

# Amanda R. (Pendleton) Rakhshandeh, Ph.D.

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Associate Professor of Anatomy & Physiology

Department of Biology

South Plains College, Levelland TX 79336

## SUMMARY

Experienced Associate Professor with a demonstrated history of working in the higher education industry. Skilled in facilitating student learning, both face-to-face and online, using a variety of active learning strategies and through effective incorporation of technology. Special expertise with diverse student populations in introductory-level college classrooms. A strong communicator with a PhD from The Johns Hopkins University School of Medicine and additional training from the University of Florida College of Medicine.

## EDUCATION

- 2007 **The Johns Hopkins University School of Medicine** Baltimore, MD
- Ph.D., Biochemistry, Cellular and Molecular Biology
  - Dissertation title: *Characterization and Functional Analysis of Infectious Bronchitis Virus Proteins 3a and 3b*
- 2003 **The Johns Hopkins University School of Professional Studies in Business and Education** Baltimore, MD
- Graduate Certificate, Teaching Adults
  - Relevant Coursework: (i) Designing Courses for Adult Learners, (ii) Techniques and Strategies for Adult Instruction, (iii) Integrating Technology into the Adult Class, (iv) Feedback, Assessment, and Grading
- 1999 **Brigham Young University** Provo, UT
- Bachelors of Science, Molecular Biology; graduated *magna cum laude*
- 1997 **Ricks College (now Brigham Young University – Idaho)** Rexburg, ID
- Associates of Arts, Pre-veterinary Medicine

## ADDITIONAL TRAINING

- 2015 – **University of Florida – School of Medicine** Gainesville, FL
- Graduate course: Medical Anatomy – GMS5650
  - Graduate course: Fundamentals of Medical Physiology – GMS6440
  - Graduate course: Medical Renal Physiology – GMS6401

## TEACHING POSITIONS

- 2016 – **South Plains College** Levelland, TX
- Associate Professor of Anatomy & Physiology*
- Facilitate student learning in face-to-face anatomy and physiology courses with laboratories using student-centered and active, flipped learning approaches.
  - Design all course materials, including presentations, problem-solving activities, interactive online tutorials, online video presentations that meet ADA guidelines, note-taking and study guides, assessments, rubrics, the syllabus, etc.
  - Promote the success of a diverse array of students, many of whom are not prepared for college-level work, through collaboration within the department and college-wide.
- 2017 – **Amarillo College** Amarillo, TX
- Adjunct Instructor of Biology*
- Facilitate student learning in online anatomy and physiology courses with laboratories using student-centered, active, constructivist and problem-based learning approaches. Design online course materials, including online tutorials with interactive games, online video presentations that meet ADA guidelines, note-taking and study guides, collaborative critical thinking assignments, rubrics, the syllabus, etc.
  - During some semesters, serve as the course coordinator for all online anatomy and physiology sections at the college. Duties include uploading course content into all online sections, as well as managing, updating, and trouble-shooting content for all online sections throughout the semester.
  - Collaboratively redesigned the anatomy and physiology course to better promote the success of a diverse array of students, many of whom are not prepared for college-level work.

- 2013 – 16 **Amarillo College** Amarillo, TX  
*Assistant Professor of Biology*
- Facilitated student learning in online and face-to-face anatomy and physiology courses with laboratories using student-centered, active, constructivist and problem-based learning approaches that incorporated technology into the classroom.
  - Designed all course materials as detailed above.
  - Course coordinator for all online anatomy and physiology sections at the college. Duties included developing and updating online content, uploading content into all online sections, and managing/trouble-shooting content for all online sections throughout the semester.
  - Implemented mandatory online peer-tutoring for at-risk students, using Blackboard Collaborate and online scheduling tools.
  - Piloted online proctoring technology (Respondus Monitor) for the entire college and incorporated it into all online Anatomy & Physiology courses.
- 2009 – 13 **Oxford College** Oxford, GA  
*Assistant Professor of Biology*
- Facilitated student learning in face-to-face introductory biology and genetics courses with laboratories using student-centered, active, and problem-based learning approaches.
  - Incorporated scientific research into the classroom, with a focus on authentic scientific communication through writing and oral presentations.
  - Collaboratively designed a module on the biosocial causes of infectious disease with a colleague in the anthropology department.
  - Mentored supplemental instructors and teaching assistants.
- 2006 **Villa Julie College (now Stevenson University)** Stevenson, MD  
*Adjunct Professor*
- Taught human anatomy with laboratory using a constructivist teaching philosophy and active, problem-based learning.
  - Designed all course materials, including presentations, in-class activities, assessments, rubrics and the syllabus.
- 2006 **The Community College of Baltimore County – Catonsville** Catonsville, MD  
*Adjunct Faculty*
- Taught remedial math to a broad demographic of students using a constructivist teaching philosophy and active, problem-based learning.
  - Designed weekly course handouts, presentations, in-class activities, weekly assessments and the syllabus.
- 2004 **The Johns Hopkins University School of Medicine** Baltimore, MD  
*Teaching Assistant*
- Co-led small group discussions and microscopy laboratories for first-year medical students with limited backgrounds in cell biology and histology.
  - Tutored individual students and graded course work.
  - My students performed as well as other students, who were initially more familiar with course content.

