways Experiment Stati	\$ 50,000 on
Habitat Value of Aquatic Macrophytes in Lake Marion, South Carolina	U. S. Army Corps Waterways Experiment Stati	\$ 92,000 on
Oats Creek Watershed Study	Ark. Dept. of Transportation	\$ 16,000
Lake Greeson Project	Ark. Game & Fish. Comm.	\$ 4,000
Pittman Island Study	School of Forest Resources	\$ 10,000
Water Quality In the Saline River	UAM Faculty Research	\$ 1,800

EDUCATIONAL GRANTS: \$ 57,500

<u>Title</u>	Funding Agency		<u>Funding</u>	
AEGIS Environmental Science	Ark. Dept. of Education	\$ 2	24,500	
AEGIS Ecological Analysis of Aquatic Habitats	Ark. Dept. of Education	\$ 1	12,000	
AEGIS Ecological Analysis of Aquatic Habitats	Ark. Dept. of Education	\$ 1	12,000	
Field Course in Natural History	U.S. Govt. Title III	\$	2,000	
Marine Invertebrates of the Gulf of Mexico	U. S. Govt. Title III	\$	6,000	
Ecology of Coral Reefs	U. S. Govt. Title III	\$	1,000	
Ecology of Caribbean Reefs	UAM Centennial Circle Fund	\$	4,400	

High School and Undergraduate Research Projects:

Rymes, L. and M. Temple. 2006. Saline River Water Quality Survey (co-directed with Dr. Morris Bramlett, internally funded by UAM Research Grant)

Lockwood, J. 2010. Effects of ATVS on Mussels in the Saline River. [Outstanding Undergraduate Oral Presentation and Scientific Paper at the 2010 Alpha Chi Regional Meeting in San Diego, CA]

Bacon, J. 1994. Effects of Stream Velocity on Macroinvertebrates in the Little Missouri River. 1994. Best of Show at the Arkansas Science and Engineering Fair, Exhibit at the International Science and Engineering Fair in Hamilton, Ontario

Bacon, J. 1995. Effects of Stream Velocity on Macroinvertebrates in the Little Missouri River. Second Place at the Arkansas Science and Engineering Fair, Exhibit at the International Science and Engineering Fair in Tucson, Arizona.

Bacon, J. 1996. Habitat Value of Plants and Substrates in the Saline River. Third Place at the Arkansas Science and Engineering Fair, Exhibit at the International Science and Engineering Fair in Louisville, Kentucky.

Bacon, P. 2002. Morphology and Feeding Strategies of <u>Asplanchna priodonta</u>. First Place at the Southeast Arkansas Regional Science Fair, Honorable Mention at the Arkansas Science and Engineering Fair.

Claycomb, A. 2012. Water Quality in the Little Missouri River Basin.

CURRICULUM VITAE

MS JESSIE C. CHAPPELL 133 West College Avenue Monticello, Arkansas 71655 e-mail: chappellj@uamont.edu 870-866-8050(cell)

Experience

1997-Present

<u>Laboratory Instructor</u> for the University of Arkansas at Monticello(UAM) in the biology department. My teaching duties include evaluating students in general biology lab and anatomy and physiology I and II labs. I also have taught anatomy and physiology lecture in some summers. For the labs I order supplies and equipment and keep an inventory of the supplies and equipment. I am also student advisor for about half of our students in allied health areas.

2012-Present

Instructor for Medical Terminology in the Biology Department.

2004-2006

<u>Instructor</u> of Anatomy & Physiology Lecture for UAM in summer sessions and as overload instructor at the McGehee and Crossett campuses.

1984-1997

<u>Laboratory Instructor</u> for the University of Arkansas at Pine Bluff (UAPB) in the biology department. My duties included preparing lab instructor schedules for each semester, teaching students in upper level labs and freshmen labs, coordinating the general biology labs, lab set ups, ordering supplies and equipment, and keeping a lab inventory. I taught labs in physical science, chemistry, botany, histology, principles of biology and zoology. However, my primary duties were in human anatomy and physiology, comparative anatomy and biological science.

Summer 1996

<u>Instructor</u>(adjunct) of human anatomy and physiology for Southeast Arkansas Technical College, Pine Bluff, Arkansas. I taught both lecture and lab for each of the two summer sessions.

<u>Science teacher</u> for the Upward Bound Program on the UAPB campus. The six week program offers academic enrichment courses to

	economically challenged 9th, 10th, and 11th graders in the region. Course work included earth science, genetics, archeology and physics.		
Summer 1993 &1994	<u>Teacher</u> in biology for PREP, and enrichment program for tenth graders to help prepare them for their high school courses. PREP was offered on the UAPB campus.		
1982-1984	Office manager/secretary for Peter Vandy, CPA, Inc. My duties included the operation of a word processor, research of the micro-computer market, clerical work and receiving clients.		
1974-1975	<u>Teacher</u> for Warren Junior High School, Warren, Arkansas. I taught eighth grade general science.		
1968-1972	Student laboratory assistant part time at the UAM in Monticello, Arkansas. I assisted in zoology, organic chemistry, and general chemistry labs.		
Education			
2003-2005	Special student at UAM. I have completed nine hours of Spanish		
	GPA 4:00/4:00		
1992-1995			
1992-1995 1985-1986	GPA 4:00/4:00 Masters Degree in Secondary Science Education from the UAPB		
	GPA 4:00/4:00 Masters Degree in Secondary Science Education from the UAPB Graduate School of Education. GPA 4:00/4:00 Special student at UAPB. I took courses required to renew my certification		
1985-1986	Masters Degree in Secondary Science Education from the UAPB Graduate School of Education. GPA 4:00/4:00 Special student at UAPB. I took courses required to renew my certification to teach biology and to add general science certification. GPA 4:00/4:00 Teacher education program at the UAM. I took courses for teacher		

Activities

Active member of the PAWS (Pets Are Worth Saving)

Active in the Feed the Kids program in Monticello

Volunteers in Public Schools (VIPS) in Pine Bluff, Arkansas

Biology Curriculum Committee at UAPB from 1993-1997

Biology NCATE accreditation committee at UAPB

Attended several computer workshops at UAPB funded through a Minority Institutions Science Improvement Program (MISIP Grant) between 1985 and 1987.

University of Arkansas at Monticello FACULTY VITA FORM

Name	Last	First	Middle	Highest Degree
	Fawley	Karen	Phillips	Ph.D.
Academic Unit/Field		rofessor		
Academic Rank		Associate Professor		

Education (begin with most recent education and include all professional education				
leading to a degree or professional credential)				
Institution	Location	Degree	Year	Field of study
North Dakota State	Fargo, ND	Ph.D.	1998	Botany
Univ.				
Old Dominion	Norfolk, VA	M.S.	1992	Biology
Univ.				
University of Texas	Austin, TX	B.A.	1991	Biology

Educational Certifications and Year Received:

Teaching Experience: Teaching ar	nd research positions, including dates
University of Arkansas at Monticello	Associate Professor of Biology 2011-present
University of Arkansas at Monticello	Assistant Professor of Biology 2006-2011
North Dakota State University	Research Assistant Professor 2003-2006
North Dakota State University	Post-Doctoral Associate, Dept. of Biol. Sci. 2000-2003
North Dakota State University	Post-Doctoral Associate, Dept. of Botany 1998-2000
North Dakota State University 1997	Graduate R.A./Graduate T.A., Dept. of Botany 1993-
Old Dominion University 1993	Laboratory Manager, Marine Phytoplankton Lab 1992-
Old Dominion University	Graduate R.A., Dept. Biological Sciences 1991-1993

Professional Experience: Positions (part-time, full-time, temporary and permanent) which relate to your preparations for your current position)

University of Arkansas at Monticello Associate Professor of Biology 2011-present

University of Arkansas at Monticello Assistant Professor of Biology 2006-2011

North Dakota State University Research Assistant Professor 2003-2006

North Dakota State University Post-Doctoral Associate, Dept. of Biol. Sci. 2000-2003

North Dakota State University Post-Doctoral Associate, Dept. of Botany 1998-2000

North Dakota State University

1997

Graduate R.A./Graduate T.A., Dept. of Botany 1993-

Old Dominion University

1992-1993

Laboratory Manager, Marine Phytoplankton Lab

Old Dominion University Graduate R.A., Dept. Biological Sciences, 1991-1993

Courses Taught (at least for the two previous years):

Principles of Biology I; Principles of Biology I Lab; General Botany; General Botany Lab; Regional Flora; Aquatic Biology; Special Topics in Biology: Evolutionary History of the Seed; Biology Seminar; Senior Research.

Publications and Presentations/Scholarly Activities:

Publications

Fawley, M.W., Jameson, I. and K. P. Fawley. 2015. The phylogeny of the genus *Nannochloropsis* (Monodopsideaceae, Eustigmatophyceae), with descriptions of *N. australis*, *sp. nov.* and *Microchloropsis*, *gen. nov.* Submitted to *Phycologia* and under review.

Fawley, K.P., Eliáš, M. and Fawley, M.W. The diversity and phylogeny of the commercially important algal class Eustigmatophyceae, including the new clade *Goniochloridales*. *Journal of Applied Phycology*, 26: 1773-1782.

Fawley, M.W., Fawley, K.P. and E. Hegewald. 2013. *Desmodesmus baconii* (Chlorophyta) a new species with double rows of arcuate spines. *Phycologia* 52:565-572.

Fawley, K.P., Witsell, C.T., Fawley, M.W., Breedlove, J.S., Brockman, R.J., Humphrey, A.C., Lawson, J.M., McCallie, K.N., Prescott, D.A., Rushing, J.T. and Whitaker, J.M. 2012. Analyses of the taxonomic status of the Arkansas endemic toothwort, *Cardamine angustata* var. *ouachitana* (Brassicaceae). *Journal of the Arkansas Academy of Science* Volume 66:50-54.

Fawley, M.W., Fawley, K.P. and Hegewald, E. 2011. Taxonomy of *Desmodesmus serratus* (Chlorophyceae, Chlorophyta) and related taxa based upon morphological and DNA sequence data. *Phycologia* 50: 23-56.

Prior, S.E., Fawley, M.W. and Fawley, K.P. 2009. DNA sequence analysis of freshwater Eustigmatophyceae, a potential source of essential fatty acids. *Journal of the Arkansas Academy of Science* 63:139-144.

Johnson, J.L., Fawley, M.W. and Fawley, K.P. 2007. The diversity of *Scenedesmus* and *Desmodesmus* (Chlorophyceae) in Itasca State Park, Minnesota, USA. *Phycologia* 46:214-229.

Fawley, K.P. and Fawley, M.W. 2007. Observations on the diversity and ecology of freshwater *Nannochloropsis* (Eustigmatophyceae), with descriptions of new taxa. *Protist* 158:325-336.

Fawley, M.W., Dean, M.L., Dimmer, S.K.,& Fawley, K.P. 2006. Evaluating the morphospecies concept in the Selenastraceae (Chlorophyceae, Chlorophyta). *J. Phycol.* 42: 142-154.

Fawley, M.W., Fawley, K.P. and Owen, H.A. 2005. Diversity and ecology of picoeukaryotic algae from Lake Itasca, Minnesota, USA, including *Meyerella planktonica*, gen. et. sp. nov. (Trebouxiophyceae, Chlorophyta). *Phycologia* 44: 35-48.

Henley, W.J., Hironaka, J.L., Buchheim, M.A., Buchheim, J.A., Fawley, M.W. and Fawley, K.P. 2004. Phylogenetic analysis of the *Nannochloris/Nannochlorum* clade and description of *Picochlorum oklahomensis* gen. et. sp. nov. (Trebouxiophyceae). *Phycologia* 43: 641-52.

Fawley, M.W., Fawley, K.P and Buchheim, M.A. 2004. Molecular diversity among communities of freshwater microchlorophytes. *Microbial Ecology* 48: 489-99.

Fawley, M.W. and Fawley, K.P. 2004. A simple and rapid technique for the isolation of DNA from microalgae. *J. Phycol.* 40:223-25.

Phillips, K.A. and Fawley, M.W. 2002. Winter phytoplankton blooms under ice associated with elevated oxygen levels. *J. Phycol.* 38:1068-73.

Phillips, K.A. and Fawley, M.W.2002. Winter phytoplankton community structure in three shallow temperate lakes during ice cover. *Hydrobiologia* 470:97-113

Phillips, K.A. and Fawley, M.W. 2000. Diversity of coccoid algae in shallow lakes during winter. *Phycologia* 39:498-506.

Phillips, K.A. 2000. Assessment of potential metrics for index of wetland biological integrity (IWBI) for phytoplankton. Report submitted to the North Dakota Health Department, pp. 15.

Phillips, K.A., Jaskowiak, M. A. and Fawley, M.W. 2000. Analysis of the algal communities of the Sheyenne River, North Dakota, potentially affected by the Devils Lake emergency outlet. Report submitted to the U.S. Army Corps of Engineers, pp. 28.

Davis, L.N., Phillips, K.A. and Marshall, H.G. 1997. Seasonal abundance of autotrophic picoplankton in the Pagan River, a Nutrient Enriched Subestuary of the James River, Virginia. *Virginia Journal of Science* 48: 211-218.

Grants and contracts:

Fawley, K.P. Botanical Database. \$4,000. Arkansas Natural Heritage Commission, 2015.

Fawley, M.W., Fawley, K.P. and Bramlett, M. Alterations and Renovations to improve Biomedical Research Facilities at the University of Arkansas at Monticello. \$190,000. Arkansas INBRE project renewal, funded by the National Institutes of Health, 2015-2017. Fawley, M.W. and Fawley, K.P. Isolation of algal strains for lipid production. \$1,100. Arkansas Space Grant Consortium, 2015.

Fawley, K.P. Study of the taxonomic status of *Erythronium albidum* and *Erythronium mesochoreum* (Liliaceae) in Arkansas. \$1,500. UAM Faculty Research Grant, 2014-2015.

UAM Faculty Research Grant- Study of the taxonomic status of *Cardamine angustata* var. *ouachitana*, \$1500, 2012.

Fawley, K.P. (PI) and Fawley, M.W. (Co-PI) Diversity and Classification of the poorly known Algal Class Eustigmatophyceae. \$152,273. National Science Foundation, Systematic Biology Program, 2012-2016. (extension awarded 2015)

UAM Faculty Research Grant- Study of the taxonomic status of *Cardamine angustata* var. *ouachitana*, \$1500, 2011.

Arkansas Space Grant Consortium - Algae that can be an important food source for extended space missions, \$4100, 2010-2011, Undergraduate-Nathan Probst.

UAM Faculty Research Grant- Phylogeny and taxonomy of the algal class, Eustigmatophyceae, \$1500, 2010

Arkansas Space Grant Consortium - Algae that can be an important food source for extended space missions, \$5320, 2009-2010, Undergraduate-Nathan Probst.

UAM Faculty Research Grant-Taxonomy and diversity of the algal class, Eustigmatophyceae, \$1600, 10/2008, extended to 2009.

Arkansas Space Grant Consortium - Algae that can be an important food source for extended space missions, \$6,359, 2008-2009, Undergraduate-Sara Prior.

UAM Faculty Research Grant-Taxonomy of the freshwater alga, Nannochloropsis, \$2100, 2007

UAM Faculty Research Grant, Collaborative research on the taxonomy of the green algae *Desmodesmus* and *Scenedesmus*, \$2231, 2006

Nutrient Criteria Pilot Project for the Sheyenne River, ND. EPA/ND Department of Health. \$65,000, 2002.

Nutrient Criteria Pilot Project for the Sheyenne River, ND. EPA/ND Department of Health. \$62,391, 2001.

Collaborative research: species discovery and population dynamics of coccoid algae in Itasca State Park, Minnesota. NSF Microbial Observatories. \$400,000, (Co-PI) 2000-2007.

Instrumentation for plant cell and molecular biology. NSF-MUI. \$122,276,(Co-PI) 2000-2002.

Wetland Water Quality Standards Development in North Dakota. EPA/ND Dept. of Health, \$8,886, 1999.

Phytoplankton analysis for surface water quality monitoring of North Dakota Lakes. ND Dept. of Health, \$13,092, 1998-2000.

Survey of algal communities potentially affected by the proposed Devils Lake Emergency Outlet. US Army Corps of Engineers. \$60,000, 1997-1999.

Survey of phytoplankton communities involved in oxygen supersaturation under the ice in shallow North Dakota lakes. USGS Water Resources Research Grant Program. \$12,489, 1994-1995.

Presentations (UAM)

6th European Phycological Congress. London, 08/2015

Amaral, R.F.^{1*}, Fawley, K.P.², Němcová, Y.³, Ševčíková, T.⁴, Lukešová, A.⁵, Santos, Lília M.A¹, Fawley, M.W.², and Eliáš, M⁴. (2015). *Diversity and revised taxonomy of the Pseudellipsoidion group – a recently recognized major clade of eustigmatophyte algae*. University of Coimbra, Coimbra, Portugal¹, University of Arkansas at Monticello², Charles University, Prague, Czech Republic³, University of Ostrava, Czech Republic⁴ and Institute of Soil Biology, Academy of Sciences of the Czech Republic, České Budějovice, Czech Republic⁵.

50th Meeting of the Phycological Society of America, Philadelphia, PA, 08/2015

Fawley, M.*, Jameson, I. and Fawley, K. (2015). *Phylogeny of Nannochloropsis* (*Eustigmatophyceae*) including strains from the Australian National Algae Culture Collection. University of Arkansas at Monticello¹ and Australian National Algae Culture Collection, CSIRO National Research Collections Australia, Hobart, Tasmania, Australia². *oral presentation

Arkansas Native Plant Society Spring Meeting, UAM, Monticello, AR, 04/2015

Fawley, K.P. and Fawley, M.W. The UAM Herbarium: Past, Present and Future.

