

DR. KAREN S. MCNEAL (SELL)

Current Title: Assistant Professor

Appointment: 50% Research, 50% Teaching

Physical Address: Department of Geosciences, PO Box 5448, Mississippi State, MS, 39762

Email Address and Phone: karen.mcneal@msstate.edu; 662-325-1114

Education: **Ph.D., Geology**, 2003-2007
Texas A&M University, College Station, Texas

M.S., Oceanography, 2000-2003
Texas A&M University, College Station, Texas

B.S., Major: Marine Science, Minor: Environmental Studies, 1996-2000, Eckerd College, St. Petersburg, Florida

Experience:

2007-Present	Assistant Professor, Department of Geosciences, Mississippi State University
Summer 2007	Research Associate, Post-Doctoral, Department of Chemistry, Texas A&M University
2006-2007	Graduate Fellow, NSF Graduate K-12 Program, Texas A&M University
Summer 2004-2006	Campus Resource Person, NSF Information Technology in Science Center for Teaching and Learning, Texas A&M University
2003-2006	Graduate Assistant, NSF Information Technology in Science Center for Teaching and Learning, Texas A&M University
2002-03	Research Assistant, Department of Oceanography, Texas A&M University
2000-2002	Scherck Fellow, Department of Oceanography, Texas A&M University

Spring 2000	Laboratory Teaching Assistant, Chemical and Physical Oceanography, Eckerd College
Summer 1999	Undergraduate NSF REU Student, Eckerd College
Summer 1998	Geochemistry Research Intern, United States Geological Survey (USGS), St. Petersburg, FL
1998-99	Laboratory Teaching Assistant, General Chemistry I and II, Eckerd College

Publications: Refereed journal publications – 15 and 3 in prep; Book chapters 1 and 1 in prep; Technical Reports - 1; Theses – 3; Abstracts – 18

Peer-Reviewed Publications:

Miller, H.R., **McNeal, K.S.**, and Herbert, B.E. 2009. Student's Conceptual Model Development of Coastal Sand-Sediment Transport During Authentic Science Inquiry in an Introductory Physical Geology Course. *Journal of Geography in Higher Education*: in review.

Sherman-Morris, K., Schumacher, A., Drobot, S., and **McNeal, K.** 2009. Pet care providers hurricane preparedness in the Houston and New Orleans metropolitan areas: An investigation of the Ike and Gustav storm events. *International Journal of Mass Emergencies and Disasters*: in revision.

Gardner, W.S., McCarthy, M.J., Carini, S.A., **McNeal, K.S.**, Puckett, M.K., and Pennington, J. 2009. Collection of intact sediment cores with overlying water to study nitrogen- and oxygen-dynamics in regions with seasonal hypoxia. *Continental Shelf Research*: in revision.

McNeal K.S. and Herbert B.E. 2009. Volatile organic metabolites as indicators of microbial activity and community composition shifts. *Soil Science Society of America Journal* 73: 579-588.

McNeal K.S., Miller H.R., and Herbert B.E. 2008. The effect of using inquiry and multiple representations on introductory geology students' conceptual model development of coastal eutrophication. *Journal of Geoscience Education* 56: 201-211.

McCarthy M.J., **McNeal K.S.**, Gardner W.S., Morse J.W. 2008. Bottom-water hypoxia effects on sediment-water interface nitrogen transformations in a seasonally hypoxic, shallow bay (Corpus Christi Bay, Texas, USA). *Estuaries and Coasts* 31: 521-531.

Sell K.S., Herbert B.E., Stuessy C. and Schielack J. 2006. Supporting student conceptual model development of complex earth systems through the use of multiple representations and inquiry. *Journal of Geoscience Education* 54: 396-407.

Sell K.S. and Morse J.W. 2006. Influences of seasonal hypoxia on iron and sulfur biogeochemistry in coastal sediments. *Aquatic Geochemistry* 12: 179-198.

Gardner W.S., McCarthy M.J., Sobolev D., Soonmo A., **Sell K.S.** and Brock D. 2005. Nitrogen fixation and dissimilatory nitrate reduction to ammonium (DNRA) support nitrogen dynamics in Texas estuaries. *Limnology and Oceanography* 51: 558-568.