## RESEARCH PROJECTS & EXPERIENCE

- 2015 – **Amarillo College & South Plains College** Amarillo, TX & Levelland, TX  
*Collaboration with Anoosh Rakhshandeh in the Animal and Food Sciences Department at Texas Tech University*
- Explored the effects of immune system stimulation on the amino acid requirements of growing pigs, as well as how to reduce the impact of weaning stress on piglets. Provided intellectual contributions in co-authoring publications and presenting results.
  - Helped train students in effective communication of research results for written, poster and oral presentations.
  - Provided editorial assistance on federally-funded grant proposals.
- 2009 – 13 **Oxford College of Emory University** Oxford, GA  
*Department of Biology*
- Designed and installed a new tissue culture facility at Oxford College.
  - Tested plant extracts for antiviral activity against an important agricultural pathogen.
  - Involved undergraduate students in every part of the research and discovery process, from initial planning to the professional presentation of results.

- 2007 – 9 **Wadsworth Center** Albany, NY  
*BDEID Postdoctoral Fellow, NIH NRSA Postdoctoral Fellow*
- Designed experiments in a collaborative, multicultural environment to explore the relationship between *in-vivo* conditions within the lung and cyclic-AMP signaling in *Mycobacterium tuberculosis*.
  - Shared my data at seminars and conferences using various presentation formats and software applications.
- 2000 – 7 **The Johns Hopkins University School of Medicine** Baltimore, MD  
*Graduate Researcher*
- Designed experiments in a collaborative, multicultural environment that characterized two proteins of unknown function produced by infectious bronchitis virus.
  - Shared my data in peer-reviewed journals, at seminars, and at conferences using a variety of techniques and software applications.
- 2000 **Brigham Young University** Provo, UT  
*Research Assistant*
- Collaboratively designed experiments to test the effects of electromagnetic field exposure on the rates of apoptosis and DNA repair in human cell lines.
  - Shared my data in peer-reviewed journals and at conferences using various software applications.
- 1999 **Baylor College of Medicine** Houston, TX  
*Research intern, SMART program*
- Integrated the *Enterobacter cloacae ampRC* genes into the *Escherichia coli* chromosome using a phage-based, non-antibiotic selection system.