Arkansas Academy of Science, , Henderson State University, Arkadelphia, AR. 04/ 2015 Bernal, R.*, Davidson, F.*, Fawley K. and Fawley M. Evaluation of the plastid gene ccsA for use in delimiting species of the alga, *Nannochloropsis* (Eustigmatophyceae). *student poster presentation

Austin, J., Cordona-Otero, A., Taylor M., Fawley, K. and Fawley M. Diversity of freshwater *Nannochloropsis* (Eustigmatophyceae) evaluated by sequence analysis of the plastid gene ccs1. *student poster presentation

Peterson, N., Rivera, F., Vincent S., Hill M., Fawley, K. and Fawley, M. A comparison of the communities of the alga, *Nannochloropsis* (Eustigmatophyceae), in different lakes in North Dakota and Minnesota. *student poster presentation

Fawley, M. and Fawley, K. Characterization of algal strains from the Eustigmatophyceae isolated from Arkansas. (poster)

UAM Research and Scholarship Forum, 04/2015

Bernal, R., Davidson, F., Fawley K. and Fawley M. Evaluation of the plastid gene ccsA for use in delimiting species of the alga, *Nannochloropsis* (Eustigmatophyceae). *student poster presentation

Austin, J., Cordona-Otero, A., Taylor M., Fawley, K. and Fawley M. Diversity of freshwater *Nannochloropsis* (Eustigmatophyceae) evaluated by sequence analysis of the plastid gene ccs1. *student poster presentation

Peterson, N., Rivera, F., Vincent S., Hill M., Fawley, K. and Fawley, M. A comparison of the communities of the alga, *Nannochloropsis* (Eustigmatophyceae), in different lakes in North Dakota and Minnesota. *student poster presentation

Invited Presentations-Czech Republic, 04/2014

Fawley, M.W. and Fawley, K.P. Species Concepts and Definitions for Eukaryotic Microorganisms. University of Ostrava, Czech Republic.

Fawley, K.P. and Fawley, M.W. The Itasca Microbial Observatory: Diversity and Ecology of Coccoid Algae, Charles University, Prague, Czech Republic.

Arkansas Academy of Sciences Annual Meeting, Magnolia, AR, 04/2014.

Fawley, K.P.¹, Witsell, C.T.², and Fawley M.W.¹ The Status of *Cardamine dissecta* (Brassicaceae) in Arkansas. University of Arkansas at Monticello¹; Arkansas Natural Heritage Commission²;

Student Research and Scholarship Forum, UAM, Monticello, AR, 11/2013.

Collins, M.*, Jones, N.*, Lindsey, M.*, Mendosa, A.*, Roberts, C.*, Garmon, J.*, Fawley, K. and Fawley M.. Evaluation of DNA Sequences from the Nuclear Large Subunit Ribosomal RNA gene for Use in Delimiting Species of the Alga, *Nannochloropsis* (Eustigmatophyceae). *student poster presentation

Student Research and Scholarship Forum, UAM, Monticello, AR (poster), UAM School of Education STEM Open House, 09/2013.

Collins, M.*, Jones, N.*, Lindsey, M.*, Mendosa, A.*, Roberts, C.*, Garmon, J.*, Fawley, K. and Fawley M.. Evaluation of DNA Sequences from the Nuclear Large Subunit Ribosomal RNA gene for Use in Delimiting Species of the Alga, *Nannochloropsis* (Eustigmatophyceae). *student poster presentation

ARK-LSAMP Spring Conference, Little Rock, AR, 04/2013

Newhouse, K.V.*, Fawley, K. P., Fawley, M.W. and Prescott D.A. Digitization of the UAM Herbarium: Bringing Analog Data into the Digital Age. *student poster presentation

Collins, M.*, Jones, N.*, Lindsey, M.*, Mendosa, A.*, Roberts, C.*, Garmon, J.*, Fawley, K. and Fawley M.. Evaluation of DNA Sequences from the Nuclear Large Subunit Ribosomal RNA gene for Use in Delimiting Species of the Alga, *Nannochloropsis* (Eustigmatophyceae). *student poster presentation

Invited Skype lecture, 04/2013

Fawley, K.P. Managing and Curating Algal Culture Collections. Skype lecture to Dr. Travis Marsico's Curations and Collections Class, Arkansas State University.

Arizona 11th Annual Student Research Conference, Tempe, Arizona, 03/2013.

Reyes, R.M.¹, Fawley, K. P.¹, Witsell, C.T.² and Fawley M.W.¹, Evidence of Hybridization Between Two Taxa of the Genus *Cardamine* (Brassicaceae) in Arkansas. University of Arkansas at Monticello¹; Arkansas Natural Heritage Commission²; *student poster presentation.

Invited presentation, University of Tulsa, 02/2013

Fawley, K.P.* and Fawley, M.W. Species Concepts and Definitions for Eukaryotic Microorganisms. Department of Biological Sciences, University of Tulsa.

ARK-LSAMP Spring Conference, Little Rock, AR, 04/2012

Brown, D.*, Crift, R.*, Newhouse, K.*, Ohannes, M.*, Fawley, K., and Fawley, M. Evaluation of the DNA Sequences from the Nuclear Ribosomal Internal Transcribed Spacer Region for Use in Delimiting Species of the alga, *Nannochloropsis* (Eustigmatophyceae). *student poster presentation

Garcia, E.*, White, D.*, Fawley, K. and Fawley, M. 2012. The Use of Plastid Barcoding DNA Sequences to Characterize the Sedge Species, *Carex nigromarginata* and *Carex floridana*. *student poster presentation

Arkansas Academy of Sciences Annual Meeting, Magnolia, AR, 04/2012.

Fawley, K.P.^{1*}, Witsell, C.T.², Fawley, M.W.¹, Breedlove, J.S.¹, Brockman, R.J.¹, Humphrey, A.C.¹, Lawson, J.M.¹, McCallie, K.N.¹, Prescott, D.A.¹, Rushing, J.T.¹ and Whitaker, J.M.¹ Analyses of the taxonomic status of the Arkansas endemic toothwort, *Cardamine angustata* var. *ouachitana* (Brassicaceae). University of Arkansas at Monticello¹; Arkansas Natural Heritage Commission²; *Oral presentation

<u>Invited presentation, Department of Biology, University of Arkansas at Little Rock,</u> 02/2012.

Fawley, M.W.* and Fawley, K.P. Species Concepts and Definitions for Eukaryotic Microorganisms. *oral presentation

Posters at the Capitol, Little Rock, AR, 02/2012.

Fawley, K.P.¹, Witsell, C.T.², Fawley, M.W.¹, Breedlove, J.S.¹, Brockman, R.J.¹, Humphrey, A.C.¹, Lawson, J.M.¹, McCallie, K.N.¹, Prescott, D.A.^{1*}, Rushing, J.T.¹ and Whitaker, J.M.¹ *Cardamine ouachitana*, a new Arkansas Endemic Plant Revealed by DNA Sequence Analysis. University of Arkansas at Monticello¹; Arkansas Natural Heritage Commission²; *student poster presentation

Probst, N.^{1*}, Fawley, K.P.¹, Fawley, M.W.¹, Eliáš, M.² and Nemjová, K.² DNA Sequence Analysis in the Algal Class Eustigmatophyceae, a Potential Source of Essential Fatty Acids. School of Mathematical and Natural Sciences, University of Arkansas at Monticello, Monticello,

AR² and Charles University, Prague, Czech Republic². *student poster presentation

Arkansas INBRE Research Conference, Fayetteville, AR, 10/2011.

Probst, Nathan^{1*}, Fawley, Karen P.¹, Fawley, Marvin. W.¹, Eliáš, Marek², and Nemjová, Katerína². Phylogenetic analysis of newly discovered members of the algal class Eustigmatophyceae. School of Mathematical and Natural Sciences, University of Arkansas at Monticello, Monticello, AR² and Charles University, Prague, Czech Republic². Student poster presentation

Phycological Society of America Annual Meeting, Seattle, WA, 07/2011.

Fawley, K.P.^{1*}, Fawley, M.W.¹, Eliáš, M.², Nemjová, K.² and Probst, N.¹ Phylogeny of the Eustigmatophyceae. School of Mathematical and Natural Sciences, University of Arkansas at Monticello, Monticello, AR¹ and Charles University, Prague, Czech Republic². *oral presentation

Arkansas Native Plant Society Spring Meeting, Bentonville, AR, 05/2011

Fawley, M.W. and Fawley, K.P. Presentation to the Arkansas Native Plant Society on the new Botanical Research and Herbarium Building and information on a new Arkansas endemic species.

ARK-LSAMP Spring Conference, Little Rock, AR, 04/2011

Criner, K.*, De La Cruz, A.*, Jacobs, L.*, Jimenez, E.*, White, D.*, Fawley, K.P. and Fawley, M.W. Further studies of heterogeneity in the nuclear ribosomal internal transcribed spacer region of the sedges, *Carex nigromarginata* and *Carex floridana*. *student poster presentation

Garcia, E.*, Fawley, K.P. and Fawley, M.W. Heterogeneity of the Ribosomal External Transcribed Spacer Region in some *Carex* species. *student poster presentation

ASGC /NASA EPSCoR Annual Meeting ASGC, Morrilton, AR, 04/2011

Probst, N.*, Fawley, M.W. and Fawley, K.P Diversity of Freshwater Eustigmatophyceae. *Student poster presentation

Arkansas Academy of Sciences Annual Meeting, Monticello, AR, 04/2011.

Fawley, M.W.* and Fawley, K.P. Ribosomal RNA Spacer Sequences as a Tool to Identify *Carex* Species (Sedges)
*oral presentation

Fawley, K.P.^{1*}, Fawley, M.W.¹, Eliáš, M.², Nemjová, K.² and Probst, N.¹ Phylogeny of Freshwater Eustigmatophyceae. School of Mathematical and Natural Sciences, University of Arkansas at Monticello, Monticello, AR¹ and Charles University, Prague, Czech Republic². *student poster presentation

Probst, N., Fawley, M.W. and Fawley, K.P*. Diversity of Freshwater Eustigmatophyceae. *oral presentation

<u>Invited presentation to the School of Forest Resources, University of Arkansas at</u> Monticello, 02/2011

Fawley, K.P.^{1*}, Fawley, M.W.¹, Eliáš, M.², Nemjová, K.² and Probst, N.¹ Phylogeny of the Eustigmatophyceae. School of Mathematical and Natural Sciences, University of Arkansas at Monticello, Monticello, AR¹ and Charles

University, Prague, Czech Republic². oral presentation

Phycological Society of America, Michigan State University, E. Lansing, MI, 07/2010

Fawley. K.P.^{1*}, Fawley M. W.¹, Eliáš, M.², Nemjová, K.² and Probst N.¹ Phylogeny of Freshwater Eustigmatophyceae School of Mathematical and Natural Sciences, University of Arkansas at Monticello, Monticello, AR¹ and Charles University, Prague, Czech Republic². *poster presentation

Fawley, M.W.^{1*}, Fawley, K. P.¹ and Hegewald, E.² Species characterization in *Desmodesmus* (Chlorophyceae) using nuclear ITS and plastid rbcL sequence data combined with morphological analyses. School of Mathematical and Natural Sciences, University of Arkansas at Monticello¹ and Institute of Chemistry and Dynamics of the Geosphere III, Research Center Jülich, Germany². *oral presentation

<u>Meeting of the International Society for Evolutionary Protistology, Kanazawa City, Japan, 07/2010.</u>

Eliáš, M.¹, Fawley,K.P.², Nemjová, K.¹, Fawley, M.W.², Němcová, Y.¹, Probst, N.², Fišerová, M.¹, & Bailey, J.C.³ Probing into the Phylogenetic Diversity of the Neglected Algal Class Eustigmatophyceae (Ochrophyta, Stramenopiles), , Charles University, Prague, Czech Republic¹, School of Mathematical and Natural Sciences, University of Arkansas at Monticello, Monticello, AR² and University of North Carolina at Wilmington³. Poster presentation by our colleagues at Charles University. I did not attend the meeting.

ARK-LSAMP Spring Conference, Philander Smith College, Little Rock, AR, 04/2010

Bridges, A.*, Bush, E., Garcia, E.*, Fawley K. and Fawley M. Evidence for heterogeneity in the nuclear ribosomal internal transcribed spacer region of some *Carex* species (sedges). School of Mathematical and Natural Sciences, University of Arkansas at Monticello, Monticello, AR. *student poster presentation

ASGC /NASA EPSCoR Annual Meeting ASGC, Morrilton, AR, 04/2010

Probst, N.*, Fawley, M and Fawley K. Diversity of Freshwater Eustigmatophyceae. School of Mathematical and Natural Sciences, University of Arkansas at Monticello, Monticello, AR. *student poster presentation

ARK-LSAMP Spring Conference, Little Rock, AR, 04/2009

Garcia, J., Fawley, K. P. and Fawley M.W. Evidence for a new hybrid species of *Carex* (Cyperaceae), School of Mathematical and Natural Sciences University of Arkansas at Monticello, Monticello, AR. *student poster presentation

Grant, J.*, Fawley K.P. and Fawley M.W. Utility of the nuclear ribosomal external transcribed space region for the identification of *Carex* species (Cyperaceae), School of Mathematical and Natural Sciences University of Arkansas at Monticello, Monticello, AR. *student poster presentation

ASGC /NASA EPSCoR Annual Meeting, Morrilton, AR, 04/2009

Prior, S.*, Fawley, M. and Fawley K. P. DNA sequence analysis of freshwater Eustigmatophyceae, a potential source of essential fatty acids, School of Mathematical and Natural Sciences University of Arkansas at Monticello, Monticello, AR. *student oral presentation

Arkansas Academy of Sciences Annual Meeting, Clarksville, AR, 04/2009

Prior, S.*, Fawley, M. and Fawley K. P. DNA sequence analysis of freshwater Eustigmatophyceae, a potential source of essential fatty acids, School of Mathematical and Natural Sciences University of Arkansas at Monticello, Monticello, AR. *student oral presentation

INBRE Meeting, Fayetteville, AR, 11/2008

Prior, S.*, Fawley, M. and Fawley K. P. DNA sequence analysis of freshwater Eustigmatophyceae, a potential source of essential fatty acids, School of Mathematical and Natural Sciences University of Arkansas at Monticello, Monticello, AR. *student oral presentation

INBRE Meeting, Fayetteville, AR, 11/2007

Henley, M.L.*, Fawley K.P. and Fawley M.W. Identification of *Carex* (sedges) species using ribosomal ITS DNA sequence data. School of Mathematical and Natural Sciences University of Arkansas at Monticello, Monticello, AR. *student poster presentation

Arkansas Academy of Sciences, Arkansas Tech University, Russellville, AR, 04/2007

Fawley, K.P.^{1*}, Fawley, M.W.¹, Bacon, E.J.¹ and Eberhard Hegewald². Preliminary survey of the *Desmodesmus* (Chlorophyta) of Lake Chicot, including one possible new species. School of Mathematical and Natural Sciences, University of Arkansas at Monticello and Institute of Chemistry and Dynamics of the Geosphere III, Research Center Jülich, Germany. *oral presentation

Professional Service (college, other professional service including collaborative efforts with departments, programs, faculty, and public schools):

Committees:

- -HLC4 Committee, 2013
- -Search Committee for the Vice Chancellor for Advancement, 2013
- -Program Review Committee, 2007-present, (chair 2009-2014)
- -Search Committee for Dean of Mathematical and Natural Sciences, 2007
- -Bachelor of Liberal Arts Committee, 2007-2008
- -Biology Search Committee, 2007-2008

UAM Organizations:

- -Faculty mentor for ARK-LSAMP students (The ARK-LSAMP program is now the Research Program for Minority Students (UAM-RPMS)
 - -UAM Biology Club, Saline River Stream Team
 - -Faculty sponsor for Lady Knights

To the public:

- -Monticello Middle School Algae Project
- -Identification of plant specimens for Agricultural Extension agents and the general public through e-mails, digital photos and mailed specimens.
 - -UAM-ERZ Summer Science Camp
 - -UAM Heritage Garden

To the profession:

- -Native Plant Society Board Member (Secretary), 2011-present
- -Arkansas Vascular Flora Committee, 2006-present
- -Review journal articles for Journal of the Arkansas Academy of Science, Phycologia, Journal of Phycology, Applied Botany and the Journal of Applied Phycology.
 - -Review NSF proposals for the Biological Collections program
 - -Phycological Society of America (PSA) Education Committee, 2006-2007

Honors, Prizes, and Awards and Professional Associations:

- -Finalist for the Hornaday Outstanding Faculty Award, 2013
- -Nominated for Teacher of the Year, Alpha Chi, 2013
- -Rookie of the Year finalist, Alpha Chi, 2009
- -North Dakota Water Resources Research Institute Graduate Student Summer

Fellowship, 1996; 1997

- -Phi Kappa Phi induction, 1996
- -Sigma Xi induction, 1996
- -Adrian Fox Scholarship, 1995
- -Oliver Lavoy Scholarship, 1994

- -Arkansas Academy of Science
- -Arkansas Native Plant Society
- -Phycological Society of America
- -Botanical Society of America
- -SouthEast Regional Network of Expertise and Collections (SERNEC)

CURRICULUM VITAE

Marvin W. Fawley, Ph.D.

Assistant Dean for Science and Research Director, UAM Research Program for Minority Students School of Mathematical and Natural Sciences University of Arkansas at Monticello Monticello, Arkansas 71656 fawleym@uamont.edu; 870-460-1165

Education:

Wilmington College, Wilmington, Ohio Cornell University, B.S. Botany, 1977

San Francisco State University, M.A. Marine Biology, 1981 (H. Yananaka, research advisor)

Miami University, Ph.D. Botany, 1985 (K.R. Mattox and K.D. Stewart, research advisors)

Honors and Awards:

Miami University Research Fellowship, 1982-1984

Miami University Dissertation Fellowship, 1984-1985

Phi Sigma Award for Doctoral Study, Miami University, 1986

North Dakota State University Mortar Board "Preferred Professor", 1990

Provasoli Award from the Phycological Society of America for authoring the outstanding paper in the *Journal of Phycology* for 2010.

Professional Experience:

Research Assistant, Biology Department, San Francisco State University, 1980

Instructor in Biology, San Francisco State University, 1980-1981

Research Assistant, Carnegie Institution of Washington, Department of Plant Biology, Stanford, California, 1981-1982, summer 1983

Visiting Assistant Professor of Botany, Miami University, 1986

Assistant Professor of Botany/Biology, North Dakota State University, 1986-1992

Associate Professor of Botany/Biology, North Dakota State University, 1992-1999

Professor of Biological Sciences, North Dakota State University, 1999-2006

Assistant Dean for Science and Research, University of Arkansas Monticello, 2007-Present

Campus Coordinator, Arkansas Louis Stokes Alliance for Minority Participation, 2008-2013.

Director, Research Program for Minority Students, University of Arkansas at Monticello, 2013-Present.

Research Interests:

Evolution, diversity, and systematics of plants and algae.

Application of molecular techniques to ecological studies and identification of algae.

Phylogeny of the green algae.

Phylogeny of the Eustigmatophyceae.

Diversity of freshwater coccoid algae.

Assessment of possible new taxa of vascular plants in Arkansas.