Morse J.W., DiMarco S.F., Hebert A.B., **Sell K.S.** 2003. A scaling approach to spatial variability in early diagenetic processes. *Hydrobiologia* 494: 25-29.

Morse J.W., DiMarco S.F., **Sell K.S.** and Herbert A.B. 2003. Determination of the optimum sampling intervals in sediment pore waters using the autocovariance function. *Aquatic Geochemistry* 9: 41-57.

Morse J.W., Gledhill D.K., **Sell K.S.**, and Arvidson R.S. 2002. Pyritization of iron in sediments from the continental slope of the northern Gulf of Mexico. *Aquatic Geochemistry* 8: 3-13.

Byrne R.H., Xuewu L., Kaltenbacher E.A., **Sell K.S.**, 2002. Spectrophotometric measurement of total inorganic carbon in aqueous solutions using liquid core waveguide. *Analytica Chimica* 451: 221-229.

Morse J.W., Gledhill D.K., **Sell K.S.** and Arvidson R.S. 2001. Reaction kinetics of iron with sulfide in anoxic marine sediments from unique biologic environments. In *The Biogeochemistry of Iron Cycling in Natural Environments*. Zhang, Coates (eds.), Kluwer Academic, New York.

Hopkins A.E., **Sell K.S.**, Soli A.L., and Byrne R.H. 2000. In-situ spectrophotometric pH measurements: the effect of pressure on thymol blue protonation and absorbance characteristics. *Marine Chemistry* 71: 103-109.

Technical Reports:

Schumacher, A., Sherman-Morris, K., **McNeal, K.**, and Drobot, S. 2009. Pet Care Professionals' Preparedness for, Response to and Utilization of Resources During Hurricane Gustav. Quick Response Report. Boulder, CO: University of Colorado Natural Hazards Center. <http://www.colorado.edu/hazards/research/gr/>

Theses and Dissertations:

McNeal K.S. 2007. Understanding complex earth systems: volatile metabolites as microbial ecosystem proxies and student conceptual model development of coastal eutrophication. Doctoral Dissertation, Texas A&M University. pp. 1-172.

Sell K.S. 2003. Temporal influences of seasonal hypoxia on sediment biogeochemistry in coastal waters. Masters Thesis, Texas A&M University. pp. 1-142.

Sell, K.S. 2000. In-situ spectrophotometric pH measurements: the use of thymol blue indicator in both high pressure and long pathlength cells to determine the CO₂ parameters of seawater. Undergraduate Thesis, Eckerd College. pp. 1-50.

Publications in Preparation:

McNeal, K.S. and Anderson, R. 2009. Adaptation and development of community members, In *A Learning Ecology Model To Promote Science Education Leadership* (Eds. Schielack, J. and Knight, S.): in prep.

McNeal, K.S., Vasquez, Y., Avandano, C., Moreno, K., and Besinaiz, J. 2009. Analyzing at-risk and bilingual elementary students' classroom behavior and conceptual understanding during inquiry-, technology-, and game-based Earth science activities. *Journal of Geoscience Education*: in prep.

Radencic, S. and **McNeal K.S.** 2009. The use of internet-based GIS resources to increase conceptual understanding of ground water and surface water processes in low-income, middle school students, *Journal of Geoscience Education*: in prep.

Abstracts and Presentations:

Invited Presentations and Seminars:

2009	Michigan State University, Division of Science and Math Education
2009	Michigan State University, Department of Geological Sciences
2009	Mississippi State University, Department of Soil Science
2008	Dauphin Island Sea Lab, Alabama Marine Science Institution
2008	Mississippi State University, Department of Biology
2007	California State University, Fullerton, Department of Geology
2007	Eastern Washington University, Department of Geology
2007	Grand Valley State University, Department of Geology
2006	Mississippi State University, Department of Geosciences
2006	Grinnell College, Departments of Chemistry and Biology
2006	Harper College, Department of Geology

National and International Presentations and Abstracts:

Ezell and McNeal, 2009. The Geological Society of America GSA, Submitted.