#### PEER-REVIEWED PUBLICATIONS & ABSTRACTS

- Wooten, H., **Rakhshandeh, A.R.**, Rakhshandeh, A. 2019. Effects of glucocorticoid receptor agonist on apparent ileal and total tract digestibility of dietary nutrients and the histomorphology of the small intestine in newly weaned pigs. in *Manipulating Pig Production XVII*, a special edition of *Advances in Animal Biosciences*, Adelaide, Australia. s06. (Short paper).
- Rakhshandeh, A., de Lange, C.F.M., Htoo, J.K., Gheisari, A., **Rakhshandeh, A.R.** 2019. Immune system stimulation increases the plasma cysteine flux and whole-body glutathione synthesis rate in starter pigs. *Journal of Animal Science*. 97:3871-3881. (Journal article).
- McGilvray, W.D., Johnson, B., Wooten, H., **Rakhshandeh, A.R.**, Rakhshandeh, A. 2019. Immune system stimulation reduces the efficiency of whole-body protein deposition and alters muscle fibers characteristics in growing pigs. *Animals*. 9:323. (Journal article).
- McGilvray, W.D., Klein, D., Wooten, H., Dawson, J.A., Hewitt, D., **Rakhshandeh, A.R.**, de Lange, C.F.M., Rakhshandeh, A. 2019. Immune system stimulation induced by porcine reproductive and respiratory syndrome virus alters plasma free amino acid flux and dietary nitrogen utilization in starter pigs. *Journal of Animal Science*. 97:2479-2492. (Journal article).
- McGilvray, W.D., Wooten, H., **Rakhshandeh, A.R.**, Petry, A., Rakhshandeh, A. 2019. Immune system stimulation increases dietary threonine requirements for protein deposition in growing pigs. *Journal of Animal Science*. 97:735-744. (Journal article).
- Wooten, H., McGlone, J.J., Wachtel, M., Thompson, G., **Rakhshandeh, A.R.**, Rakhshandeh, A. 2019. A glucocorticoid receptor agonist improves post-weaning growth performance in segregated early-weaned pigs. *Animal*. 10: 1-10. (Journal article).
- McGilvray, W.S., Klein, D., Wooten, H., Dawson, J.A., Hewitt, D., **Rakhshandeh, A.R.**, de Lange, C.F.M., Rakhshandeh, A. 2019. Immune system stimulation induced by *Escherichia coli* lipopolysaccharide alters plasma free amino acid flux and dietary nitrogen utilization in growing pigs. *Journal of Animal Science*. 97: 315-326. (Journal article).
- Petry, A., McGilvray, W., **Rakhshandeh, A.R.**, Rakhshandeh, A. 2017. Technical note: Assessment of an alternative technique for measuring body temperature in pigs. *Journal of Animal Science*. 95: 3270-3274. (Journal article).
- McGilvray, W.S., de Lange, C.F.M., **Pendleton, A.R.**, Rakhshandeh, A. 2017. Immune system stimulation (ISS) alters the protein deposition (PD) and increases dietary threonine requirements of growing pigs. *Journal of Animal Science*. 95 (supplement 2): 70. (Peer-reviewed abstract).
- Petry, A., McGilvray, W.S., **Pendleton, A.R.**, Rakhshandeh, A. 2017. Assessment of an alternative technique for measuring body temperature in pigs. *Journal of Animal Science*. 95 (supplement 2): 42-43. (Peer-reviewed abstract).
- Stuart, W., Burkey, T.E., Gabler, N., Schwartz, K.J., Klein, D., Dawson, J.A., **Pendleton, A.R.**, de Lange, C., and Rakhshandeh A. 2016. Immune system stimulation (ISS) induced by lipopolysaccharide (LPS) alters amino acid metabolism in growing pigs. *Journal of Animal Science*. 94 (supplement 2): 51. (Peer-reviewed abstract).