Courses Taught:

Introductory Botany Evolution

Phycology Evolution: Scientific and Cultural Perspectives

Cell Biology Molecular Evolution and Phylogenetics

General Biology, Cellular Genetics

Biology Seminar Research Experience for RPMS Students

Active Grants:

Partnership for Biomedical Research in Arkansas (Facilities Alterations and Renovations Section). \$190,000. 2015-2020. National Institutes of Health, INBRE Program. UAM CoPI; Lawrence Cornett, UAMS, PI. (CoPIs Karen Fawley and Morris Bramlett).

Equipment to enhance biomedical research and education at UAM. \$50,000. 2015-2016 Arkansas INBRE.

Diversity and Classification of the poorly known Algal Class Eustigmatophyceae, \$152,273. 2012-2016. National Science Foundation. (CoPI; Karen Fawley, PI)

Arkansas Alliance for Minority Participation. \$3,471,665. 2013-2018. National Science Foundation. (CoPI; Mary Benjamin, UAPB, PI) (Note: UAM does not receive direct support from this grant)

Additional Grants and Contracts:

Isolation of algal strains for lipid production, \$1150. Arkansas Space Grant Consortium. 2014-2015. (PI; Karen Fawley, CoPI)

UAM-ASSET Initiative Summer Research Experience and Internship Program. \$6,400. 2014. Arkansas Science and Technology Authority.

Arkansas Science and Technology Authority ASSET II Summer STEM Internships. \$20,300. 2013-2014. Arkansas Science and Technology Authority

Research Microscope System for UAM Biomedical Research and Education. \$25,000. 2013. Arkansas INBRE.

Algae that can be an important food source for extended space missions. \$4,100. 2010-2011. Arkansas Space Grant Consortium. (with Karen Fawley)

Arkansas Alliance for Minority Participation (ARK-LSAMP) in STEM Careers – New Alliance, \$304,023. 2008-2013 National Science Foundation. (CoPI; Morris Bramlett, PI)

Equipment to enhance Cell and Molecular Biology Research. \$25,000. 2012. Arkansas INBRE.

Algae that can be an important food source for extended space missions. \$6,359. 2009-2010. Arkansas Space Grant Consortium. (with Karen Fawley)

Equipment for Cell and Molecular Biology. \$18,900. 2008. Arkansas INBRE.

Collaborative Research: A multi-gene approach to chlorophytan phylogeny and diversity. \$107,575. 2002-2006. National Science Foundation, Systematic Biology.

Collaborative research: species discovery and population dynamics of coccoid algae in Itasca State Park, Minnesota (with Karen Fawley). \$436,500. 2000-2007. National Science Foundation, Microbial Observatories Program.

Nutrient criteria pilot project for the Sheyenne River. (with Karen Fawley (PI), Megan Jaskowiak) \$65,000. 2002-2003. US EPA - North Dakota Department of Health.

Genetic Diversity of Aphanomyces cochliodies. \$25,000. 2000-2003. USDA.

- Instrumentation for Plant Cell and Molecular Biology (with Karen Fawley, Marc Anderson, and Alan White) \$121,276. 2000-2002. NSF, Instrumentation and Instrument Development Program.
- Physical and environmental factors influencing the periphyton communities of the Sheyenne River, North Dakota (with Karen Fawley). \$16,968. 2001-2002. North Dakota Water Resources Research Institute.
- Phylogeny of basal green algae: preliminary analysis of RNA polymerase II subunit genes. \$6,000. 2000-2001. ND EPSCoR.
- Identification of Great Lakes coccoid algae using molecular tools. \$5,000. 1999-2000. NDSU Research Foundation.
- Purchase of a digital camera system. \$2,600. 1998. North Dakota EPSCoR.
- Purchase of a transilluminator. \$500. 1998. North Dakota EPSCoR.
- Phylogeny and Systematics of Coccoid Prasinophytes. \$110,000. 1997-2000. National Science Foundation, Systematic Biology Program.
- Survey of the Algal Communities Potentially Affected by the Proposed Devils Lake Emergency Outlet. 1997-1999. \$60,000. U.S. Army Corps of Engineers.
- Supplies for DNA sequencing. \$607. 1997. North Dakota EPSCoR.
- Purchase of a "Minibeadbeater". \$685. 1997. North Dakota EPSCoR.
- Phylogeny and systematics of coccoid prasinophytes. \$15,000. 1996-1997. North Dakota EPSCoR.
- Development of a simple and rapid technique for identification of organisms important to water quality, focusing on the euglenoids of the Red River of the North. 1995-1996. \$17,450. North Dakota Water Resources Research Institute. (with K. Phillips)
- Interim support for the development of ribosoma RNA-based techniques for the detection of aquatic microorganisms. 1995. \$3,100. North Dakota State University Grant-in-Aid.
- Phylogeny and systematics of coccoid prasinophytes. 1995-1996. \$18,785. ND-EPSCoR.
- Survey of the phytoplankton communities involved in oxygen supersaturation under the ice in shallow North Dakota Lakes. 1994-1995. \$12,489. North Dakota Water Resources Research Institute.
- The origins and phylogeny of green plants: a research coordination group. 1994-1999. Joint program on Collaborative Research in Plant Biology (NSF, USDA, DOE). (Participant, M. Buchheim, University of Tulsa, PI)
- Graduate student support for the development of oligonucleotide probes. 1992-1994. \$17,400. North Dakota ASEND Program.
- Development of ribosomal RNA-based oligonucleotide probes for green ultraphytoplankton. 1993-1995. \$161,125. National Science Foundation, Biological Oceanography Program.
- Purchase of a Dual Wavelength scanning spectrophotometer. 1990-1992. \$23,857. NSF Biological Instrumentation Program. (S. Meinhardt, PI, five other CoPIs)
- Evaluating the validity of pigment fingerprints as taxonomic indicators in coccoid green ultraphytoplankton. 1990-1992. \$99,539. National Science Foundation Biological Oceanography Program.
- Summer Undergraduate Research Experience. 1989-1991. \$4,750. NSF EPSCoR Program, North Dakota ASEND.
- Undergraduate research in plant molecular biology. 1988. \$32,000. National Science Foundation Research Experiences for Undergraduates Program. (with M. Duysen, R. Sparks, and A. Oleson)

- Comparative biochemistry and immunochemistry of the light-harvesting complexes of green algae. 1988-1990. \$60,000. NSF EPSCoR Program, North Dakota ASEND.
- Purchase of Centrifuges and Rotors. \$46,000. 1987-1990. NSF Biological Instrumentation Program. (with M. Sheridan, M. Duysen and D. Galitz)
- Separation and quantification of pigments from photosynthetic pigment-protein complexes by high-performance liquid chromatography. \$1000. 1987. North Dakota State University Grant-in-Aid Program.

Selected Publications:

- Fawley, M.W., Jameson, I. and Fawley, K.P. The phylogeny of the genus *Nannochloropsis* (Monodopsideaceae, Eustigmatophyceae), with descriptions of *N. australis*, *sp. nov.* and *Microchloropsis*, *gen. nov.* In revision for *Phycologia*.
- Fawley, K.P., Eliáš, M. and Fawley, M.W. 2014. The diversity and phylogeny of the commercially important algal class Eustigmatophyceae, including the new clade *Goniochloridales*. *Journal of Applied Phycology* 26:1773-1782.
- Fawley, M.W., Fawley, K.P. and E. Hegewald. 2013. *Desmodesmus baconii* (Chlorophyta) a new species with double rows of arcuate spines. *Phycologia* 52:565-572.
- Fawley, K.P., Witsell, C.T., Fawley, M.W., Breedlove, J.S., Brockman, R.J., Humphrey, A.C., Lawson, J.M., McCallie, K.N., Prescott, D.A., Rushing, J.T. and Whitaker, J.M. 2012. A possible new Arkansas endemic plant revealed by DNA sequence analysis. *Journal of the Arkansas Academy of Science*, 66:50-54.
- Fawley, M. W., Fawley, K. P. and Hegewald, E. 2011. Taxonomy of *Desmodesmus serratus* (Chlorophyceae, Chlorophyta) and related taxa based upon morphological and DNA sequence data. *Phycologia* 50:23-56.
- Zechman, F.W., Verbruggen, H., Leliaert, F., Buchheim, M.A., Fawley, M.W., Ashworth, M. Spalding, H., Pueschel, C.M., Buchheim, J.A., Verghese, B. and Hanisak, M.D. 2010. The deep-water marine palmelloid algae *Palmophyllum* and *Verdigellas* represent an ancient lineage of green plants. *Journal of Phycology* 46:1288-1295.
- Prior, S.E., Fawley, M.W. and Fawley, K.P. 2009. DNA sequence analysis of freshwater Eustigmatophyceae, a potential source of essential fatty acids. *Journal of the Arkansas Academy of Science* 63:139-144
- Acosta-Leal, R., Fawley, M.W. and Rush, C. M. 2008. Changes in the intraisolate genetic structure of *Beet necrotic yellow vein virus* populations associated with plant resistance breakdown. *Virology* 376:60-68.
- Fawley, K.P. and Fawley, M.W. 2007. Observations on the diversity and ecology of freshwater *Nannochloropsis* (Eustigmatophyceae), with descriptions of new taxa. *Protist* 158:325-336.
- Johnson, J.L., Fawley, M.W. and Fawley, K.P. 2007. The diversity of *Scenedesmus* and *Desmodesmus* (Chlorophyceae) in Itasca State Park, Minnesota, USA. *Phycologia* 46:214-229.
- Kim, E., Wilcox, L.W., Fawley, M.W., and Graham, L.E. 2006. Phylogenetic position of the green flagellate *Mesostigma viride* based on alpha-tubulin and beta-tubulin gene sequences. *International Journal of Plant Science* 167:873-883.
- Fawley, M.W., Dean, M. L., Dimmer, S. K. and Fawley, K.P. 2006. Evaluating the morphospecies concept in the Selenastraceae (Chlorophyceae, Chlorophyta). *Journal of Phycology* 42:142-154.

- Fawley, M.W., Fawley, K.P. and Owen, H.A. 2005. Diversity and ecology of small coccoid green algae from Lake Itasca, Minnesota, USA, including *Meyerella planktonica*, gen. et sp. nov. (Trebouxiophyceae, Chlorophyta). *Phycologia* 44:35-48.
- Fawley, M.W. and Fawley, K.P. 2004. A simple and rapid technique for the isolation of DNA from microalgae. *Journal of Phycology* 40:223-225.
- Fawley, M.W., Fawley, K.P. and Buchheim, M.A. 2004. Molecular diversity among communities of freshwater microchlorophytes. *Microbial Ecology* 48:489-499. (Microbial Observatories Special Edition)
- Henley, W.J., Hironaka, J.L., Buchheim, M.A., Buchheim, J.A., Fawley, M.W. and Fawley, K.P. 2004. Phylogenetic analysis of the *Nannochloris/Nanochlorum* clade and description of *Picochlorum oklahomensis*, gen. et sp. nov. (Trebouxiophyceae). *Phycologia* 43:641-652.
- Phillips, K.A. and Fawley, M.W. 2001. Winter phytoplankton community structure in three shallow termperate lakes during ice cover. *Hydrobiologia* 470:97-113.
- Phillips, K.A. and Fawley, M.W. 2001. Winter phytoplankton blooms under ice associated with elevated oxygen levels. *Journal of Phycology* 38:1068-1073.
- Phillips, K.A. and Fawley, M.W. 2000. Diversity of coccoid algae in shallow lakes during winter. *Phycologia* 39:498-506.
- Fawley, M.W., Yun, Y. and Qin, M. 2000. Phylogenetic analyses of 18S rDNA sequences reveal a new coccoid lineage of the Prasinophyceae (Chlorophyta). *Journal of Phycology* 36:387-393.
- Fawley, M.W., Qin, Mingbo, and Yun, Y. 1999. The relationship between *Pseudoscourfieldia marina* and *Pycnococcus provasolii* (Prasinophyceae, Chlorophyta): evidence from 18S rDNA sequence data. *Journal of Phycology* 35:838-843.
- Kang, T.J. and Fawley, M.W. 1997. Variable (CA/GT)_n simple sequence repeat DNA in the alga *Chlamydomonas*. *Plant Molecular Biology* 35:943-948.
- Knauber, D.C., Berry, E.S. and Fawley, M.W. 1996. Ribosomal RNA-based oligonucleotide probes to identify marine green ultraphytoplankton. *Journal of Eukaryotic Microbiology* 43:89-94.
- Fawley, M.W. and Buchheim, M.A. 1995. Loroxanthin, a phylogenetically useful character in *Chlamydomonas* and other chlorophycean flagellates. *Journal of Phycology* 31:664-667.
- Jiao, S. and Fawley, M.W. 1994. A cDNA clone encoding a light-harvesting protein from *Mantoniella squamata. Plant Physiology* 104:797-8.
- Fawley, M.W. 1993. Structure of a prasinoxanthin-chlorophyll *a/b* light-harvesting complex from the green flagellate *Pseudoscourfieldia marina* (Micromonadophyceae). *Biochimica et Biophysica Acta*. 1183:85-90.
- Fawley, M.W. 1992. Photosynthetic pigments of *Pseudoscourfieldia marina* and select green flagellates and coccoid ultraphytoplankton: implications for the systematics of the Micromonadophyceae (Chlorophyta). *Journal of Phycology* 28:26-31.
- Fawley, M.W., Douglas, C.A., Stewart, K.D. and Mattox, K.R. 1990. Light-harvesting pigment-protein complexes of the Ulvophyceae (Chlorophyta): Characterization and phylogenetic significance. *Journal of Phycology* 26:186-195.
- Fawley, M.W. 1989. A new form of chlorophyll *c* involved in light-harvesting. *Plant Physiology* 91:727-732.

- Fawley, M.W., Stewart, K.D. and Mattox, K.R. 1986. The novel light-harvesting pigment-protein complex of *Mantoniella squamata* (Chlorophyta): phylogenetic implications. *Journal of Molecular Evolution* 23:168-176.
- Fawley, M.W. and Grossman, A.R. 1986. Polypeptides of a light-harvesting complex of the diatom *Phaeodactylum tricornutum* are synthesized in the cytoplasm of the cell as precursors. *Plant Physiology* 81:149-155.

Presentations since 2006 (UAM)

Invited Presentations

- Fawley, K.P. and Fawley, M.W. The UAM Herbarium: Past, Present and Future. Presentation to the Arkansas Native Plant Society, University of Arkansas at Monticello, 04/2015
- Fawley, M.W. and Fawley, K.P. Species Concepts and Definitions for Eukaryotic Microorganisms. University of Ostrava, Czech Republic. 04/2014
- Fawley, K.P. and Fawley, M.W. The Itasca Microbial Observatory: Diversity and Ecology of Coccoid Algae, The Charles University in Prague, Prague, Czech Republic. 04/2014
- Fawley, K.P. and Fawley, M.W. Species Concepts and Definitions for Eukaryotic Microorganisms. Department of Biological Sciences, University of Tulsa. University of Tulsa, 02/2013
- Fawley, M.W. and Fawley, K.P. Species Concepts and Definitions for Eukaryotic Microorganisms. Department of Biology, University of Arkansas at Little Rock, 02/2012.
- Fawley, K.P., Fawley, M.W., Eliáš, M., Nemjová, K. and Probst, N. Phylogeny of the Eustigmatophyceae. School of Forest Resources, University of Arkansas at Monticello, 02/2011

Presentations at International Meetings

6th European Phycological Congress. London, 08/2015.

Amaral, R.F.^{1*}, Fawley, K.P.², Němcová, Y.³, Ševčíková, T.⁴, Lukešová, A.⁵, Santos, Lília M.A¹, Fawley, M.W.², and Eliáš, M⁴. *Diversity and revised taxonomy of the* Pseudellipsoidion *group – a recently recognized major clade of eustigmatophyte algae*. University of Coimbra, Coimbra, Portugal¹, University of Arkansas at Monticello², Charles University, Prague, Czech Republic³, University of Ostrava, Czech Republic⁴ and Institute of Soil Biology, Academy of Sciences of the Czech Republic, České Budějovice, Czech Republic⁵.

50th Meeting of the Phycological Society of America, Philadelphia, PA, 08/2015.
Fawley, M.*, Jameson, I. and Fawley, K. *Phylogeny of Nannochloropsis*(Eustigmatophyceae) including strains from the Australian National Algae Culture
Collection. University of Arkansas at Monticello¹ and Australian National Algae Culture

Collection, CSIRO National Research Collections Australia, Hobart, Tasmania, Australia². *oral presentation

Phycological Society of America Annual Meeting, Seattle, WA, 07/2011.

- Fawley, K.P., Fawley, M.W., Eliáš, M., Nemjová, K. and Probst, N. Phylogeny of the Eustigmatophyceae.
- Fawley, M.W., Buchheim, M.A., and Zechman, F.W. Phylogeny of the Pedinophyceae (Chlorophyta).

Phycological Society of America, Michigan State University, E. Lansing, MI, 07/2010

- Fawley, K.P., Fawley, M.W., Eliáš, M., Nemjová, K. and Probst, N.. Phylogeny of Freshwater Eustigmatophyceae.
- Fawley, M.W., Fawley, K. P. and Hegewald, E. Species characterization in *Desmodesmus* (Chlorophyceae) using nuclear ITS and plastid rbcL sequence data combined with morphological analyses.

International Society for Evolutionary Protistology, Kanazawa City, Japan, 07/2010.

Eliáš, M., Fawley, K.P., Nemjová, K., Fawley, M.W., Němcová, Y., Probst, N., Fišerová, M., and Bailey, J.C. Probing into the Phylogenetic Diversity of the Neglected Algal Class Eustigmatophyceae (Ochrophyta, Stramenopiles).

Annual Meeting of the American Society for Virology, Ithaca, NY. 07/2008

Acosta-Leal, R., Bryan, B. K., Fawley, M. W., and Rush, C. M. 2008. Dynamics of Beet necrotic yellow vein virus (BNYVV) quasispecies during host adaptation.

Presentations at Regional Meetings

Arkansas Academy of Science, , Henderson State University, Arkadelphia, AR. 04/2015. Bernal, R.*, Davidson, F.*, Fawley K. and Fawley M. Evaluation of the plastid gene ccsA for use in delimiting species of the alga, *Nannochloropsis* (Eustigmatophyceae). *student poster presentation

Austin, J., Cordona-Otero, A., Taylor M., Fawley, K. and Fawley M. Diversity of freshwater *Nannochloropsis* (Eustigmatophyceae) evaluated by sequence analysis of the plastid gene ccs1. *student poster presentation

Peterson, N., Rivera,F., Vincent S., Hill M., Fawley, K. and Fawley, M. A comparison of the communities of the alga, *Nannochloropsis* (Eustigmatophyceae), in different lakes in North Dakota and Minnesota. *student poster presentation

Fawley, M. and Fawley, K. Characterization of algal strains from the Eustigmatophyceae isolated from Arkansas. (poster)

UAM Research and Scholarship Forum, 04/2015.