Corley, M.E., Folk, R.L., Kirkland, B.L., Lynch, F.L. , **McNeal**, K.S., Puckett, M.K., 2009. A New Look at Familiar Environmental: Early Carbonate Precipitates and Biofilms in Hot Springs, Salt Ponds, and Reefs, American Association of Petroleum Geologists, Denver, June 7-10.

Ledley, T., Libarkin, J., **McNeal**, K., Ellins, K., Barstow, E., and Comer, C. 2008. AGU. Facilitating Students Understanding Change in the Earth System on Multiple Time Scales. In 2008 American Geophysical Union Fall Meeting, Section ED21B, San Francisco, December 10-14, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract ED21B-0627.

Herbert B.E. and **McNeal**, K.S. 2008. Developing Student Understanding of Complex Earth Systems. A Critical Review. In 2008 Joint Meeting of The Geological Society of America, Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, Gulf Coast Association of Geological Societies with the Gulf Coast Section of SEPM, Section T175, Houston, Oct. 5-9, *Conference abstracts with programs*, pp.192.

Puckett, K., **McNeal**, K.S., and Kirkland, B.L. 2008. A Biogeochemical Description of Microbial Biofilms from Fowl Cay Reef and Microbial Mats at Salt Pond, the Bahamas. In 2008 Joint Meeting of The Geological Society of America, Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, Gulf Coast Association of Geological Societies with the Gulf Coast Section of SEPM, Section T273, Houston, Oct. 5-9, *Conference abstracts with programs*, pp. 238.

Radencic, S. and **McNeal**, K.S. 2008. The Use of Internet-Based GIS Resources to Increase Conceptual Understanding of Hydrologic Systems In Low-Income, Middle School Students. In 2008 Joint Meeting of The Geological Society of America, Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, Gulf Coast Association of Geological Societies with the Gulf Coast Section of SEPM, Section T175, Houston, Oct. 5-9, *Conference abstracts with programs*, pp.192.

McNeal, K.S., Brown, M., Rodgers, J., and Sherman-Morris, K. 2008. The Use of Technologies to Foster On-Line Learning Communities in the Geosciences. In 2008 Geological Society of America Fall Meeting Southeastern Section Spring Meeting, Section T10, Charlotte, April 10-12, *Conference abstracts with programs* 40(4): pp. 45.

McNeal, K.S., Vasquez, Y., Alvandano, C., Moreno, C., Besnaiz, J. 2007. At-Risk

and Bilingual Fifth-Grade Students' On-Task Behavior and Conceptual Understanding in Earth Science-Related Topics during Inquiry-, Technology-, and Game-Based Activities. In 2007 American Geophysical Union Fall Meeting, Section ED23B, San Francisco, December 10-14, *Eos Trans. AGU*, 87(53), Fall Meet. Suppl., Abstract ED23B-1293.

McNeal, K.S. and Herbert, B.H. 2007. Volatile Organic Metabolites as Indicators of Soil Microbial Community Structure and Activity. In 2007 Soil Science Society of America, American Society of Agronomy, Crop Science Society of America Annual Meeting, Section 188, New Orleans, November 4-8, *Annual meetings abstracts [CD-ROM] ASA-CSSA-SSSA*.

Herbert, B.E. and **McNeal, K.S.** 2006. Following The Money: Characterizing the Dynamics of Microbial Ecosystems and Labile Organic Matter in Grassland Soils. In 2006 American Geophysical Union Fall Meeting, Section B-09, San Francisco, December 11-15, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract B52A-02.

McNeal K.S., and Herbert B.E. 2006. Volatile Organic Carbon Metabolites as Indicators of Soil Microbial Community Shift in Microcosm Studies. In 2006 Geological Society of America Fall Meeting, Section T51, Philadelphia, November 22-25, *Conference abstracts with programs 38(7): pp.29*.