- Hewitt, D.J., de Lange, C., Antonick, T., Dekkers, J.C.M., **Pendleton, A.R.**, Rakhshandeh, A. 2015. Effect of divergent selection for residual feed intake on whole body protein turnover in growing gilts fed either adequate or lysine deficient diets. *Journal of Animal Science*. 94 (supplement 2): 108. (Peer-reviewed abstract).
- Chen, C.\*, Zuckerman, D.M., Brantley, S.\*, Sharpe, M.\*, Childress, K.\*, Hoiczky, E., **Pendleton, A.R.\*\***. 2014. *Sambucus nigra* extracts inhibit infectious bronchitis virus at an early step in the replication process. *BMC Veterinary Research*. 10: 24. (Journal article).
- **Pendleton, A.R.** 2011. Using student evaluations to improve teaching and learning. *Journal of Microbiology & Biology Education*. 12: 116-117. (Peer-reviewed abstract).
- **Pendleton, A. R.**, and Machamer, C.E. 2008. Generating antibodies to the gene 3 proteins of infectious bronchitis virus, pp. 162-189. In *SARS and other coronaviruses: laboratory protocols*, D. Cavanagh (ed). Humana Press, Totowa, N.J. (Book chapter).
- **Pendleton, A.R.**, and Machamer, C.E. 2006. Differential localization and turnover of infectious bronchitis virus 3b protein in mammalian versus avian cells. *Virology*. 345: 337-345. (Journal article).
- **Pendleton, A.R.**, and Machamer, C.E. 2005. Infectious bronchitis virus 3a protein localizes to a novel domain of the smooth endoplasmic reticulum. *Journal of Virology*. 79: 6142-6151. (Journal article).
- Ruff, C.T., Ray, S.C., Kwon, P., Zinn, R., **Pendleton, A.**, Hutton, N. Ashworth, R., Gange, S., Quinn, T.C., Siliciano, R.F., Persaud, D. 2002. Persistence of wild-type virus and lack of temporal structure in the latent reservoir for human immunodeficiency virus type 1 in pediatric patients with extensive antiretroviral exposure. *Journal of Virology*. 76: 9481-9492. (Journal article).
- Petrosino, J.F., **Pendleton, A.R.**, Weiner, J.H., Rosenberg, S.M. 2002. Chromosomal system for studying AmpC-mediated beta-lactam resistance mutation in *Escherichia coli*. *Antimicrobial Agents and Chemotherapy*. 46: 1535- 1539. (Journal article).
- Robison, J.G., **Pendleton, A.R.**, Monson, K.O., Murray, B.K., O'Neill, K.L. 2002. Decreased DNA repair rates and protection from heat induced apoptosis mediated by electromagnetic field exposure. *Bioelectromagnetics*. 23: 106-112. (Journal article).
- Zhang, F., Li, H., **Pendleton, A.R.**, Robison, J.G., Monson, K.O., Murray, B.K., O'Neill, K.L. 2001. Thymidine kinase 1 immunoassay: a potential marker for breast cancer. *Cancer Detection and Prevention*. 25: 8-15. (Journal article).

\* indicates undergraduate, sophomore co-authors who I mentored

\*\* indicates publications in which I was the corresponding author

#### OTHER POSTER ABSTRACTS

- Chen, C.\*, **Pendleton, A.R.** 2012. *Sambucus nigra* inhibits IBV at an early stage of infection. *Summer Undergraduate Research at Emory Program Conference*. Atlanta, Georgia.
- Brantley, S.E.\*, **Pendleton, A.R.** 2011. Extracts of *Nigella sativa* do not inhibit infectious bronchitis virus. *Summer Undergraduate Research at Emory Program Conference*. Atlanta, Georgia.
- **Pendleton, A.R.** 2011. Using student evaluations to improve teaching and learning. *American Society for Microbiology, Conference for Undergraduate Educators*. Baltimore, Maryland.
- Sharpe, M.G.\*, Brantley, S.E.\*, **Pendleton, A.R.** 2011. *Rhodiola rosea* extracts enhance infectious bronchitis virus infection *in vitro*. *Association of Southeastern Biologists Annual Meeting*. Huntsville, Alabama.
- Sharpe, M.G.\* and **Pendleton, A.R.** 2010. A *Rhodiola rosea* extract enhances infectious bronchitis virus infection *in vitro*. *Summer Undergraduate Research at Emory Program Conference*. Atlanta, Georgia.
- **Pendleton, A.R.**, Smith, E.A., McDonough, K.A. 2008. Adenosine 3',5'-cyclic monophosphate signaling in *Mycobacterium tuberculosis*. *American Society for Microbiology Conference*. Boston, Massachusetts.
- **Pendleton, A.R.**, Youn, S., Collisson, E.W., and Machamer, C.E. 2005. Characterization and functional analysis of infectious bronchitis virus proteins 3a and 3b. *Xth International Nidovirus Symposium*. Colorado Springs, Colorado.
- **Pendleton, A.R.**, and Machamer, C.E. 2004. Characterization of infectious bronchitis virus proteins 3a and 3b. *American Society for Virology Conference*. Montreal, Quebec, Canada.
- Niemitz, E. and **Pendleton, A.R.** 2003. Facilitating learning in the biology classroom. *The Johns Hopkins University School of Business and Education Symposium on Learning in Higher Education*. Baltimore, Maryland.
- **Pendleton, A.R.**, and Machamer, C.E. 2003. Characterization of infectious bronchitis virus 3a protein. *American Society for Virology Conference*. Davis, California.