Bernal, R., Davidson, F., Fawley K. and Fawley M. Evaluation of the plastid gene ccsA for use in delimiting species of the alga, *Nannochloropsis* (Eustigmatophyceae). *student poster presentation

Austin, J., Cordona-Otero, A., Taylor M., Fawley, K. and Fawley M. Diversity of freshwater *Nannochloropsis* (Eustigmatophyceae) evaluated by sequence analysis of the plastid gene ccs1. *student poster presentation

Peterson, N., Rivera, F., Vincent S., Hill M., Fawley, K. and Fawley, M. A comparison of the communities of the alga, *Nannochloropsis* (Eustigmatophyceae), in different lakes in North Dakota and Minnesota. *student poster presentation

Arkansas Academy of Sciences Annual Meeting, Searcy, AR, 04/2014.

Fawley, K.P., Witsell, C.T. and Fawley, M.W.. The Status of *Cardamine dissecta* (Brassicaceae) in Arkansas.

Student Research and Scholarship Forum, UAM, Monticello, AR, 11/2013.

Collins, M., Jones, N., Lindsey, M., Mendosa, A., Roberts, C., Garmon, J., Fawley, K. and Fawley, M. Evaluation of DNA Sequences from the Nuclear Large Subunit Ribosomal RNA gene for Use in Delimiting Species of the Alga, *Nannochloropsis* (Eustigmatophyceae). student poster presentation

UAM School of Education STEM Open House, 09/2013.

Collins, M., Jones, N., Lindsey, M., Mendosa, A., Roberts, C., Garmon, J., Fawley, K. and Fawley, M. Evaluation of DNA Sequences from the Nuclear Large Subunit Ribosomal RNA gene for Use in Delimiting Species of the Alga, *Nannochloropsis* (Eustigmatophyceae). student poster presentation

ARK-LSAMP Spring Conference, Little Rock, AR, 04/2013

Newhouse, K.V., Fawley, K. P., Fawley, M.W. and Prescott, D.A. Digitization of the UAM Herbarium: Bringing Analog Data into the Digital Age. Poster presented by K. Newhouse.

Collins, M., Jones, N., Lindsey, M., Mendosa, A., Roberts, C., Garmon, J., Fawley, K. and Fawley, M. Evaluation of DNA Sequences from the Nuclear Large Subunit Ribosomal RNA gene for Use in Delimiting Species of the Alga, *Nannochloropsis* (Eustigmatophyceae). student poster presentation

Arizona 11th Annual Student Research Conference, Tempe, Arizona, 03/2013.

Reyes, R.M., Fawley, K. P., Witsell, C.T. and Fawley, M.W. Evidence of Hybridization Between Two Taxa of the Genus *Cardamine* (Brassicaceae) in Arkansas. Poster presented by R. Reyes.

ARK-LSAMP Spring Conference, Little Rock, AR, 04/2012

Brown, D., Crift, R., Newhouse, K., Ohannes, M., Fawley, K., and Fawley, M. Evaluation of the DNA Sequences from the Nuclear Ribosomal Internal Transcribed Spacer Region for Use in

- Delimiting Species of the alga, *Nannochloropsis* (Eustigmatophyceae). Student poster presentation
- Garcia, E., White, D., Fawley, K. and Fawley, M. 2012. The Use of Plastid Barcoding DNA Sequences to Characterize the Sedge Species, *Carex nigromarginata* and *Carex floridana*. student poster presentation

Arkansas Academy of Sciences Annual Meeting, Magnolia, AR, 04/2012.

Fawley, K.P., Witsell, C.T., Fawley, M.W., Breedlove, J.S., Brockman, R.J., Humphrey, A.C., Lawson, J.M., McCallie, K.N., Prescott, D.A., Rushing, J.T. and Whitaker, J.M. Analyses of the taxonomic status of the Arkansas endemic toothwort, *Cardamine angustata* var. *ouachitana* (Brassicaceae).

Posters at the Capitol, Little Rock, AR, 02/2012.

- Fawley, K.P., Witsell, C.T., Fawley, M.W., Breedlove, J.S., Brockman, R.J., Humphrey, A.C., Lawson, J.M., McCallie, K.N., Prescott, D.A., Rushing, J.T. and Whitaker, J.M. *Cardamine ouachitana*, a new Arkansas Endemic Plant Revealed by DNA Sequence Analysis. Poster presentation by Drew Prescott.
- Probst, N., Fawley, K.P., Fawley, M.W., Eliáš, M. and Nemjová, K. DNA Sequence Analysis in the Algal Class Eustigmatophyceae, a Potential Source of Essential Fatty Acids. Poster presentation by Nathan Probst.

Arkansas INBRE Research Conference, Fayetteville, AR, 10/2011.

Probst, Nathan, Fawley, Karen P., Fawley, Marvin. W., Eliáš, Marek, and Nemjová, Katerína. Phylogenetic analysis of newly discovered members of the algal class Eustigmatophyceae. Poster presentation, Nathan Probst.

Arkansas Native Plant Society Spring Meeting, Bentonville, AR, 05/2011

Fawley, M.W. and Fawley, K.P. Presentation to the Arkansas Native Plant Society on the new Botanical Research and Herbarium Building and information on a new Arkansas endemic species.

ARK-LSAMP Spring Conference, Little Rock, AR, 04/2011

- Criner, K., De La Cruz, A., Jacobs, L., Jimenez, E., White, D., Fawley, K.P. and Fawley, M.W. Further studies of heterogeneity in the nuclear ribosomal internal transcribed spacer region of the sedges, *Carex nigromarginata* and *Carex floridana*. student poster presentation
- Garcia, E., Fawley, K.P. and Fawley, M.W. Heterogeneity of the Ribosomal External Transcribed Spacer Region in some *Carex* species. Poster presented by Elia Garcia.

ASGC /NASA EPSCoR Annual Meeting ASGC, Morrilton, AR, 04/2011

Probst, N., Fawley, M.W. and Fawley, K.P Diversity of Freshwater Eustigmatophyceae. Poster presented by Nathan Probst.

Arkansas Academy of Sciences Annual Meeting, Monticello, AR, 04/2011.

- Fawley, M.W. and Fawley, K.P. Ribosomal RNA Spacer Sequences as a Tool to Identify *Carex* Species (Sedges)
- Fawley, K.P., Fawley, M.W., Eliáš, M., Nemjová, K. and Probst, N. Phylogeny of Freshwater Eustigmatophyceae.
- Probst, N., Fawley, M.W. and Fawley, K.P. Diversity of Freshwater Eustigmatophyceae. Poster presented by Nathan Probst.

ARK-LSAMP Spring Conference, Philander Smith College, Little Rock, AR, 04/2010

Bridges, A., Bush, E., Garcia, E., Fawley, K. and Fawley, M. Evidence for heterogeneity in the nuclear ribosomal internal transcribed spacer region of some *Carex* species (sedges).. School of Mathematical and Natural Sciences, University of Arkansas at Monticello, Monticello, AR. Student poster presentation.

ASGC /NASA EPSCoR Annual Meeting ASGC, Morrilton, AR, 04/2010

Probst, N., Fawley, M., and Fawley, K. Diversity of Freshwater Eustigmatophyceae. Student poster presentation.

ARK-LSAMP Spring Conference, Little Rock, AR, 04/2009

- Garcia, J., Fawley, K.P. and Fawley, M.W. Evidence for a new hybrid species of *Carex* (Cyperaceae). Student poster presentation.
- Grant, J., Fawley, K.P. and Fawley, M.W. Utility of the nuclear ribosomal external transcribed space region for the identification of *Carex* species (Cyperaceae), , Student poster presentation.

ASGC /NASA EPSCoR Annual Meeting, Morrilton, AR, 04/2009

Prior, S., Fawley, M.W. and Fawley, K.P. DNA sequence analysis of freshwater Eustigmatophyceae, a potential source of essential fatty acids. Student oral presentation.

Arkansas Academy of Sciences Annual Meeting, Clarksville, AR, 04/2009

Prior, S., Fawley, M.W. and Fawley, K.P. DNA sequence analysis of freshwater Eustigmatophyceae, a potential source of essential fatty acids. Student oral presentation.

Arkansas INBRE Research Conference, Fayetteville, AR, 11/2008

Prior, S., Fawley, M.W. and Fawley, K.P. DNA sequence analysis of freshwater Eustigmatophyceae, a potential source of essential fatty acids. Student oral presentation.

Arkansas INBRE Research Conference, Fayetteville, AR, 11/2007

Henley, M.L., Fawley, K.P., and Fawley, M.W. Identification of *Carex* (sedges) species using ribosomal ITS DNA sequence data. Student poster presentation.

Arkansas Academy of Sciences, Arkansas Tech University, Russellville, AR, 04/2007 Fawley, K.P., Fawley, M.W., Bacon, E.J. and Hegewald, E. Preliminary survey of the *Desmodesmus* (Chlorophyta) of Lake Chicot, including one possible new species.

Current collaborators:

Mark Buchheim, Univ. of Tulsa; Heather Owen, Univ. of Wisconsin, Milwaukee; Hilary McManus, Le Moyne College; Curt Pueschel, SUNY Binghamton; Karen Fawley, UAM; Theo Witsell, Arkansas Natural Heritage Commission; Pierre Metzger, Ecole Nationale Superieure de Chimie de Paris; Eberhard Hegewald, Germany; Eric Sundell, UAM; Marek Eliáš, University of Ostrava, Czech Republic; Ian Jameson, Australia; Raquel Amaral, University of Coimbra, Coimbra, Lília M.A Santos, Portugal; Yvonne Němcová, Charles University, Prague, Czech Republic; Alena Lukešová, Institute of Soil Biology, Academy of Sciences of the Czech Republic, České Budějovice, Czech Republic.

Past Graduate Students:

Shuping Jiao, M.S., Pioneer Seeds, Iowa

Yue Yun, M.S., Ph.D. program, Washington University

Tae-Jin Kang, Ph.D., Korea

Karen Phillips Fawley, Ph.D., UAM

Christine Donohue, M.S., North Dakota State University

Megan Jaskowiak, Ph.D., Cincinnati, Ohio

Michelle Dean, M.S., Milwaukee, Wisconsin

Joni Johnson, M.S., Lansing, MI.

Service

At the University of Arkansas at Monticello

Director, UAM Research Program for Minority Students, 2013-present

Herbarium Building Committee, 2012-present

Contact person for Udall Scholarship program, 2011-present

Promotion and Tenure Committee, 2011

Arkansas Space Grant Consortium, UAM campus representative, 2010-present

Promotion and Tenure Committee, 2010, Chair

Chemistry Search Committee, 2009, Chair

Biology Search Committee, 2008, Chair

UAM-ERZ Summer Science Camp, 2008

Arkansas Louis Stokes Alliance for Minority Participation, UAM Coordinator, 2008-2013

At North Dakota State University

University Computer Planning and Goals Committee, 1998-2006. Chair of the Instructional Technology Subcommittee

Plant Physiology Search Committee, 1998-1999, Chair

Cellular and Molecular Biology Graduate Program Steering Committee, 1996-1998

Safety Officer, 1989-1998

Editorial Board, Journal of Phycology, 1995-1997

Director of the Botany/Biology Graduate Program, 1990-1998

College of Science and Mathematics Teaching Evaluation Committee, 1989

College of Science and Mathematics Promotion, Tenure and Evaluation Committee, 1989-1991

College of Science and Mathematics Student Progress Committee, 1988-2006

College of Science and Mathematics Student Recruiting Committee, 1988-1991

University Chemical Safety Committee, 1989-2006

University Bush Planning Grant Committee, 1989-1990

Biology Committee, 1987-1991

Plant Cell Biology Search Committee, 1987

College of Science and Mathematics Student/Faculty Relations, 1986-1988

Manuscript Reviewer for:

Biochimica et Biophysica Acta

BioTechniques

Biotechnology Progress

Environmental Microbiology

European Journal of Phycology

Journal of Phycology

Journal of the North American Benthological Society

Phycologia

Phycological Research

PLOS One

Protist

The Southwestern Naturalist

Proposal Reviewer for:

NSF Systematic Biology Program

NSF Biological Oceanography Program

NSF Biotic Surveys and Inventories Program

NSF Biological Instrumentation Program

NSF Office of Polar Programs

NSF International Programs

Natural Sciences and Engineering Research Council of Canada

NSF Systematic Biology Program Panel, 2006

Other service to the profession:

Invited participant in NSF survey on the peer review process and award management, 2007 Organized symposium on the green algae at the Phycological Society of America Annual Meeting, Williamsburg VA, 2004

Society membership:

Phycological Society of America

International Phycological Society

Arkansas Native Plant Society

Arkansas Academy of Science

Botanical Society of America

Community Involvement:

Board Vice-chair, Dakota Montessori School, 1987-1988; Baseball coach, 1990-1998; Chair, Social Action Committee, Fargo-Moorhead Unitarian Universalist Church, 2002-2006; Leadership Council, Fargo-Moorhead Unitarian Universalist Church, 2004-2006; Advisory committee, Probstfield Organic Community Gardens, 2003-2006; Organizing committee, South Agassiz Resource Council, 2004-2005. Presented Basic Botany Lecture for Master Gardner Training Course, 2008-2009; 2014-2015; Monticello Middle School Algae Project.

Curriculum Vitae

John L. Hunt, Ph.D. School of Mathematical and Natural Sciences University of Arkansas at Monticello Monticello, AR 71656

870-460-1466

E-mail: huntj@uamont.edu

Work Experience:

2015-Current	Professor, University of Arkansas at Monticello, Monticello, AR.
2014-Current,	Director of Pre-Medical Studies, University of Arkansas at Monticello, Monticello, AR.
2010-2015	Associate Professor, University of Arkansas at Monticello, Monticello, AR.
2004-2010	Assistant Professor, University of Arkansas at Monticello, Monticello, AR. Granted tenure, 2010.
1996-2004	Instructor and Graduate Teaching Assistant, Auburn University, Auburn, AL.
2002	State Lands Division, Alabama Department of Conservation and Natural Resources, Montgomery, AL. Field survey of bats around Lake Tensaw, AL.
2000-2001	Oil and Gas Consortium, Artesia, NM. Field survey to determine status of populations of the lesser prairie-chicken (<i>Tympanuchus pallidicinctus</i>) in southeastern New Mexico.
1997	Auburn University, AL. Participated in endangered gray bat habitat evaluation under the direction of Dr. Troy Best.
1979-1996	Genuine Parts Company, Little Rock, AR. Managed various retail and wholesale auto parts sales locations. Continued in a part-time capacity until 1999.

Education:

2004	Auburn University. Ph.D. Dissertation subject: Investigation into the decline of populations of the lesser prairie-chicken (<i>Tympanuchus</i>
	pallidicinctus Ridgway) in southeastern New Mexico. Major professor—
	Dr. Troy L. Best. Awarded Presidential Fellowship—1999. Graduate
	Dean's Award for Excellence—2000-2001. Named an Outstanding
	Doctoral Student—2002. GPA: 4.0.

1999 Auburn University. M.S. in Zoology. Thesis: Food habits of scaled

quail, northern bobwhites, and mourning doves in southeastern New Mexico. Major professor—Dr. Troy L. Best. Department of Wildlife and Zoology Outstanding Graduate Teaching Award—1999. GPA: 4.0.

1996 University of Arkansas at Little Rock. B.S. in Biology (Summa cum

laude). Minor—History. Martha Couch Givens Award (Outstanding

Senior in Biology)—1996. GPA: 3.962.

1977 Paron High School, Paron, AR. Valedictorian.

Research Experience:

2011-Current	Study of fecal hormone techniques in bats with Dr. Matt Grilliot and Dr. Christopher Sims.
2011-2013	Survey of diversity of dung beetles in southeastern Arkansas.
2010-2012	Study of reproductive habits of pocket gophers in southern Arkansas and northern Louisiana.
2009-2012	Impact of altered forms of <i>Drosophila</i> kinase p70S6 on cell size. Coinvestigator with Dr. Mary Stewart.
2007-Current	Survey of mammalian diversity in southeastern Arkansas.
2006-Current	Study of conservation status of anhinga (<i>Anhinga anhinga</i>) with Dr. Christopher Sims.
2005	Survey of vertebrates at Gulf Shores State Park, Alabama.
2001-2004	Participated in study of distribution of bats in Alabama.
2000-Current	Investigation into environmental effects on declines in lesser prairie chickens (<i>Tympanuchus pallidicinctus</i>). Involved in gathering and analysis of data on vegetation, grazing by livestock, climate, noise pollution, habitat fragmentation, and effects of oil exploration in habitat of lesser prairie chickens.
1999-2000	Participated in study of winter roosts of Mexican free-tailed bats in northern Mexico. Involved in location, measurement, and evaluation of

	condition of winter roosts of bats from Carlsbad Caverns National Park, NM, and collection and preparation of museum specimens.
1998	Volunteered in study of song rates of house finches at Auburn University, AL.
1997-2000	Participated in study of mammals in Colima, Mexico. Involved in preparation of museum specimens of rodents and bats.
1997-2000	Feeding habits study of Mexican free-tailed bats at Carlsbad Caverns National Park, NM. Participated in mist-netting and radio-tracking of bats.
1997-1999	Food habits study of three southwestern desert birds in Lea and Eddy Counties, NM. Involved in identification and quantification of food items of northern bobwhites, scaled quail, and mourning doves. Supervised work of twelve students who assisted on the project.
1996	Participated in study of small mammal population at Camp Robinson, AR. Assisted in trapping of rodents.
1995-1996	Field and museum work under Dr. William Baltosser. Assisted in capture and preparation of avian specimens.
1995-1996	Thermoregulation study of nine-banded armadillo, Big Goat Island, AR. Involved in capture, marking, recapture, and tracking of armadillos for measurement of temperature cycles.
1994-1995	Volunteered in population survey of nine-banded armadillo at Arkansas Post National Monument, AR. Involved in capture, marking, and recapture of armadillos.