Miller H.R., **McNeal K.S.** and Herbert B.H. 2006. Transfer of Geoscience Field Research at Laguna Atascosa National Wildlife Refuge through Authentic Inquiry in the Science Classroom. In 2006 Geological Society of America Fall Meeting, Section T51, Philadelphia, November 22-25, *Conference abstracts with programs 38(7): pp. 361*.

McNeal K.S., Stuessy, C.S, Simanek E., Herbert B.E. 2006. The GK12 Experience in the Fifth Grade Classroom with At-Risk Students: The Benefits and Challenges. In 2006 Geological Society of America Fall Meeting, Section T51, Philadelphia, November 22-25, *Conference abstracts with programs 38(7): pp.158*.

Sell K.S. 2006. How do ITS Participants Adapt Their Authentic Science Experiences to Their Planned Classroom Instructional Frameworks? In 2006 American Education Research Association Spring Meeting, Section 26.085, San Francisco, April 8-12, *Annual meeting program and supplement, pp. 130*.

Sell K.S., Peschel J., Simmons M., and Herbert B. 2005. IT-Supported Authentic Inquiry in Undergraduate Science and Engineering Education. In 2005 American Geophysical Union Fall Meeting, Section ED-53A, San Francisco, December 5-9, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract ED53A-0334.

Sell K.S., Miller H.R., Herbert B.E. 2004. The use of Multiple Representations to Enhance Student Mental Model Development of a Complex Earth System in an

Introductory Geoscience Course. In 2004 American Geophysical Union Fall Meeting, Section ED-41A, San Francisco, December 14-17, *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract ED41A-0248.

Miller H.R., **Sell K.S.**, Hebert B.E. 2004. Influences of Learning Environment Characteristics on Student Learning During Authentic Science Inquiry in an Introductory Physical Geology Course. In 2004 American Geophysical Union Fall Meeting, Section ED-41A, San Francisco, December 14-17, *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract ED41A-0249.

Sell K.S., B.E. Herbert, J. Schielack, and C. Stuessy 2004. Use of Physical Models and Information Technology to Explore Student Difficulties in Developing Rich Mental Models of Complex Earth & Environmental Systems. In 2004 Geological Society of America Fall Meeting, Section T133, Denver, November 7-10, *Conference abstracts with programs 36(5): pp. 555.*

Sell K.S., B.E. Herbert, and J. Schielack. 2004. Student Cognitive Difficulties and Mental Model Development of Complex Earth and Environmental Systems. In 2004 American Geophysical Union Spring Meeting, Section ED-31A, Montreal, Canada, May 17-21, *Eos Trans. AGU*, 85(17), Jt. Assem. Suppl., Abstract ED31A-02.

Sell K.S. and Morse J.W. 2003. Temporal Influences of Seasonal Hypoxia on Sediment Biogeochemistry, In 2003 Geological Society of America Fall meeting, Section 19, Seattle, November 2-5, *Conference abstracts with programs 35(6): pp.83.*

Sell K.S. and Morse J.W. 2003. Temporal Influences of Seasonal Hypoxia on Sediment Biogeochemistry, In 2003 Oceanography International and The Oceanography Society Summer Meeting, New Orleans, June 4-6, *Oceanography 16(2): pp.60.*

Regional Presentations:

B. L. Kirkland, F. L. Lynch, R. L. Folk, A.M. Lawrence, M. Corely, K. Puckett, and **K.S. McNeal**. 2008. Nannobacteria, Organic Matter, and Precipitation in Hot Springs, Reefs, and Tidal Flats: serendipitous science and real implications. Bio Inspired Design Conference, Mississippi State University, August 19-22.

Metoyer S. and **Sell K.S.** 2006. Authentic Science Inquiry Lessons; Tested, Approved, and "Good to Go". In 2006 Conference for Advancement of Science Teachers Fall Meeting, November 9-11.

McCarthy, M.J., Gardner W.S., **Sell K.S.** and Morse J.W. 2006. Bottom-water Hypoxia Effects on Sediment-Water Interface Nitrogen Transformations

Corpus Christi Bay, Texas, USA. In 2006 Texas Bays and Estuaries Meeting, Port Aransas.