- **Pendleton, A.R.**, Hicks, S.W., and Machamer, C.E. 2001. Potential role of golgin-160 cleavage fragments in the ER stress response and other signaling pathways. *Molecular Biology of the Cell*. 12 (S):509a. American Society for Cell Biology Conference. Washington D.C.
- Robison, J.G., **Pendleton, A.R.**, Monson, K.O., Murray, B.K., O'Neill, K.L. 2000. Decreased DNA repair rates and protection from heat induced apoptosis mediated by electromagnetic field exposure as analyzed by the comet assay. *American Association for Cancer Research Conference*. San Francisco, California.
- Petrosino, J.F., **Pendleton, A.R.**, Weiner, J.H., Rosenberg, S.M. 1999. Recombination-dependent mutation leads to antibiotic resistance in non-dividing Escherichia Coli. *Genetic Recombination & Chromosome Rearrangements FASEB conference, Snowmass Village, Colorado*.

\* indicates undergraduate, sophomore co-authors who I mentored

#### ORAL PRESENTATIONS

- |        |  |                     |
|--------|--|---------------------|
| 2013   | <b>American Society for Virology Annual Conference</b><br><i>Sambucus nigra extracts inhibit infectious bronchitis virus at an early step in the replication process</i><br><b>Pendleton, A.R.</b> , Chen, C.*, Zuckerman, D.M., Brantley, S.*, Sharpe, M.*, Hoicyzk, E. | University Park, PA |
| 2013   | <b>Instructor Development – Community of Practice of Emory Libraries</b><br><i>3rd Annual Faculty/Librarian Collaboration Panel</i><br><b>Pendleton, A.R.</b> (A. Hiesel & S. Bankston also co-presented at this panel)  | Atlanta, GA         |
| 2011   | <b>Oxford College, CAE Workshop on using IDEA student ratings of instruction</b><br><i>Scholarship of teaching and learning: an IDEA project</i><br><b>Pendleton, A.R.</b> (J. Galle & J. Ninkovic also presented at this workshop)                                      | Oxford, GA          |
| 2010   | <b>Oxford College, Faculty Development Committee faculty lecture</b><br><i>Herbs and a chicken virus: a path for mentoring young scientists</i><br><b>Pendleton, A.R.</b>  | Oxford, GA          |
| 2007   | <b>The Wadsworth Center, Biodefense and Emerging Infectious Disease Fellows Seminars</b><br><i>Adenosine 3',5'-cyclic monophosphate signaling in Mycobacterium tuberculosis</i><br><b>Pendleton, A.R.</b> , Smith, E.A., McDonough, K.A.                                 | Albany, NY          |
| 2007   | <b>The Wadsworth Center, Postdoctoral and Doctoral Student Research Seminars</b><br><i>Adenosine 3',5'-cyclic monophosphate signaling in Mycobacterium tuberculosis</i><br><b>Pendleton, A.R.</b> , Smith, E.A., McDonough, K.A.   | Albany, NY          |
| 2000-6 | <b>The Johns Hopkins University School of Medicine, Cell Biology Department</b><br><i>Yearly presentations to department scientists about my ongoing graduate research</i><br><b>Pendleton, A.R.</b>   | Baltimore, MD       |
| 2000-6 | <b>The Johns Hopkins University School of Medicine, Cell Biology Department</b><br><i>Yearly presentations to department scientists about a current, relevant journal article</i><br><b>Pendleton, A.R.</b>  | Baltimore, MD       |
| 2005   | <b>American Society for Virology Annual Conference</b><br><i>Characterization and functional analysis of infectious bronchitis virus protein 3a</i><br><b>Pendleton, A.R.</b> , Youn, S., Collisson, E.W., and Machamer, C.E.  | University Park, PA |
| 1999   | <b>ASM Intermountain-branch Conference</b><br><i>Thymidine kinase: the future of breast cancer diagnosis and prognosis</i><br>Zhang, F., Li, H., <b>Pendleton, A.R.</b> , Robison, J.G., Monson, K.O., Murray, B.K., O'Neill, K.L.                                       | Boise, ID           |

\* indicates undergraduate, sophomore co-authors who I mentored

#### AWARD & GRANTS

- |      |  |                  |
|------|--|------------------|
| 2015 | <b>Amarillo College Faculty Excellence Award for Professional Development (\$500)</b><br><i>This award was given for my pilot of online exam proctoring software for the entire college.</i> | Amarillo College |
|------|--|------------------|