Teaching Experience:

Professor of Biology at the University of Arkansas at Monticello, 2015-current; Associate Professor of Biology, 2010-2015; Assistant Professor of Biology, 2004-2010. Taught classes, participated in curriculum development, acted as cosponsor of the Biology Club, Pre-Med Club and Sigma Zeta, served as primary Pre-Med Advisor. Named Pre-Medical Director, 2014. Won Hornaday Award for Outstanding Faculty, 2014. Named Alpha Chi Rookie of the Year in 2005.

Member of graduate faculty. Served on Faculty Research Committee, Library Committee, and Graduate Council. Chair of Biology Curriculum Committee. Served on search committees for Provost and Chancellor. Served as chair of Search Committee for Dean of School of Mathematical and Natural Sciences. Served as chair of Biology Search Committee (twice). Served on Rockefeller Lecture Committee. Faculty Representative for Goldwater Scholarship Program.

Served on graduate committees of M.S. students in the School of Forest Resources of the University of Arkansas at Monticello: Tiffany Whitsitt, Nigel Seidel, Zachary Robinson, Danielle Techentin, Emily Boyd, Kevin Wood, and Kathryn Brautigam.

Classes taught:

Anatomy and Physiology II, Biogeography, Comparative Anatomy, Desert Ecology, Environmental Science, Evolution, General Zoology, Introduction to Biological Science, Mammalogy, Mammalogy for Graduate Students, Principles of Biology II, Seminar in Biology, Senior Research.

Special Topics Courses: Marine Ornithology, Fauna of Costa Rica, Fauna of the Canyonlands, Scientific and Cultural Perspectives on Evolution, Vertebrate Population Analysis, Fauna of the Canadian Rockies, Fauna of Yellowstone, Fauna of Hawaii, Anatomy of the Shark, Preparation of Biological Specimens.

Labs taught:

Anatomy and Physiology II, Biological Science, Comparative Anatomy, General Zoology, Mammalian Anatomy, Mammalogy, Principles of Biology II.

Substitute lecturer:

Ornithology, Regional Flora.

During graduate school at Auburn University, 1996-2004, taught several undergraduate courses, acted as graduate teaching assistant for numerous labs, and was a substitute lecturer for several courses. Won Outstanding Graduate Teaching Award, 1999.

Classes taught:

Comparative Anatomy, Natural History of Vertebrates, Evolution and Systematics, Mammalogy (co-instructor).

Substitute lecturer:

Comparative Anatomy, Human Anatomy, Mammalogy, Evolution and Systematics, General Ecology, Vertebrate Biodiversity.

Labs taught:

Anatomy and Physiology, Comparative Anatomy, Mammalian Physiology I and II, Mammalogy, Human Anatomy, Natural History of Vertebrates

Professional Organizations:

American Society of Mammalogists, Arkansas Academy of Science, Association of Field Ornithologists, Louisiana Academy of Sciences, North American Grouse Partnership, Southeastern Bat Diversity Network, Southwestern Association of Naturalists.

Professional Service:

Member of Board of Governors of the Ouachita Mountains Biological Station. 2011-Current.

Reviewer, textbook artwork, W.H. Freeman Publishing Company, New York. 2010.

Local Organizing Committee Member—Wildlife Society Southeastern Student Conclave, Little Rock, AR. March 26-28, 2009.

Chair of Public Relations Committee, Southwestern Association of Naturalists, 2007-Current.

Instructor—English as a Second Language, First United Methodist Church, Monticello, AR, 2006-2010.

Local Organizing Committee Member—Tenth Annual Colloquium on Conservation of Mammals in the Southeastern United States, Guntersville, AL. February 25, 2000.

Manuscript reviewer—Prairie Naturalist, Southeastern Naturalist, Southwestern Naturalist, Journal of Wildlife Management, Journal of the Arkansas Academy of Science, Mammalia.

Peer-Reviewed Publications:

Grilliot, M. E., J. L. Hunt, C. G. Sims, and C. E. Comer. 2014. New host and location record for the bat bug *Cimex adjunctus* Barber 1939, with a summary of previous records. *Journal of the Arkansas Academy of Science*, 68:149-151.

Connior, M. B., D. C. Cagle, H. E. Peek, C. R. Ellington, and J. L. Hunt. 2014. Reproductive cycle of Baird's pocket gopher (*Geomys breviceps*) in northern Louisiana. *The Southwestern Naturalist*, 59:115-117.

Kelley, J. B., J. L. Hunt, and M. B. Connior. 2013. Scarab beetles (Coleoptera: Scarabaeidae) in the dung of native Arkansas mammals. *Journal of the Arkansas Academy of Science*, 67:66-69.

Stewart, M. J., and J. L. Hunt. 2012. Effects of *Drosophila* ribosomal protein S6 kinase on wing growth. *Journal of the Arkansas Academy of Science*, 66:141-149.

Hunt, J. L., and T. L. Best. 2010. Vegetative characteristics of active and abandoned leks of lesser prairie-chickens (*Tympanuchus pallidicinctus*) in southeastern New Mexico. *The Southwestern Naturalist*, 55:477-487.

Hunt, J. L., J. E. Morris, and T. L. Best. 2004. *Nyctomys sumichrasti. Mammalian Species*, 754:1-6.

Smith, K. G., and J. L. Hunt. 2004. On the use of spleen mass as a measure of avian immune system strength. *Oecologia*, 138:28-31.

Hunt, J. L., L. A. McWilliams, T. L. Best, and K. G. Smith. 2003. *Eumops bonariensis*. *Mammalian Species*, 733:1-5.

Best, T. L., K.E. Geluso, J. L. Hunt, and L. A. McWilliams. 2003. The lesser prairie chicken (*Tympanuchus pallidicinctus*) in southeastern New Mexico: a population survey. *The Texas Journal of Science*, 55:225-234.

Best, T. L., J. L. Hunt, L. A. McWilliams, and K. G. Smith. 2002. *Eumops auripendulus*. *Mammalian Species*, 708:1-5.

McWilliams, L. A., T. L. Best, J. L. Hunt, and K. G. Smith. 2002. *Eumops dabbenei. Mammalian Species*, 707:1-3.

Hunt, J. L., and T. L. Best. 2001. Foods of northern bobwhites (*Colinus virginianus*) in southeastern New Mexico. *Southwestern Naturalist*, 46:239-243.

Hunt, J. L., and T. L. Best. 2001. Foods of scaled quail (*Callipepla squamata*) in southeastern New Mexico. *The Texas Journal of Science*, 32:147-156.

Best, T. L., J. L. Hunt, L. A. McWilliams, and K.G. Smith. 2001. *Eumops maurus. Mammalian Species*, 667:1-3.

Best, T. L., J. L. Hunt, L. A. McWilliams, and K.G. Smith. 2001. *Eumops hansae. Mammalian Species*, 687:1-3.

Published Book Reviews:

Hunt, J. L. In press. Wild Life: the institution of nature, by Irus Braverman (review). Choice.

Hunt, J. L. 2015. The action plan for Australian mammals 2012, by John C. Z. Woinarski, Andrew A. Burbidge, and Peter L. Harrison (review). *Choice*, 52:5105.

Hunt, J. L. 2015. Darwin's dice: the idea of chance in the thought of Charles Darwin, by Curtis Johnson (review). *Choice*, 52:3644.

Hunt, J. L. 2015. Evolution: components and mechanisms, by David Zeigler (review). *Choice*, 52:2533.

Hunt, J. L. 2014. Apes and human evolution, by Russell H. Tuttle (review). *Choice*, 52:0846.

Hunt, J. L. 2014. The accidental species: misunderstandings of human evolution, by Henry Gee (review). *Choice*, 51:4424.

Hunt, J. L. 2014. Stephen J. Gould: the scientific legacy, edited by Gian Antonio Danieli, Alessandro Minelli, and Telmo Pievani (review). *Choice*, 51:3832.

Hunt, J. L. 2013. Evolutionary perspectives on pregnancy, by John C. Avise (review). *Choice*, 50:6761.

Hunt, J. L. 2013. Physiological adaptations for breeding in birds, by Tony D. Williams (review). *Choice*, 50:3268.

Hunt, J. L. 2012. Cells to civilization: the principles of change that shape life, by Enrico Coen (review). *Choice*, 50:2052.

Hunt, J. L. 2012. Forerunners of mammals: radiation, histology, biology, edited by Anusuya Chinsamy-Turan (review). *Choice*, 49:2090.

Hunt, J. L. 2012. Winged sentinels: birds and climate change, by Janice Wormworth and Cagan Sekercioglu (review). *Choice*, 49:1292.

Hunt, J. L. 2011. Mammals of Colorado, by David M. Armstrong, James P. Fitzgerald, and Carron A. Meaney (review). *Choice*, 49:708.

- Hunt, J. L. 2011. Listed: dispatches from America's Endangered Species Act, by Joe Roman (review). *Choice*, 49:143.
- Hunt, J. L. 2011. Nightjars of the world: potoos, frogmouths, oil-bird and owlet-nightjars, by Nigel Cleere (review). *Choice*, 48:1318-1319.
- Hunt, J. L. 2010. Dogs: domestication and the development of a social bond, by Darcy F. Morey (review). *Choice*, 48:532.
- Hunt, J. L. 2010. Recent mammals of Alaska, by S. O. MacDonald and Joseph A. Cook (review). *Choice*, 47:1099.
- Hunt, J. L. 2009. Remarkable creatures: epic adventures in the search for the origins of species, by Sean B. Carroll (review). *Choice*, 47:133.
- Hunt, J. L. 2009. The better to eat you with: fear in the animal world, by Joel Berger (review). *Choice*, 46:1530.

Technical Reports:

- Best, T. L., C. H. Kilgore, L. A. McWilliams, M. D. Gay, and J. L. Hunt. 2005. Survey of vertebrates in the maritime forest, Gulf State Park, Baldwin County, Alabama. Auburn, Alabama. 10 pp.
- Hunt, J. L., and T. L. Best. 2004. Investigation into the decline of populations of the lesser prairie-chicken (*Tympanuchus pallidicinctus*) on lands administered by the Bureau of Land Management, Carlsbad Field Office, New Mexico: final report. Carlsbad, New Mexico. 365 pp.
- Hunt, J. L., and T. L. Best. 2003. Annual report: investigation into the decline of populations of the lesser prairie chicken (*Tympanuchus pallidicinctus*) on lands administered by the Bureau of Land Management, Carlsbad Field Office. Carlsbad, New Mexico. 102 pp.
- Hunt, J. L., and T. L. Best. 2002. Annual report: investigation into the decline of populations of the lesser prairie chicken (*Tympanuchus pallidicinctus*) on lands administered by the Bureau of Land Management, Carlsbad Field Office. Carlsbad, New Mexico. 90 pp.
- Hunt, J. L., and T. L. Best. 2001. Annual report: investigation into the decline populations of the lesser prairie chicken (*Tympanuchus pallidicinctus*) on lands administered by the Bureau of Land Management, Carlsbad Field Office. Carlsbad, New Mexico. 27 pp.

Manuscripts in Preparation:

- Hunt, J. L., and T. L. Best. A bibliography of the genus *Tympanuchus*.
- Hunt, J. L., and T. L. Best. Foods of mourning doves (*Zenaida macroura*) in southeastern New Mexico.
- Hunt, J. L., and T. L. Best. Overlap in diet and evidence for competition among three species of birds in southeastern New Mexico.
- Hunt, J. L., and T. L. Best. Factor analysis of variables involved in decline in populations of lesser prairie-chickens (*Tympanuchus pallidicinctus*) in southeastern New Mexico.

Grants Received:

- 2014. University of Arkansas at Monticello Faculty Research Award. Sexual dimorphism in the thirteen-lined ground squirrel (*Ictodomys tridecemlineatus*). \$1368.
- 2013. University of Arkansas at Monticello Faculty Research Award. Monitoring Rafinesque's big-eared bats for toxin exposure. \$1,400.
- 2013. University of Arkansas Centennial Opportunity Award. Funding of Marine Biology/Ornithology trip to Gerace Research Station, Bahamas. \$4,250.
- 2012. University of Arkansas at Monticello Faculty Research Award. Validation of fecal hormone analysis techniques in bats. \$1,511.
- 2012. EPSCoR Fellowship Grant. Survey of dung beetles associated with swamp rabbits. \$1,852.50.
- 2011. University of Arkansas at Monticello Faculty Research Award. Bobwhite migration and population trends in Sharp County, Arkansas. \$928.
- 2010. University of Arkansas at Monticello Faculty Research Award. Pocket gopher reproductive cycles and burrow inquilines in Arkansas and Louisiana. \$1,496.
- 2008. University of Arkansas at Monticello Faculty Research Award. Road-kill survey of mammalian diversity in southeastern Arkansas. \$2,000.

2007. University of Arkansas at Monticello Faculty Research Award. Preliminary survey of mammalian diversity in southeastern Arkansas. \$2,000.

2006. University of Arkansas at Monticello Faculty Research Award. Livestock road use and destruction of habitat of lesser prairie-chicken (*Tympanuchus pallidicinctus*). \$1,800.

2005. University of Arkansas at Monticello Faculty Research Award. (Co-investigator with Christopher G. Sims). Conservation status of anhinga in Arkansas. \$2,150.

2001-2003. Bureau of Land Management. (Co-investigator with Troy L. Best). Investigation into decline of lesser prairie chickens in New Mexico, \$152,000.

Presentations:

Hunt, J. L. Mammals of Arkansas Post National Historical Park. Biodiversity Day, Arkansas Post National Historical Park, Arkansas, June 1, 2013.

Connior, M. B., D. C. Cagle, H. E. Peek, C. R. Ellington, and J. L. Hunt. Reproductive cycle of Baird's pocket gopher (*Geomys breviceps*) in northern Louisiana. 22nd Colloquium on the Conservation of Mammals in the Southeastern United States, Louisville, Mississippi, February 24, 2012.

Stewart, M. J., and J. L. Hunt. Effects of *Drosophila* ribosomal protein s6 kinase on wing growth. Arkansas Academy of Science, Magnolia, Arkansas, April 13, 2012.

Hunt, J. L, and T. L. Best. Vegetative characteristics of active and abandoned leks of lesser prairie-chickens (*Tympanuchus pallidicinctus*) in southeastern New Mexico. Southwestern Association of Naturalists, Stephenville, Texas. April 21, 2007.

Hunt, J. L. Effects of human activities on declines in populations of lesser prairie-chickens in southeastern New Mexico. Invited presentation—Department of Forestry, University of Arkansas—Monticello, Arkansas, February 21, 2007.

Hunt, J. L., T. L. Best, L. A. McWilliams, D. M. Roemer, C. López-Gonzaléz, G. Vellagas-Guzmán, and H. Cuevos-Arellano. Winter roost caves of Mexican free-tailed bats (*Tadarida brasiliensis mexicana*) from Carlsbad Caverns National Park, New Mexico. Eleventh Annual Colloquium on Conservation of Mammals in the Southeastern United States. Memphis, Tennessee. February 23, 2001. Won award for Best Student Presentation.

- Hunt, J. L., and T. L. Best. Overlap in diet and evidence for competition among three species of birds in southeastern New Mexico. Southwestern Association of Naturalists, Denton, Texas. April 22, 2000.
- Hunt, J. L., T. L. Best, L. A. McWilliams, D. M. Roemer, C. López-Gonzaléz, L. Guabara-Chumacaro, and G. Vellagas-Guzmán. Status of known winter roost caves of Mexican free-tailed bats (*Tadarida brasiliensis mexicana*) from Carlsbad Caverns National Park. Tenth Annual Colloquium on Conservation of Mammals in the Southeastern United States, Guntersville, Alabama. February 25, 2000.
- Hunt, J. L., and T. L. Best. Feeding habits of northern bobwhites (*Colinus virginianus*) in southeastern New Mexico. Southwestern Association of Naturalists, Monterrey, Nuevo Leon, Mexico. April 23, 1999.

Honors Received:

- 2014—Named an Outstanding Faculty Advisor, University of Arkansas at Monticello.
- 2014—Winner, Hornaday Award for Outstanding Faculty, University of Arkansas at Monticello.
- 2013—Finalist, Teacher of the Year, Alpha Chi Academic Honor Socity, University of Arkansas at Monticello.
- 2012—Runner-up, Teacher of the Year, Alpha Chi Academic Honor Society, University of Arkansas at Monticello.
- 2011—Finalist, Teacher of the Year, Alpha Chi Academic Honor Society, University of Arkansas at Monticello.
- 2010—Runner-up, Teacher of the Year, Alpha Chi Academic Honor Society, University of Arkansas at Monticello.
- 2009—Runner-up, Teacher of the Year, Alpha Chi Academic Honor Society, University of Arkansas at Monticello.
- 2005—Faculty Rookie of the Year, Alpha Chi Academic Honor Society, University of Arkansas at Monticello.
- 2002—Outstanding Doctoral Student, Auburn University.

2001—Best Student Presentation, Eleventh Annual Colloquium on Conservation of Mammals in the Southeastern United States, Memphis, TN.

2000-2001—Graduate Dean's Award for Excellence, Auburn University.

1999—Presidential Fellowship, Auburn University.

1999—Outstanding Graduate Teaching Award, Department of Zoology and Wildlife Science, Auburn University.

1996—Martha Couch Givens Award (Outstanding Senior in Biology), University of Arkansas at Little Rock.

1982, 1986, 1987—Management Achievement Award, Genuine Parts Company, Little Rock, Arkansas.

1981—Most Improved Management Award, Genuine Parts Company, Little Rock, Arkansas.

1977—Valedictorian, Paron High School, Paron, Arkansas.

Personal:

Married since 1989 to Sarah McDonald Hunt, a psychological examiner at the Southeast Arkansas Human Development Center, Warren, AR.

References:

Dr. Edmund Bacon, School of Mathematical and Natural Sciences (Emeritus), 397 University Drive, University of Arkansas at Monticello, Monticello, AR 71656. 870-460-1166. bacon@uamont.edu

Dr. William Baltosser, Department of Biology, University of Arkansas at Little Rock, Little Rock, AR 72204. 501-569-3521. <a href="whitesample-style="whitesample-style-

Dr. Troy Best, Department of Biological Sciences, 331 Funchess Hall, Auburn University, AL 36849. 334-844-9260. <u>besttro@auburn.edu</u>.

Dr. J. Morris Bramlett, Dean, School of Mathematical and Natural Sciences, 397 University Drive, University of Arkansas at Monticello, Monticello, AR 71656. 870-460-1465. bramlett@uamont.edu

Dr. Christopher G. Sims, School of Mathematical and Natural Sciences, 397 University Drive, University of Arkansas at Monticello, Monticello, AR 71656. 870-460-1664. simsc@uamont.edu.

Last modified: May 15, 2015.