Sell K.S. and Metoyer S. 2005. Influencing Science Teaching Practices Through Authentic Scientific Research Learning: The Water Environment Team. In 2005 School, Science, and Math Association Meeting, Fort Worth, November 10-12.

Sell K.S. and Morse J.W. 2003 Temporal Influences of Seasonal Hypoxia on Sediment Biogeochemistry, Gulf Estuarine Research Symposium, Port Aransas, April 18.

Beazley M. and **Sell K.S.** 2002. Biogeochemistry of the Deep Gulf of Mexico, The Sixth Annual Symposium of the Geochemistry of the Earth's Surface, Honolulu, University of Hawaii, June 4-6.

Funding Awards and Applications:

Proposals in Review (2)

2009 *GK12: Initiating New Science Partnerships in Rural Education (INSPIRE)*, PI, National Science Foundation (NSF), Graduate K-12 Program, 01/2010-12/2014, Solicitation 09-556 Mississippi State University (\$2,798,805), *Submitted*.

2009 A Novel Quantitative Risk Assessment Model for Geologic CO₂ Storage, Senior Scientist, Department of Energy, 01/2010-12/31/2013, Solicitation DE-PS26-09NT0001263, Mississippi State University (\$1,598,373), *Submitted*.

Funded Projects (13)

2009 *Fueling the Geosciences educational pipeline: The development of a K-12 network to support minority participation*, Co-PI, 12/31/09-12/30/2010, National Science Foundation (NSF), Solicitation 08-605, Mississippi State University (\$39,828), *Funded*.

2009 *The Sediment Biogeochemistry of Weeks Bay during Bottom Water Hypoxic and Norm-oxic Events*, PI, 06/01/2009-05/31/2010, National Oceanic and Atmospheric Administration (NOAA), Solicitation NOS-OCRM-092001452, Mississippi State University (\$28,572), *Funded*.

2009 *Project SMARTER: Science and Mathematics Advancement and Reform utilizing Technology and Enhanced Resources*, Co-PI, 09/2008-08/2009 Appalachian Regional Commission (ARC), Mississippi State University (\$259,613), *Funded*.

2009 *Diversity Enhancement of the Geosciences through Research Experiences (DEGRE): Mentoring African Americans through Research*, Co-PI, National

- Science Foundation (NSF), Solicitation 08-605, 09/01/09-08/30/10, Mississippi State University (\$196,090), *Funded*.
- 2009 *Earth System Science: A Key to Climate Literacy*, Co-PI, National Aeronautics and Space Administration (NASA), Solicitation NNH08ZDA001N, 04/01/09-03/31/12, TERC (\$280,000), Sub-contract (\$34,000), *Funded*.
- 2009 *The University of Akron and Mississippi University Undergraduate Research Partnership*, PI, 01/01/09-12/31/09, Mississippi State University, Quick Grant Program (\$1,200), *Funded*.
- 2009 *Modeling Mobile Bay Sediments and Pollutants with New Technologies*, 09/2008-09/2009, Year 3 Renewal, Northern Gulf Institute (NGI), National Oceanic and Atmospheric Administration (NOAA), Mississippi State University (\$200,000), Sub-contract (\$16,415), *Funded*.
- 2009 *REU Site: Field Research on Bahamian Lakes-Exploring Records of Anthropogenic and Climate Change*, 01/01/09-12/31/012, National Science Foundation (NSF) Solicitation 07-569, Akron University (\$482,712), Faculty Mentor, Consultant (\$25,000), *Funded*.
- 2009 *Sediment and Mercury Modeling*, Co-PI, 01/01/2010-12/31/2012, Northern Gulf Institute (NGI), National Oceanic and Atmospheric Administration (NOAA), Mississippi State University (\$500,000), Sub-contract (\$227,604), *Funded*.
- 2008 *In-situ Measurements of Microbial Volatile Organic Compound Production in Mississippi Pine Forest Soils*, PI, Research Initiation Program, 01/2008-12/2009, Mississippi State University (\$10,000), *Funded*.
- 2008 *Facilitating Student Understanding of Change in the Earth System on Multiple Time Scales*, National Science Foundation (NSF), Geoscience Education Division Solicitation 05-609, 09/2008-08/2010, TERC (\$150,000), Research and Evaluation Consultant (\$3,500), *Funded*.
- 2008 *Modeling Mobile Bay Sediments and Pollutants with New Technologies*, Year 2 Renewal, Northern Gulf Institute (NGI), National Oceanic and Atmospheric Administration (NOAA), 09/2007-09/2008, Mississippi State University (\$250,000), Sub-contract (\$8,900), *Funded*.