Glenn Jason Manning

Address: 141 Market St Apt.1222, Monticello, AR 71655 **Phone:** (870)224-2900

E-Mail: manning@uamont.edu

Education:

- -University of Arkansas, Fayetteville. August 1999 August 2008, Ph.D. Biology.
- -Kansas State University, August 1995 December 1998, B.S. Biochemistry and B.S. Biology.
- -Butler County Community College, January 1994 July 1995.

Employment

- -University of Arkansas @ Monticello, Associate Professor, August 2007 Present.
- -University of the Ozarks, Adjunct Professor, August 2006 December 2006.
- -John Brown University, Adjunct Professor, August 2005 December 2005.
- -University of Arkansas @ Fayetteville, Graduate Teaching Assistant, August 2009 June 2007.

Dissertation

-Distribution and Hybridization of Two Communities of Whiptail Lizards (Squamata: Teiidae) in Eastern New Mexico.

Professional Development

Presentations

- -Manning, Glenn J. And J. M. Walker. 2003. Status of *Aspidoscelis neomexicana* (Squamta: Teiidae) at Ft. Sumner, De Bacca Co., New Mexico. Missouri Herpetolgical Association.
- -Manning, Glenn J. 2004. Distribution and Hybridization of the New Mexico Whiptail *Aspidoscelis neomexicana* (Squamata: Teiidae) at Ft. Sumner, De Baca Co., New Mexico. Joint Meeting of the ASIH, SSAR, and HL. Norman, OK.
- -Manning, Glenn J. 2006. Water Mains, a Death Trap for Small Vertebrates. Joint Meeting of the ASIH, SSAR, and HL. New Orleans, LA.
- -Manning, Glenn J. 2007. Distribution and Characterization of Two Tokogenetic Arrays of *Aspidoscelis tesselata* D in San Miguel County, New Mexico. Joint Meeting of the ASIH, SSAR, and HL. St. Louis, MO.
- -Manning, Glenn J. 2009. Indiscriminant Sex, A Parthenogenetic Whiptail's Tale. Dallas Forth Worth Herpetelogical Society.
- -Manning, Glenn J. 2008. Is New Mexico *Aspidoscelis tesselata* Pattern Class D a Species, You Decide? Missouri Herpetological Association.

Workshops and Meetings

- -Arkansas Wildlife Action Plan, Mount Magazine State Park, 2010. UCA, 2013.
- -SURF Grant review, ADHE Little Rock, 2011-2014.

Publications

- -Shen, Zhicheng, Glenn Manning, John C. Reese, and Gerald R. Reeck. 1999. Pectin methylesterase from the rice weevil, *Sitophilus oryzae* (L.) (Coleoptera: Curculionidae: Purification and characterization. Insect Biochemistry and Molecular Biology 29: 209!214.
- -Taylor, Harry L., James M. Walker, James E. Cordes, and Glenn J. Manning. 2005. Life history characteristics support separate origins of D-designation color pattern classes in parthenogenetic *Aspidoscelis tesselata* (Squamata: Teiidae). The Southwestern Naturalist 50(2): 258!262.
- -Taylor, Harry L., James M. Walker, James E. Cordes, and Glenn J. Manning. 2005. Application of the Evolutionary Species Concept to Parthenogenetic Entities: Comparison of Postformational Divergence in Two Clones of *Aspidoscelis tesselata* and between *Aspidoscelis cozumela* and *Aspidoscelis maslini* (Squamata: Teiidae). Journal of Herpetology 39(2): 266!277.
- -Walker, James M, Julio A. Lemos Espinal, Hobart M. Smith, Glenn J. Manning. 2005. Aspidoscelis tigris aethiops (Sonora-Sinaloa Desert Whiptail). Habitat, Body Size, and Reproduction. Herpetological Review 36(3): 316!317.
- -Manning, Glenn J., Charles J. Cole, Herbert C. Dessauer, and James M. Walker. 2005. Hybridization Between Parthenogenetic *Aspidocelis neomexicana* and Gonochoristic *Aspidoscelis sexlineata virids* in New Mexico: Ecological, Morphological, Cytological, and Molecular Context. American Museum Novitates 3492: 1-56.
- -Manning, Glenn J. and James M. Walker. 2006. Hybridization Between Normally Parthenogenetic *Aspidoscelis tesselata* E and Gonochoristic *A. sexlineata viridis* (Squamata: Teiidae) at Ft. Sumner, De Baca Co., New Mexico. American Midland Naturalist 155:399-404.
- -Manning, Glenn J. 2007. *Uta stansburiana* (Side-Blotched Lizard). Mortality. Herpetological Review 38(4): 465.
- Manning, Glenn J., James M. Walker, and Stephen R. Goldberg. 2009. *Aspidoscelis tesselata* (Checkered Whiptail) x *Aspidoscelis sexlineata viridis* (Prairie Racerunner). Reproductive Potential. Herpetological Review 40(3): 340.
- -Taylor, Harry L., Charles J. Cole, Glenn J. Manning, James E. Cordes, and James M. Walker. 2012. Comparative Meristic Variability in Whiptail Lizards (Teiidae, *Aspidoscelis*): Samples of Parthenogenetic *A. tesselata* Versus Samples of Sexually Reproducing *A. sexlineata*, *A. marmorata*, and *A. gularis septemvittata*. American Museum Novitates 3744: 1-24.
- -Walker, James M. Harry L. Taylor, Glenn J. Manning, James E. Cordes, Chad E. Montgomery, Lauren J. Livo, Steve Keefer and Charles Loeffler. 2012. Michelle's Lizard: Identity,

- Relationships, and Ecological Status of an Array of Parthenogenetic Lizards (Genus *Aspidoscelis*: Squamata: Teiidae) in Colorado, USA. Herpetolgical Consevation and Biology 7(2): 227-248.
- -Walker, James M., James E. Cordes, Harry L. Taylor, and Glenn J. Manning. 2012. *Aspidoscelis tesselata* (Common Checkered Whiptail) Northern Life History. Herpetological Review 43(3) 479-480.
- Walker, James M., James E. Cordes, Stanley E. Truath, and Glenn J. Manning. 2013. *Aspidoscelis neomexicana* (New Mexico Whiptail) *Aspidoscelis sexlineata viridis* (Prairie Racerunner) Duration of Hybridization. Herpetological Review 44(3) 505-507.

Awards

- -2000 David Cuasy Grant in Aid, for promising research to a graduate student, Department of Biology University of Arkansas, Fayetteville.
- -2003 David Cuasy Grant in Aid, for promising research to a graduate student, Department of Biology University of Arkansas, Fayetteville.
- -2003 Biology Teaching Award University of Arkansas, Fayetteville.
- -2006 David Causy Prize, for outstanding or promising research, Department of Biology University of Arkansas, Fayetteville.
- -2009 Alpha Chi Rookie of the Year.
- -2009 Arkansas State Wildlife Grant. submitted by Dr. Todd M. Fearer (School of Forest Resources). Adapting a habitat model for timber rattlesnakes (*Crotalus horridus*) to assess the potential distribution of Western Diamondback Rattlesnakes (*C. atrox*) in Arkansas.

Professional Service

UAM Community

- -2007-Present, Faculty Advisor Biology Club.
- -2007-Present, Faculty Advisor Medical Science Club.
- -2008, Search Committee for Professor of Biology.
- -2009, Search Committee for Professor of Chemistry.
- -2014, Search Committee for Instructor of Biology.
- -2015, Search Committee for Professor of Physics.
- -2009, Judge of Engineering: Materials and Bioenergy Southeastern Arkansas Regional Science Fair.
- -2010, Judge Southeastern Arkansas Regional Science Fair.
- -2010, Committee Member Student Evaluation Committee.
- -2012-2014-Present, Teacher Education Committee.
- -2012-Present, Committee Member Institutional Review Board.
- -2015, Committee Member, New Science Center Planning Committee.

Public

- -2007, Snakes of Arkansas Educational Booth, Kidz Fair in Little Rock
- -2009, Snakes of Arkansas Educational Booth, Historic Arkansas Museum's Territorial Fair in Little Rock.
- -2010, Reptile show for the Night at the Museum Monticello Intermediate School.
- -2011, Reptile show for the Night at the Museum Monticello Intermediate School.
- -2012-2015 Biodiversity Fair Arkansas National Post.
- -2012 & 2014, Reptile show for Cub Scouts.

Profession

- -2000-Present, Attended annual Missouri Herpetological Meeting.
- -2005-Present, Attended twice a year Arkansas Herpetological Society Meeting.
- -2011, Local Chair for Arkansas Academy of Science Meeting at UAM.
- -2011 & 2015, Midwest Partners for Reptile Conservation Meeting.
- -2011-Present, Advisory Board for the Ouachita Mountain Biological Station.
- -2012-Present, Joint Meeting of Ichthyologist and Herpetologist

Lauren M. Morgan

Address: School of Mathematical and Natural Sciences

University of Arkansas at Monticello

Monticello, AR 71656

Phone: (870) 460-1816
Email: morganl@uamont.edu

Education:

University of Arkansas at Monticello. B.S. Biology (Magna cum laude). Minor: Natural

Science. GPA: 3.79

2009 Warren High School. Salutatorian. 3.83 GPA

Teaching Experience:

University of Arkansas at Monticello, Monticello, AR

2014- Current Instructor of Biology Labs

2013-2014 Lab Instructor (Undergraduate opportunity from Miller Sisters' Scholarship)

Classes Taught:

University of Arkansas at Monticello, Monticello, AR

Instructor of Biology Labs

2014-Current Microbiology Lab and Introduction to Biological Science Lab

Due to my reception of the Miller Sisters' Scholarship, I was able to instruct the following lab courses as an undergraduate at the University of Arkansas at Monticello:

2014 Microbiology Lab (Substitute position)

2013 Introduction to Biological Science Lab

Work Experience:

University of Arkansas at Monticello, Monticello, AR

2014-Current Instructor of Biology Labs

2013-Current Construction of an Anatomy and Physiology Dissection Manual and an Introduction to

Biological Science Photo Atlas for publication and use by Ms. Jesse Chappell at UAM

2013-2014 Microbiology Lab Assistant

2012-2014 Anatomy and Physiology I Lab Assistant

Anatomy and Physiology II Lab Assistant

Introduction to Biological Science Lab Assistant

Research Experience:

University of Arkansas at Monticello, Monticello, AR

2015 Post-Baccalaureate Summer Research Internship with Dr. Karen Fawley and Dr. Marvin

Fawley

Honors:

2015	Alpha Chi Rookie of the Year Nominee
2013-2014	Miller Sisters' Scholarship, University of Arkansas at Monticello, Monticello, AR
2012	Albert L. Etheridge Scholarship, University of Arkansas at Monticello, Monticello, AR
2009	Salutatorian, Warren High School, Warren, AR

Memberships:

2012-Current	Alpha Chi National Honor Society
2012-2014	Sigma Zeta National Science and Mathematics Honor Society
2012-2014	UAM Biology Club

References:

Ms. Jesse Chappell, School of Mathematical and Natural Sciences, 397 University Drive, University of Arkansas at Monticello, Monticello, AR 71656. 870-460-1566. chappellj@uamont.edu

Dr. Karen Fawley, School of Mathematical and Natural Sciences, 397 University Drive, University of Arkansas at Monticello, Monticello, AR 71656. 870-460-1165. fawley@uamont.edu

Dr. Mary Stewart, School of Mathematical and Natural Sciences, 397 University Drive, University of Arkansas at Monticello, Monticello, AR 71656. 870-460-1767. stewartm@uamont.edu

CURRICULUM VITAE

I. Name and Personal Information:

Christopher G. Sims

Associate Professor of Biology
School of Mathematics and Natural Sciences
The University of Arkansas at Monticello
Monticello, AR 71656
TEL: (870) 460-0513 Home
(870) 460-1664 Office
(870) 460-1316 Fax
E-MAIL: simsc@uamont.edu

Born November 10, 1971, Decatur, Alabama. Married (Monica). One child (James).

II. Post-secondary education history:

B. S. The University of North Alabama, 1994

Major: Professional Biology

Minor: Chemistry

Ph.D. The University of Mississippi, 2002

Major: Biology

III. Employment Experience:

Associate Professor of Biology: The University of Arkansas at Monticello (Fall 2002-present)

Instructor of Biology: The University of Mississippi (Fall 2000 and Spring 2002)

Chemist: Intergraph Corporation, Huntsville, AL. (1994-95).

TEACHING EXPERIENCE:

The University of Mississippi

Laboratory Instructor:

BISC 103 and 105 Non-majors General Biology Laboratory (Fall 1995, Spring 1996, Fall 1996, Spring 1997)

BISC 161 Majors General Biology Laboratory (Summer 1997, Fall 1998, and Fall 1999)

BISC 330 Human Physiology Laboratory (Fall 1997, Spring 1999, and Spring 2001)

BISC 512 Behavioral Ecology (Fall 1995)

BISC 512 Animal Behavior Laboratory (Fall 1996, 1997, 1998, and 1999)

BISC 207 Human Anatomy and Physiology Laboratory (Spring 2000)

Lecture Instructor:

BISC 512 Animal Behavior Guest Lecturer (Fall 1999)

BISC 330 Human Physiology Guest Lecturer (Spring 1999 and Spring 2001)

BISC 102 Inquiry into Life/Human Biology (Fall 2000 and Spring 2002)

BISC 207 Human Anatomy and Physiology (Spring 2002)

The University of Arkansas at Monticello

Current or Past Instructor:

BIOL 2223 Human Anatomy (Fall 2002, Spring 2003)

BIOL 2273 Human Physiology (Summer 2003)

BIOL 3801 Mammalian Anatomy Lab (Fall 2002)

BIOL 1063 Introduction to Biological Sciences (Spring 2003-present)

- BIOL 4634 Vertebrate Physiology (Spring 2003-present)
- BIOL 2233 and 2243 Human Anatomy and Physiology (Fall 2003-present)
- BIOL 3574 Comparative Anatomy (Fall 2003)
- BIOL 1053 Principles of Biology (Fall 2005-2006)
- BIOL 4741 Seminar in Biology (Fall/Spring 2005-present)
- BIOL 4711 Teaching Biology (Spring 2005)
- BIOL 3524 Ornithology (Spring 2006-present)
- BIOL 475V Waterfowl Ecology (Spring 2011-present)

IV. Dissertation:

PHYSIOLOGICAL, ECOLOGICAL, AND BEHAVIORAL ASPECTS OF THE EARLY LIFE HISTORY OF THE NORTHERN MOCKINGBIRD (Mimus polyglottos)

V. Professional Development:

PRESENTATIONS/POSTERS:

- (1996) "Corticosterone, Energetic Condition, Gonadal Development, and Weather During Migration". C. G. Sims and R. L. Holberton. 114th stated meeting of the American Ornithologists Union, Biose, Idaho.
- (1998) "Age-related differences in the corticosterone stress response in the Northern Mockingbird". C. G. Sims and R. L. Holberton. North American Ornithological Congress, 116th stated meeting of the American Ornithologists Union, St. Louis, Missouri.
- (1998) "Trans_dermal delivery of Exogenous Steroid Hormone in a Migratory Bird". W. B. Cash, C. G. Sims, L, Arcand_Hoy, F. Tilton, and R. L. Holberton. The University of Southern Mississippi Graduate Student Symposium. Hattiesburg, Mississippi.
- (1998) "Trans_dermal delivery of Exogenous Steroid Hormone in a Migratory Bird". W. B. Cash, C. G. Sims, L, Arcand_Hoy, F. Tilton, and R. L. Holberton. 116th stated meeting of the American Ornithologists Union, St. Louis, Missouri.
- (1999) "How do juveniles handle stress? A connection between endocrinology and juvenile independence". C. G. Sims. 117th stated meeting of the American Ornithologists Union, Cornell University, Ithaca, New York.
- (1999) "An endocrine basis for migratory feeding and fattening: Is corticosterone necessary?" R. L. Holberton, W. B. Cash, C. G. Sims, and C. M. Wilson. 117th stated meeting of the American Ornithologists Union, Cornell University, Ithaca, New York.
- (1999) "Physiological, ecological, and behavioral aspects of natal dispersal in the Northern Mockingbird, (Mimus polyglottos)". C. G. Sims. The University of Mississippi, Department of Biology Seminar Series.

- (2000) "Development of the Corticosterone Stress Response in Young Northern Mockingbirds (Mimus polyglottos)". C. G. Sims. Mississippi State University, Department of Biology Seminar Series.
- (2000) "Early life and corticosterone: a study of stress and independence in the Northern Mockingbird (Mimus polyglottos)". C. G. Sims. Animal Behavior Society Annual Meeting. Moorehouse College, Atlanta, Georgia.
- (2001) "The Role of Corticosterone and the Effects of its Inhibition During the Development of Migratory Condition in Dark-eyed Juncos". R. L. Holberton, C. M. Wilson, C. G. Sims, and W. B. Cash. Society for Integrative and Comparative Biology, Chicago, Illinois.
- (2002) "The influence of brood size on parental provisioning and the time to fledging in nestling Northern Mockingbirds". C. G. SIMS and R. L. HOLBERTON, The Third North American Ornithological Conference, New Orleans, Louisiana.
- (2006) "Sibling Competition and Parental Provisioning in Nestling Carolina Chickadees (Poecile carolinensis)". C. G. Sims and I. Nall, 67th meeting of the Association of Southeastern Biologists, Gatlinburg, Tennessee.
- (2009) "Sibling Competition and Parental Provisioning in Nestling Carolina Chickadees". C. G. Sims and J. L. Hunt, 127th stated meeting of the American Ornithologists Union, University of Pennsylvania, Philadelphia, PA.
- (2011) "A Test of the Migration Modulation Hypothesis in a Non-Passerine, Neotropical Migrant, the Blue-Winged Teal". C. M. Wilson, C. G. Sims, S. J. Schoech, and Z. L. Robinson. 129th stated meeting of the American Ornithologists Union, Jacksonville, FL.
- (2011) "Where are the Bugs? Invertebrate Forage for Migrating Shorebirds in Southeast Arkansas". J. Aycock and C. G. Sims. 129th stated meeting of the American Ornithologists Union, Jacksonville, FL.
- (2014) "New Host and Location Record for the Bat Bug Cimex adjunctus Barber 1939, with a Summary of Previous Records." M. E. Grillot, J. L. Hunt, C. G. Sims, and C. E. Comer. 24th Colloquium on Conservation of Mammals in the Southeastern United States, Lake Charles, Louisiana.
- (2014) "New Host and Location Record for the Bat Bug Cimex adjunctus Barber 1939, with a Summary of Previous Records." M. E. Grillot, J. L. Hunt, C. G. Sims, and C. E. Comer. Arkansas Academy of Sciences, Harding University, Searcy, Arkansas.
- (2015) "DDT and DDE Present in the Fur of Rafinesque's Big-eared Bats (*Corynorhinus rafinesquii*) and Hispid Cotton Rat (*Sigmodon hispidus*) in an Agricultural Region of Southeastern Arkansas." M. E. Grilliot, J. L. Hunt, and C. G. Sims. Poster presented at the meeting of the Southwestern Association of Naturalists, San Diego State University, San Diego, California, April 2-5, 2015.

(2015) "Shorebird Foraging Habitat in Southeast Arkansas". J. Aycock and C. G. Sims. Journal of the Arkansas Academy of Science. Arkansas Academy of Sciences, Henderson State University, Arkadelphia, Arkansas

PUBLICATIONS:

(2000) "Development of of the Corticosterone Stress Response in Young Northern Mockingbirds (Mimus polyglottos)." C. G. Sims and R. L. Holberton. General and Comparative Endocrinology.

(2005) "A net pole for the masses." C. G. Sims. North American Bird Bander.

(2007) "The Role of Corticosterone in Migratory Lipogenesis of the Dark-eyed Junco, Junco hyemalis: A Model for Central and Peripheral Regulation." R. L. Holberton, C. Morgan Wilson, M. J. Hunter, W. B. Cash, C. G. Sims. Physiological and Biochemical Zoology.

(2014) "New Host and Location Record for the Bat Bug Cimex adjunctus Barber 1939, with a Summary of Previous Records." M. E. Grillot, J. L. Hunt, C. G. Sims, and C. E. Comer. Journal of the Arkansas Academy of Science.

PUBLICATIONS IN PREP:

(in review) "A test of the migration modulation hypothesis in a non-passerine, neotropical migrant, the blue-winged teal". C. G. Sims and C. M. Wilson.

(in review) "Shorebird Foraging Habitat in Southeast Arkansas". J. Aycock and C. G. Sims. Journal of the Arkansas Academy of Science.

(to be resubmitted). Sibling competition and parental provisioning in nestling Carolina Chickadees. **C. G. Sims** and J. L. Hunt.

VI. Professional Recognition:

HONORS AND AWARDS:

University of Mississippi summer research fellowship (Summer 1999 and 2000)

University of Mississippi dissertation fellowship (Fall 2001)

University of Arkansas at Monticello: Alpha Chi Rookie of the Year (2002-03 and 2003-04)

University of Arkansas at Monticello: Alpha Chi Teacher of the Year (2008)

Phi Kappa Phi Honors Society (1997- present)

GRANTS:

(2005) "Status and Distribution of Anhingas (Anhinga anhinga) in Arkansas". J. L. Hunt and C. G. Sims. \$2150. UAM Faculty Research Grants.

(2007) "Sibling Competition and Parental Provisioning in Nestling Carolina Chickadees (Poecile carolinensis)". C. G. Sims. \$2340. UAM Faculty Research Grants.

(2008, 2009, 2010, 2011, 2013) "Understanding the Migratory Patterns of the Blue-winged Teal (Anas discors)— A Test of the Migration Modulation Hypothesis in a Non-Passerine Neotropical Migrant". C. G. Sims. \$2500. UAM Faculty Research Grants.

(2012) "Validation of Fecal Hormone Analysis Techniques for Bats" J. L. Hunt, C.G. Sims, and M.E. Grilliot. \$1511. UAM Faculty Research Grants.

(2013) "Monitoring Rafinesque's big-eared bats for toxin exposure". J. L. Hunt, C.G. Sims, and M.E. Grilliot. \$1400. UAM Faculty Research Grants.

VII. Service:

PROFESSIONAL:

University of Arkansas at Monticello Graduate Council (2003-2005)

Mathematics and Natural Sciences Tenure and Promotions Committee (2003)

Committee to evaluate and change the Human Anatomy and Physiology curriculum (2002-2003)

Physiologist Search Committee Chair (2003-2004)

Faculty Research Committee Chair (2005-2007)

Silo/Surf Undergraduate Research Committee (Arkansas Department of Higher Education) (Fall 2005 and 2007)

UAM Institutional Animal Care Committee (2004-present)

Athletic Committee Chair (2009-present)

Basketball Head Coach Search Committee (2010 and 2014)

Football Head Coach Search Committee (2011)

Faculty sponsor: UAM Biology Club (2002-present)

Faculty sponsor: UAM Medical Sciences Club (2002-present)
Faculty sponsor: UAM Ducks Unlimited Chapter (2006-present)
Faculty sponsor: UAM Weevil Claybusters shotgun team (2014)

COMMUNITY:

Presentation of birds and bird life to Oxford Public Library summer reading program participants.

Judge, Bramlett Elementary Science Fair 2000

Judge, University of Mississippi, Ken Wooten Scholars Bowl 2001 & 2002

Judge, Drew Central Jr. and Sr. High Science Fair 2003

Judge, Regional Science Fair, University of Arkansas at Monticello (Spring 2003-present)

Drew County Ducks Unlimited Local Committee (2005-present)

Adult continuing education (Shepherd program) birding class (Spring 2008)

Founding member of the SEARK cyclists bicycle club (2013)

Range officer for the Arkansas National Archery in Schools Regional Tournament (2013)

Developed the "Robert H. Burch Endowment for Waterfowl Research" at the University of Arkansas at Monticello (2015)

MANUSCRIPT REVIEWER:

American Midland Naturalist The Wilson Bulletin General and Comparative Endocrinology Northeastern Naturalist Herpetologica (2013)

Graduate Committies:

Andrea Long. 2009-2011. American Woodcock spring migration chronology, use of early successional pine stands, and distribution in Arkansas. School of Forest Resources, University of Arkansas at Monticello.

Jean Aycock. 2010-2012. Shorebird use of stopver habitat on private, state, and federal lands in Southeast Arkansas. School of Forest Resources, University of Arkansas at Monticello. Major Advisor

Jerad Henson. 2012-present. Impacts of hunting and life-history stages on the stress physiology of wintering Mallards (Anas platyrhynchos). Department of Biology. University of Memphis. Co-advisor.

Cassandra Montoya. 2013. Achieving desired forest conditions in a bottomland hardwood forest: a monitoring approach to informing management decision. School of Forest Resources, University of Arkansas at Monticello. Student withdrawn.

VIII. Other Relevant Information:

PROFESSIONAL SOCIETIES:

American Ornithologists Union (1995- present)
Animal Behaviour Society (1996- 2004)
Association of Field Ornithologists (2002)
Association of Southeastern Biologists (2004-2006)
BETA BETA BETA Biological Honors Society (1993-94)
Cooper Ornithological Society (1995- 2008)
Wilson Ornithological Society (2002)

RESEARCH INTERESTS:

Ecological, behavioral, and physiological aspects of natal dispersal and fledging behavior in birds.

Waterfowl migration and winter ecology.

RESEARCH EXPERIENCE:

Field:

Energetics and endocrinology of Neotropical bird migration on the Gulf of Mexico in Fall and Spring. (1995-96)

Early life history and endocrinology of Northern Mockingbirds (*Mimus polyglottos*). (1997-2004) Early life history and endocrinology of Carolina Chickadees (*Poecile carolinensis*). (2005-present)

Lab:

Capture, handling, and care of wild birds in captivity. (1995- present)

Blood collection from birds. (1995- present)

Radioimmunoassay to measure plasma hormone levels. (1996- present)

Research assistant identifying and studying the role of bacteria in chicken compost. (1993-94)

ADDITIONAL PROFESSIONAL AND SCHOLORLY ACTIVITIES:

Adjunct graduate faculty at the University of Memphis

It should be noted that I have served not only on graduate committees, but have acted as the major advisor for one master's thesis for a student in the College of Forest Resources and currently I am serving as the co-advisor for a student at the University of Memphis. To my knowledge, I am the only person to have served as a graduate committee chair from Mathematics and Natural Sciences.

Curriculum vitae

Mary J. Stewart

Professional preparation

B.S.	Biology	Kearney State	College (Univ.	of NE at Kearney), 1986

Ph.D. Biology Kansas State University, 1992

Postdoctoral Growth Control Friedrich Miescher Institute, Basal Switzerland, 1992-1997

Appointments

2011-present	Associate Professor of Biology	Univ. of Arkansas at Monticello
2008-2011	Assistant Professor of Biology	Univ. of Arkansas at Monticello
2005-2008	Adjunct Instructor in Biology	Minnesota State Community and Technical College, Moorhead, MN
2001-2002	Director, Cell and Molecular Biol. Graduate Program	North Dakota State Univ., Fargo, ND
1997-2006	Assistant Professor of Biol. Sci.	North Dakota State Univ., Fargo, ND

Classes Taught Since Joining UAM

Microbiology, three credit hours (BIOL 3553): Taught for 14 academic semesters and 4 summer sessions.

Microbiology Lab, one credit hour (BIOL 3561): Taught for 12 academic semesters and 4 summer sessions.

Cell Biology, three credit hours (BIOL 3363): Taught for seven academic semesters.

Genetics with lab, four credits (BIOL 3354): Taught for seven academic semesters.

Senior Research, one credit hour (BIOL 498V): Taught for eight academic semesters.

Senior Seminar, one credit hour (BIOL 4741): Taught in Spring 2013.

Special Topics, Developmental Biology, three credits (BIOL 475V): Taught in Spring 2011.

Molecular Biology, three credits (BIOL 3334): Taught in Spring 2015. This course will be offered every spring semester of odd-numbered years.

Molecular Biology lab, one credit, (BIOL 3331): Taught in Spring 2015. This course will be offered every spring semester of odd-numbered years.

Planned Classes to Teach at UAM

In Spring 2016, I plan to teach Immunology, a three-credit hour undergraduate course that has not been offered previously at UAM. I expect to teach this course every spring semester of even-numbered years.

Updates and equipment additions to laboratories taught at UAM

2009-2014: I made changes to the genetics lab that I teach (BIOL 3354) to include more molecular genetics lab work such as plasmid cloning, genomic DNA isolation, DNA fingerprinting, PCR, and DNA sequencing.

2013: With funds from the Dean of Mathematical and Natural Sciences, I purchased several sets of micropipettes for use in the molecular genetics portion of genetics lab (BIOL 3354).

2014: Added an additional section of genetics laboratory (BIOL 3354) to accommodate the increased demand for the course.

2015: With funds from a UAM Faculty Research grant and from the Dean of Mathematical and Natural Sciences, I purchased a vertical SDS-PAGE and blotting unit to allow students to perform gel electrophoresis of proteins and Western blotting for protein analysis.

2015: With funds from the Dean of Dean of Mathematical and Natural Sciences, I purchased the equipment listed below to allow students in genetics laboratory to work more efficiently and to relieve bottlenecks caused by waits to access equipment:

- Additional sets of micropipettes. This will allow each student in the laboratory to have their own set of micropipettes to use.
- Four horizontal gel electrophoresis units. This brings our total number of electrophoresis units to eight and will eliminate the need for students to wait long in line to load their samples on a gel.
- Two additional microcentrifuges. This brings our total number of microcentrifuges to four and will eliminate the need for students to wait in line to centrifuge their samples.

Students Mentored in Undergraduate Research Since I Joined UAM

Seth St. John, research student from 2014 – present. Expected graduation is May 2016. After graduating from UAM, Seth plans to attend pharmacy school. *A research poster presented by Seth St. John and Devon Wray at the 2015 joint meeting of the AR Academy of Science and Arkansas Undergraduate Research Conference won the "best poster overall" for the meeting.*

Devon Wray, research student from 2014 – present. Expected graduation is May 2016. After graduating from UAM, Devon plans to attend graduate school. *A research poster presented*

- by Seth St. John and Devon Wray at the 2015 joint meeting of the AR Academy of Science and Arkansas Undergraduate Research Conference won the "best poster overall" for the meeting.
- Shana Chancellor, research student from 2012 to 2014. Graduated from UAM in 2014. Currently enrolled in graduate school in microbiology and immunology at the University of Arkansas for Medical Sciences in Little Rock, Arkansas.
- Hope Dunlap, research student from 2012 to 2014. Graduated from UAM in 2014. Currently attending veterinary school at Louisiana State University in Baton Rouge, Louisiana.
- Sammi Warren, research student in 2012. Graduated in 2014.
- Robert Rose, research student from 2010 to 2012. Graduated from UAM in 2012. Currently in medical school at the University of Arkansas for Medical Sciences at the University of Arkansas for Medical Sciences in Little Rock, Arkansas.

Honors, Awards, Patents

- 2013: Named "Outstanding Academic Advisor" by the Dean of Mathematics and Natural Sciences at the Univ. of Arkansas at Monticello.
- 2010: Voted Faculty Rookie of the Year by the students of the Alpha Chi Academic Honor Society at the Univ. of Arkansas at Monticello.
- 2009: Was a finalist for Faculty Rookie of the Year as voted by students of the Alpha Chi Academic Honor Society at the Univ. of Arkansas at Monticello.
- 1998: Stewart, M., Kozma, S., Thomas. G. *Drosophila melanogaster* p70 S6 kinase. World Patent 1998.1.29 9803662-A.
- 1989: H.H. Haymaker Award for Excellence in Graduate Research, Kansas State University, Manhattan, KS

Publications

- **Stewart, M.J.** and Hunt, J.L. (2012). Effects of *Drosophila* Ribosomal Protein S6 Kinase on Wing Growth. AR Acad. of Sci. 66:141-149.
- Lin, J.I., Mitchell, N.C., Kalcina, M., Tchoubrieva, E., **Stewart, M.J.**, Marygold, S.J., Walker, C.D., Thomas, G., Leevers, S.J., Pearson, R.B., Quinn, L.M., Hannan, R.D. (2011). *Drosophila* ribosomal protein mutants control tissue growth non-autonomously via effects on the prothoracic gland and ecdysone. PLoS Genet., 7(12):e1002408.
- **Stewart, M.J.** and Nordquist, E.N. (2005). *Drosophila* Bys is nuclear and shows dynamic tissue-specific expression during development. Dev. Genes Evol., 215: 97-102.

- Stewart, M.J. (2004) Exploring Cells. Cell Biol. Educ., 3:228-229.
- Barcelo, H. and **Stewart, M.J.** (2002). Altering *Drosophila* S6 kinase activity is consistent with a role for S6 kinase in growth. Genesis, 33:83-85.
- Volarevic, S., **Stewart, M.J.**, Ledermann, B., Zilberman, F., Terracciano, L., Montini, E., Grompe, M., Kozma, S.C. and Thomas, G. (2000). Proliferation, but not growth, blocked by conditional deletion of 40S ribosomal protein S6. Science, 288: 2045-2047.
- *Montagne, J., **Stewart, M.J.**, Stocker, H., Hafen, E., Kozma, S.C., and Thomas, G. (1999). *Drosophila* S6 kinase: a regulator of cell size. Science, 283:2126-2129. * *M.J. Stewart and J. Montagne contributed equally to this study*.
- **Stewart, M.J.**, Berry, C.O.A., Zilberman, F., Thomas, G., and Kozma, S.C. (1996). The *Drosophila* p70^{s6k} homolog displays conserved regulatory motifs and rapamycin sensitivity. Proc. Natl. Acad. Sci., U.S.A. 93:10791-10796.
- **Stewart, M.J.** and Thomas, G. (1994). Mitogenesis and protein synthesis: a role for ribosomal protein S6? BioEssays 16:809-815.
- **Stewart, M.J.** and Denell, R. (1993). Mutations in the *Drosophila* homolog of ribosomal protein S6 cause tissue overgrowth. Mol. Cell. Biol. 13:2524-2535.
- **Stewart, M.J.** and Denell, R. (1993). The *Drosophila* ribosomal protein S6 gene includes a 3' triplication which arose by unequal crossing over. J. Mol. Biol. Evol. 10:1041-1047.
- Maki, C., Rhoads, D.D., **Stewart, M.J.**, Van Slyke, B., and Roufa, D.J. (1989). The *Drosophila melanogaster* RpS17 gene encoding ribosomal protein S17. Gene 79:289-298.
- Brown, S.J., Rhoads, D.D., **Stewart, M.J.**, Van Slyke, B., Chen, I.-T., Johnson, T.K., Denell, R.E., and Roufa, D.J. (1988). Ribosomal protein S14 is encoded by a pair of highly conserved adjacent genes on the X chromosome of *Drosophila melanogaster*. Mol. Cell. Biol. 8:4314-4321.

Oral Presentations Since Joining UAM

- **Stewart, M.J.** (2013). Function of a Ribosomal Protein Gene in Growth and Tumors. Oral presentation at the 2013 Arkansas INBRE Research Meeting in Little Rock, Arkansas.
- **Stewart, M.J.** (2012). Tumor Suppressor Genes: *Drosophila melanogaster* as a Model for Human Disease. Oral presentation at the 2012 Arkansas INBRE Research Meeting in Little Rock, Arkansas.
- **Stewart, M.J.** and Hunt, J.L. (2012). Effects of *Drosophila* Ribosomal Protein S6 Kinase on Wing Growth. Oral presentation at the 2012 Arkansas Academy of Science Meeting in Magnolia, Arkansas.