Courses Taught:

Biogeochemical Cycles and Processes (GG 8990) – Geoscience Masters Degree Program, Mississippi State University

Environmental Geosciences (GG 8233) - Teachers in Geoscience Masters Degree Program, Distance Learning Program, Mississippi State University

Ocean Science (GG 8203) - Teachers in Geoscience Masters Degree Program, Distance Learning Program, Mississippi State University

Field Research Methods (GG 8400) - Teachers in Geoscience Masters Degree Program, Distance Learning Program, Mississippi State University

Geology I: Process and Products (GG 8113) - Teachers in Geoscience Masters Degree Program, Distance Learning Program, Mississippi State University

Professional Affiliations:

2008-Present	Sigma Gamma Epsilon
2007-Present	Soil Science Society of America
2006-Present	National Association of Geoscience Teachers
2005-Present	American Society of Limnology & Oceanography
2004-Present	American Geophysical Union
2003-Present	Geological Society of America

Honors and Awards (Graduate and Post-Graduate Only):

2009	Faculty Fellow, GeoSystems Institute, Mississippi State University
2007	Co-author of the 2 nd place poster award in the ““Humanities and Social Sciences” and receipt of ribbon award for the interdisciplinary research and education categories, Student Research Week, Texas A&M University.
2006	Awarded the \$2000 Oswald graduate scholarship from the Department of Geology & Geophysics, Texas A&M University
2006	Co-author of the \$100 2 nd place award poster award in the “Humanities and Social Sciences” category, Student Research Week, Texas A&M University
2005	Awarded the \$4000 Ronald McAdams graduate scholarship from the Department of Geology & Geophysics, Texas A&M University

- 2005 Awarded the \$300 paper award in the “Cognitive and Instructional Technologies Laboratory” category, 10th Annual Educational Research Exchange, Texas A&M University, Jan. 28
- 2004 Awarded the \$6000 Chevron-Texaco graduate scholarship for “Outstanding Current Geology Student” from the Department of Geology & Geophysics, Texas A&M University
- 2004 Awarded the \$300 Research Paper Award in the “Cognitive and Instructional Technologies Laboratory” category, 9th Annual Educational Research Exchange, Texas A&M University, Jan. 30
- 2004 Awarded a \$1000 research scholarship from the Texas Water Resource Institute
- 2003 “Honorable Mention” student research poster, The Ocean Sciences (TOS) meeting, New Orleans
- 2000-02 Awarded Texas A&M University Scherck Fellowship in Oceanography (\$15,500/yr)

Professional Service:

- 2009-present Associate Editor, *Journal of Geoscience Education*
- 2009 Manuscript Reviewer, *Bioresources Technology*
- 2008 Research Initiative Program Proposal Reviewer, Mississippi State University
- 2008 Manuscript Reviewer, *Soil Science Society of America*
- 2008 Geological Society of America, Campus Representative, Mississippi State University
- 2008 Co-Convener, AEG Teacher Training Workshop, New Orleans
- 2008 Manuscript Reviewer, *Journal of Geoscience Education*
- 2008 Co-Convener, Session T175, “Teaching and Learning about Complex Earth Systems: Effective Strategies in Undergraduate Classrooms and Teacher Development Programs”, Geological Society of America Joint Meeting, Oct 5-9, Houston, TX
- 2007-Present Co-sponsor Geosciences Club, Mississippi State University

2007-Present Co-sponsor MSU Upsilon Chapter, Sigma Gamma Epsilon
2005-2007 Manuscript Reviewer, *Limnology & Oceanography*
2004 Guest Manuscript Reviewer, *Journal of Geography in Higher Education*

Field Research Excursions:

2008-2009 Salt Pond Microbial Mats, San Salvador, Bahamas
2004-2006 Dissertation Research, Laguna Atascosa National Wildlife Refuge, TX, 2 weeks
2003 R/V Gyre, Deep Gulf of Mexico Benthic Ecology Program, Texas A&M University, 1 week
2003 R/V Walton Smith, The Bahamas Whiting Exploration, University of Miami, 1 Week
2002 R/V Gyre, Deep Gulf of Mexico Benthic Ecology Program, Texas A&M University, 3 weeks
2002 Thesis Research, Corpus Christi Bay, TX, 5 weeks
2001 R/V Gyre, Deep Gulf of Mexico Benthic Ecology Program, Texas A&M University, 3 weeks

Certificates:

2008 Perkin Elmer Gas Chromatography Mass Spectrometry Operator Training Course
2004 Information Technology in Science Center for Teaching & Learning, earned two-year program certification
2002-Present Scientific diving, American Academy of Underwater Scientists certified
2002-Present Advanced open water SCUBA, PADI certified
1997-Present Open water SCUBA, PADI certified

Collaborators:

Dr. Bruce Herbert, Texas A&M University, College Station (Dissertation Advisor)
Dr. John Morse, Texas A&M University, College Station (Thesis Advisor)
Dr. Eric Simanek, Texas A&M University, College Station (Post-Doctoral Advisor)
Dr. Wayne Gardner, University of Texas, Port Aransas
Dr. Julie Libarkin, Michigan State University
Dr. Tamara Ledley, TERC
Dr. Lisa Park, University of Akron
Dr. John Rodgers, Mississippi State University
Dr. Brenda Kirkland, Mississippi State University
Dr. Mike Brown, Mississippi State University
Dr. James Martin, Mississippi State University
Dr. William McAnally, Mississippi State University
Dr. Jairo Diaz, Mississippi State University
Dr. Lori Bruce, Mississippi State University
Dr. Donna Pierce, Mississippi State University
Dr. Sandra Harpole, Mississippi State University
Dr. Darrel Schmitz, Mississippi State University
Dr. Vladimir Alacron, Mississippi State University
Dr. Kathy Sherman-Morris, Mississippi State University

Students Advised:

Master Degree Students

Ms. Mary Keith Puckett (Current)*
Mr. John Eric Ezell (Current)*
Mr. Chris Ruhs (Current)*
Mr. Andrew Birmingham (Current)**
Ms. Charlotte Bluecher (Current)**

Doctoral Degree Students

Mr. Shankar Ganapathi Shanmugam (Current)**

Undergraduate Students

Ms. Maria Cade (Current)*
Mr. Assonman Degny (Current)*
Mr. Jason Leist (Current)*

TIG Distance Learning Program Graduate Students

Ms. Sarah Radencic (Current)*	Ms. Janette Stewart**
Ms. Tracie Schroeder**	Ms. Cheryl Utecht**
Ms. Jennifer Haydon**	Ms. Kimberly Drake**
Mr. Garrett Bostwick**	Ms. Stephanie Linders**
Mr. Robert Sidebotham**	Ms. Julian Carroll**
Mr. Curt Taylor**	Ms. Megan Cordes**
Mr. Eric Stauffer**	Mr. Christopher Etherington**
Ms. Shannon Wright-Sahabi**	Ms. Katia Etherington**

Mr. Matthew Farrer**
Mr. David Moyer**
Mr. Matthew Olsen**

Mr. Trevor Oystriick**
Mr. Jason Plawa**

*=major advisor

**=served as committee member

Student Workers

Master Degree Students

Ms. Maggie Corley

Ms. Kendra Wright

Undergraduate Students

Ms. Maria Cade

REU Students Advised

Ms. Emily Frank (University of Akron)

Mr. Evan Playle (Eckerd College)

Mr. Jake Sprey (University of Alabama)