- **Abstracts and Poster Presentations Since Joining UAM.** (The names of UAM undergraduate student researchers are underlined)
- <u>Seth St. John, Devon Wray</u> and Mary Stewart (2015). Analysis of a Ribosomal Protein Gene in Tumor Development. Poster presentation at the April 2015 Joint Meeting of the Arkansas Academy of Science and the Arkansas Undergraduate Research Conference in Arkadelphia, Arkansas. *This poster won the "Best Overall Poster Award" for this meeting.*
- <u>Shana Chancellor, Hope Dunlap, Robert Rose,</u> Helen Beneš and Mary Stewart (2014). Genetic analysis of *RpS6-Or_aca2* gene function. Poster presentation at the April 2014 Arkansas Space Grant Consortium meeting in Hot Springs, Arkansas.
- <u>Shana Chancellor, Hope Dunlap, Robert Rose,</u> Helen Beneš and Mary Stewart (2013). Genetic analysis of *RpS6-Or_aca2* gene function. Poster presentation at the November 2013 Southeast Regional IDeA meeting in Little Rock, AR.
- <u>Shana Chancellor, Hope Dunlap, Robert Rose,</u> Helen Beneš and Mary Stewart (2013). Genetic analysis of *RpS6-Or_aca2* gene function. Poster presentation at the October 2013 Arkansas INBRE meeting in Fayetteville, Arkansas.
- Mary Stewart, <u>Shana Chancellor</u>, <u>Hope Dunlap</u> and Helen Beneš (2013). Expression of the *Drosophila melanogaster RpS6-Or_aca2* Gene. Poster presentation at the October 2013 Arkansas INBRE meeting in Fayetteville, Arkansas.
- Shana Chancellor, Hope Dunlap, Helen Beneš and Mary Stewart (2013). Function of a Dual Gene in Growth and Tumors. Poster presentation at the February 2013 STEM meeting at the Arkansas State Capital in Little Rock, Arkansas.
- Shana Chancellor, Hope Dunlap, Robert Rose, Helen Beneš and Mary Stewart (2013). Function of a "Dual Gene" in Growth and Tumors. Poster presentation at the April 5-6, 2013 Arkansas Academy of Science meeting in Little Rock, Arkansas.
- Warren, S., Dunlap, H., Chancellor, S., and Stewart, M.J. (2012). A Transgenic Approach to Discern the Role of a Small Non-Coding RNA. Poster presentation at the 2012 AR INBRE meeting in Fayetteville, Arkansas.
- Stewart, M.J. and Rose, R. (2012). Ribosomal Protein S6 in Growth and Tumor Development. Poster presentation at the 2012 AR INBRE meeting in Fayetteville, Arkansas.
- Rose, R. and Stewart, M.J. (2012). Investigation of Two Genes in Growth and Tumor Development. Poster presentation at the 2012 STEM meeting at the Arkansas state capital in Little Rock, AR.
- Stewart, M.J. and Hunt, J.L. (2011). Effects of *Drosophila* p70S6 Kinase Variants on Cell Size. Poster presentation at the 2011 Arkansas Academy of Science meeting in Monticello, Arkansas.
- Rose, R. and Stewart, M.J. (2011). Functional Analysis of the *RpS6*gene and a nested snoRNA in Growth and Tumor Suppression. Poster presentation at the 2011 Arkansas Academy of Science meeting in Monticello, Arkansas.

- Rose, R. and Stewart, M.J. (2011). Functional Analysis of the *RpS6* gene and a nested snoRNA in Growth and Tumor Suppression. Poster presentation at the 2011 Arkansas INBRE meeting in Fayetteville, Arkansas.
- Stewart, M.J. and Hunt, J.L. (2010). Altered forms of *Drosophila* S6 kinase impact cell size. Poster presentation at the 2010 Arkansas INBRE meeting in Fayetteville, Arkansas.
- Rose, R. and Stewart, M.J. (2010). Investigation of two genes in growth and tumor suppression. Poster presentation at the 2010 Arkansas INBRE meeting in Fayetteville, Arkansas.

Grants Funded Since Joining UAM

- 2014: UAM faculty research grant for \$1500.00
- 2013: UAM faculty research grant for \$1500.00
- 2013: Faculty sponsor for a \$2600.00 SURF grant awarded to Shana Chancellor (UAM undergraduate student) by the Arkansas Department of Higher Education.
- 2013: Faculty sponsor for a \$1500.00 STEM grant awarded to Shana Chancellor (UAM undergraduate student) by the Arkansas Space Grant Consortium.
- 2013: Arkansas INBRE summer research grant for \$20,252.00.
- 2012: Arkansas INBRE summer research grant for \$8785.59.
- 2012: UAM faculty research grant for \$1500.00.
- 2010: UAM faculty research grant for \$1500.00.
- 2010: Faculty sponsor for a \$2600.00 SURF grant awarded to Robert Rose (UAM undergraduate student) by the Arkansas Department of Higher Education.
- 2009: UAM faculty research grant for \$1500.00.

Grants Submitted, but Not Funded, Since Joining UAM

- NSF (National Science Foundation) grant application in 2009 for \$66,646.00. This proposal was in collaboration with Drs. Marvin and Karen Fawley at UAM. Grant title: Acquisition of instrumentation to enhance research in cell biology and biodiversity
- NSF grant application in 2010 for 130,200.00. The proposal was in collaboration with Drs. Marvin and Karen Fawley at UAM. Grant title: MRI acquisition of microscopy equipment to enhance research in cell biology and biodiversity

Other Current Research Activities

An ongoing collaboration with Dr. Leonie Quinn at the University of Melbourne (Melbourne, Australia) and Drs. Rick Pearson and Ross Hannan and at the Peter MacCallum Cancer Research Institute in Melbourne Australia has yielded a 2011 publication in the journal PLoS Genetics.

In the summer of 2012, I began a collaboration with Dr. Helen Beneš at UAMS in Little Rock, Arkansas. Dr. Beneš served as my faculty mentor for two different Arkansas INBRE summer research grants; one for summer of 2012 and another for summer of 2013.

Advising

Serve as academic advisor to a variety of UAM students including Allied Health majors, Prepharmacy majors and Biology majors.

In 2013, was named "Outstanding Academic Advisor" by the Dean of Mathematics and Natural Sciences at UAM (Univ. of Arkansas at Monticello).

University Service and Committees

Member of the UAM Faculty Research Grant Committee, Spring 2015 - present.

Member of the UAM Teacher Education Committee, 2014 to present.

Member of the UAM Library Committee, 2010 – 2014.

Member of the Biology Curriculum Committee, an *ad hoc* committee to review the biology curriculum at UAM, 2011 to present.

Member of the UAM cost containment committee, 2011 - 2012.

Professional Service

Facilitated a one-day, K-12 science teacher professional development workshop called "Biotech in a Box" on June 5, 2013.

In 2012, served as an "expert interviewee" for 8th grade Star City science students by answering their interview questions via email

Attended a week long Advanced Placement Biology Summer Institute held in Hot Springs, Arkansas in July 2011.

In 2011, became an "advanced placement biology liaison" for regional K-12 schools.

In 2011 and 2010, volunteered at College Goal Sunday, a one-day event to help students apply for financial aid to attend college.

Served as a poster and/or oral presentation judge for numerous scientific meetings:

- 2014: Poster judge at the Southeast Arkansas Science Fair at UAM in Monticello, Arkansas.
- 2013: Poster judge at the Arkansas INBRE meeting in Fayetteville, Arkansas.
- 2013: Poster judge at the Southeast Arkansas Science Fair at UAM in Monticello, Arkansas.
- 2012: Poster judge at the Southeast Arkansas Science Fair at UAM in Monticello, Arkansas.
- 2011: Oral presentation judge at the Arkansas Academy of Science Conference in Monticello, Arkansas.
- 2011: Poster judge at the Southeast Arkansas Science Fair at UAM in Monticello, Arkansas.
- 2010: Poster judge at the 2010 Arkansas Academy of Science meeting in Little Rock, Arkansas.
- 2010: Poster judge at the Southeast Arkansas Science Fair at UAM in Monticello, Arkansas.
- 2009: Poster judge at the Southeast Arkansas Science Fair at UAM in Monticello, Arkansas.

Professional Memberships

Member of UAM chapter of Sigma Zeta.

Member of the Arkansas Academy of Sciences.

Past member of the American Society for Microbiology.

Past member of the Genetics Society of America.

Past member of the American Association of Sciences.

CURRICULUM VITA M. JEFFREY TAYLOR ASSOCIATE PROFESSOR OF CHEMISTRY

I. PERSONAL DATA:

Date of Birth: June 23, 1962

II. EDUCATION:

Postdoctoral Fellow University of Illinois at Urbana-Champaign (1992-1994) Ph.D. University of Arkansas, Fayetteville, AR, 1992 Ph.D.

Biochemistry **GPA=4.0/4.0**

M.A. University of Texas; Austin TX; 1987 M.A. Chemistry **GPA=4.0/4.0** B.S. University of Arkansas at Little Rock; Little Rock, AR, 1984 B.S.

Chemistry (ACS Certified) GPA=3.93/4.0 (magna cum laude, alpha

epsilon)

High School Mountain View Public High School; Mountain View, AR; 1980 (honors)

III. PROFESSIONAL HISTORY:

1. Associate Professor of Chemistry, University of Arkansas at Monticello; Monticello, AR August 2006 - present.

- 2. Assistant Professor of Chemistry, University of Louisiana at Monroe; Monroe, LA, August 1995 August 2006.
- 3. Adjunct Assistant Professor of Chemistry; Lyon College, Batesville, AR, August 1994 May 1995.
- 4. Post-Doctoral Research Fellow; University of Illinois at Urbana-Champaign, Urbana, Illinois, June 1992 August 1994.
- 5. Graduate Teaching/Research Assistant; University of Arkansas, 1987 1992.
- 6. Graduate Teaching/Research Assistant; University of Texas, 1984 1987.
- 7. University Lecturer, University of Arkansas at Little Rock, 1983 1984.
- 8. Laboratory Teaching Assistant, University of Arkansas at Little Rock, 1981 1983.

IV. GRANTS FUNDED:

- 1. "Molecular Modeling of Phylogenetically Significant Carotenoids" Danielle Cook and M. Jeffrey Taylor; (2014); Arkansas Space Grant Consortium; STEM Award; \$1500.
- 2. "Hydrogen Generation through the Electrolysis of Water"; Chris Roberts and M. Jeffrey Taylor; (2014); Arkansas Space Grant Consortium; STEM Award; \$1500.
- 3. "Hydrogen Generation through the Electrolysis of Water" Esgar Jimenez and M. Jeffrey Taylor; (2013); Arkansas Space Grant Consortium; STEM Award; \$1500.
- 4. "Proposal to Enhance Research and Academic Instruction Through the Use of Molecular Modeling"; M. Jeffrey Taylor; (2012); INBRE; \$11,447.
- 5. "2000 Undergraduate Biological Sciences Education Program"; F.L. Pezold, P.M.K. Aku, G.L. Stringer, S. Davis, A.M. Findley, M.J. Taylor, A.M. Hill; Howard Hughes Medical Institute (2000-2004), \$1,500,000.
- 6. "Sterilization Equipment for the Chemistry and Natural Sciences Building Laboratory Suite"; H. C. Bounds, A. M. Findley, J. A. Knesel, D. W. Pritchett, T. W. Sasek, T. G.

- Lewis, W. C. Hoefler, J. L. Oakes, T. Smith, and M. J. Taylor; 1999-2000; ULM Development Grants Program, \$6,300.
- 7. "Molecular Modeling and Conformational Analysis of Biological Macromolecules"; M. Jeffrey Taylor; 1997-1999; Louisiana Educational Quality Support Fund (LEQSF), \$66,000.
- 8. "Teaching Molecular Biology in the Laboratory"; Ann M. Findley, Steven J. Hecht, Tsunami Yamashita, and M. Jeffrey Taylor; 1997-1998; NLU Development Program, \$8,000.
- "Enhancement of Undergraduate Chemistry Instruction Utilizing Molecular Graphics";
 M. Jeffrey Taylor; 1996-1997; Teaching and Learning Resource Center Grant (TLRC),
 \$4,000.

V. AWARDS AND HONORS:

- 1. Recipient of 2015 Hornaday Outstanding Faculty Award.
- 2. Directed Top Student Poster Presentation in Chemistry at the Arkansas Academy of Sciences 2014 meeting.
- 3. Finalist for the 2014 Hornaday Outstanding Faculty Award.
- 4. Alpha-Chi Teacher of the Year for 2008.
- 5. Who's Who Among America's Teachers for 2002.
- 6. Alpha Lambda Delta Favorite Professor Award, Spring 2002.
- 7. Finalist selected for the Scott Endowed Professorship in Teaching Excellence, March 1999.
- 8. Outstanding Professor selected by Mortar Board and Omicron Delta Kappa, April 1999.
- 9. Radiation Oncology Training Post-Doctoral Fellowship (National Research Service Award derived from NIH) University of Illinois at Urbana-Champaign, June 1992 August 1994.
- 10. University Dissertation Fellowship; University of Arkansas, 1990 1991.
- 11. Chemistry Department Fellowship for Entering Graduates; University of Arkansas, 1987.
- 12. Honorable Mention, National Science Foundation Graduate Fellowship; University of Texas, 1985.
- 13. Dupont Graduate Fellowship; University of Texas, 1984 1985.
- 14. Eakins Graduate Fellowship; University of Texas, 1984 1985.
- 15. Outstanding Senior Chemistry Student (American Institute of Chemists); UALR, 1984.
- 16. Outstanding Achievement in Chemistry (American Chemical Society); UALR, 1984.
- 17. Outstanding Analytical Chemistry Student (American Chemical Society); UALR, 1982.
- 18. Outstanding Freshman Chemistry Student (American Chemical Society); UALR, 1981.

VI. THESES DIRECTED:

- 1. "Molecular Modeling Studies of Two 9,10-Diphenylanthracene Derivatives"; Reddy M. Chilakuri; December 2001.
- 2. "Theoretical Conformational Analysis of Four TNT-Degradation Products"; Zhong Li; May 2001.
- 3. Theoretical Conformational Analysis of Gramicidin-Like Channels"; Yi (Alex) Gu; May 1999.

VII. SELECTED PUBLICATIONS:

- 1. Roger E. Koeppe II, J. Antoinette Killian, T. C. Bas Vogt, Ben de Kruijff, M. Jeffrey Taylor, Gwendolyn L. Mattice, and Denise V. Greathouse. "Palmitoylation-Induced Conformational Changes of Specific Side Chains in the Gramicidin Transmembrane Channel." (1995) *Biochemistry* **34**, 9299-9306.
- 2. J. Antoinette Killian, M. Jeffrey Taylor, and Roger E. Koeppe II. "Orientation of the Valine-1 Side Chain of the Gramicidin Transmembrane Channel and Implications for Channel Functioning. A ²H NMR Study." (1992) *Biochemistry* **31**, 11283-11290.
- 3. Linda P. Williams, Elizabeth J. Narcessian, Olaf S. Andersen, George R. Waller, M. Jeffrey Taylor, John P. Lazenby, James F. Hinton, and Roger E. Koeppe II. "Molecular and Channel-Forming Characteristics of Gramicidin K's: A Family of Naturally Occurring Acylated Gramicidins." (1992) *Biochemistry* 31, 7311-7319.
- 4. Roger E. Koeppe, M. Jeffrey Taylor, and Olaf S. Andersen. "Models for Gramicidin Channels." (1992) *Biophysical J.* **61**, 831.
- 5. M. Jeffrey Taylor, James F. Hinton and Roger E. Koeppe II "2D NMR Determination of the Structure of Acylated Gramicidin in d₂₅SDS Micelles." (1992). *Biophysical J.* **61**, 3038a.
- M. Jeffrey Taylor, Gwendolyn L. Mattice, James F. Hinton and Roger E. Koeppe II "NMR Studies of Acylated Gramicidin in d₆DMSO Solution and d₂₅SDS Micelles." (1991), *Biophysical J.* 59, 319a.
- 7. M. Jeffrey Taylor and Roger E. Koeppe II "NMR Studies of Tyr-1 Gramicidin A." (1990) *Biophysical J.* **57**, 99a.

VIII. SELECTED PRESENTATIONS:

- 1. Danielle S. Cook and M. Jeffrey Taylor, "Construction of a Large Scale Photovoltaic Hydrogen Gas Generator"; Posters at the Capitol, Feb. 11, 2015, Little Rock, AR.
- 2. Danielle S. Cook and M. Jeffrey Taylor, "Molecular Orbital Calculations of Echinenone and 3-Hydroxyechinenone from Orange Carotenoid Proteins from Algae"; INBRE, Nov. 8, 2014, Fayetteville, AR.
- 3. Esgar Jimenez and M. Jeffrey Taylor, "Photovoltaic Generation of Hydrogen" Arkansas Space Grant Consortium Symposium, April 7, 2014, Hot Springs, AR.
- 4. Ryan M. Reyes and M. Jeffrey Taylor, "Molecular Modeling Studies of Phylogenetically Significant Carotenoids of Oxygenic Phototrophs", Meeting of the Arkansas Academy of Sciences, April 5, 2014, Harding University.
- 5. Ryan M. Reyes and M. Jeffrey Taylor, "Molecular Modeling Studies of Phylogenetically Significant Carotenoids of Oxygenic Phototrophs", National Meeting of the American Chemical Society, March 15-17, 2014, Dallas, TX.
- 6. Esgar Jimenez and M. Jeffrey Taylor; "Hydrogen Generation through the Hydrolysis of Water"; ARKLSAMP Poster Presentation; April 19-20, 2012.
- 7. Reddy M. Chilakuri and M. Jeffrey Taylor; "Conformational Analysis of Diphenylanthracenes by Molecular Mechanics"; First Annual ULM Student Research Symposium; University of Louisiana at Monroe, Monroe LA, Apr. 18, 2001.

- 8. Zhong Li and M. Jeffrey Taylor; "Conformations of TNT-Degradation Products Determined by Molecular Mechanics"; 74th Annual Meeting of the Louisiana Academy of Sciences, Centenary College, Shreveport, LA, Feb. 4, 2000.
- 9. M. Jeffrey Taylor and Andrew H.-J. Wang; "The solution Structures of Four DNA Oligonucleotides Containing Tandem GA Mismatched Base-Pairs as Determined by Two-Dimensional NMR Spectroscopy"; Cell and Molecular Biology and Molecular Biophysics Research Symposium, Beckman Institute, Urbana, IL, Sep. 11, 1993.
- 10. J. Antoinette Killian, M. Jeffrey Taylor and Roger E. Koeppe II; "Orientation of the Val¹ Side Chain of Gramicidin A in Lipid Bilayers"; Cell and Molecular Biology and Molecular Biophysics Research Symposium, Beckman Institute, Urbana, IL, Sep. 19, 1992.
- 11. M. Jeffrey Taylor, James F. Hinton and Roger E. Koeppe II; "2D NMR Determination of the Structure of Acylated Gramicidin in d₂₅SDS Micelles"; Biophysical Society National Meeting, Houston, TX, Feb. 9-13, 1992.
- 12. M. Jeffrey Taylor, Gwendolyn L. Mattice, James F. Hinton and Roger E. Koeppe II; "NMR Studies of Acylated Gramicidin in d₆DMSO Solution and d₂₅SDS Micelles"; American Society for Biochemistry and Molecular Biology Fall Symposium, Keystone CO, Oct. 11-14, 1991.
- 13. M. Jeffrey Taylor, Gwendolyn L. Mattice, James F. Hinton and Roger E. Koeppe II; "NMR Studies of Acylated Gramicidin in d₆DMSO Solution and d₂₅SDS Micelles"; Biophysical Society National Meeting, San Francisco, CA, Feb. 24-28, 1991.
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