- 2013 **Faculty Development Grant (\$1,503)** Oxford College  
*This competitive award was used to travel to the 32<sup>nd</sup> Annual American Society for Virology Conference in University Park, PA where I gave an oral presentation on my disciplinary scholarship.*
- 2012 **Faculty Development Grant (\$521.50)** Oxford College  
*This competitive award was used to travel to the 34<sup>th</sup> Annual Association for Biology Laboratory Education Conference in Chapel Hill, North Carolina. Attendance at this conference helped prepare me to submit Biology 120 as an INQ course January 2013.*
- 2012 **Summer Undergraduate Research at Emory (SURE) program (\$5,000)** Emory University  
*This competitive award funded my summer research with and mentoring of a sophomore student. Our work investigated the effects of Sambucus nigra extracts on infectious bronchitis virus replication.*
- 2011 **The Harrison Foundation Grant (\$70,000)** The Luther & Susie Harrison Foundation, Inc.  
*This competitive grant proposal was written collaboratively between faculty (including me) of the Biology, Chemistry, Physics and Mathematics departments at Oxford College of Emory University. A portion of this award was used to purchase equipment for the biology courses that I taught at Oxford College. The remainder of the award was distributed to different programs of the Division of Natural Science & Mathematics.*
- 2011 **Faculty Development Grant (\$1,603)** Emory University  
*This competitive award was used to travel to the 18<sup>th</sup> Annual American Society for Microbiology Conference for Undergraduate Educators in Baltimore, Maryland where I presented a poster on my education research.*
- 2011 **President's Supplemental Funding for Scholarship (\$4,975)** Emory University  
*This competitive award was used to purchase an oil-immersion fluorescence microscope objective and a camera for an inverted, phase contrast tissue culture microscope. This equipment was used in my personal research into herbal inhibitors of infectious bronchitis virus.*
- 2011 **Summer Undergraduate Research at Emory (SURE) program (\$5,000)** Emory University  
*This competitive award funded my summer research with and mentoring of a sophomore student. Our work investigated the effects of Nigella sativa extracts on infectious bronchitis virus replication.*
- 2011 **Oxford Research Scholars Funding (\$2,000)** Oxford College  
*This competitive award was used to fund my research with and mentoring of a sophomore student during the Fall 2011 and the Spring 2012 semesters. Our work investigated the effects of Nigella sativa extracts and osmolality on infectious bronchitis virus replication.*
- 2010 **Faculty Development Grant (\$1,142)** Oxford College  
*This competitive award was used to travel to the 17<sup>th</sup> Annual American Society for Microbiology Conference for Undergraduate Educators in San Diego, California.*
- 2010 **President's Supplemental Funding for Scholarship (\$5,000)** Emory University  
*This competitive award helped me finish installing a new tissue culture research facility at Oxford College. This facility was used in introductory biology courses, as well as in my personal research into plant-based inhibitors of infectious bronchitis virus.*
- 2010 **Summer Undergraduate Research at Emory (SURE) program (\$5,000)** Emory University  
*This competitive award funded my summer research with and mentoring of a sophomore student. Our work investigated the effects of Rhodiola rosea extracts on infectious bronchitis virus replication.*
- 2010 **Oxford Research Scholars Funding (\$2,000)** Oxford College  
*This competitive award funded my research with and mentoring of a sophomore student during the Fall 2010 and Spring 2011 semesters. Our work investigated the effects of Nigella sativa and Rhodiola rosea extracts on infectious bronchitis virus replication.*
- 2009 **Ruth L. Kirschstein National Research Service Award Individual Postdoctoral Fellowship** National Institutes of Health
- 2007 **Biodefense and Emerging Infectious Disease Postdoctoral Fellowship** Wadsworth Center
- 2005 **Student Travel Award** American Society for Virology
- 2001 **Honorable Mention, Predoctoral Fellowships in Biological Sciences** Howard Hughes Medical Institute

## SERVICE TO STUDENTS

2018	<b>Student Award Nomination</b> <i>Nominated an outstanding student for the Pre-Allied Health Student of the Year award</i>	Levelland, TX
2017 –	<b>South Plains College Academic Advisor</b> <i>Advised students at advising and registration sessions.</i>	Levelland, TX
2010 –	<b>Student letters of recommendation</b>	Oxford, GA; Amarillo, TX; Levelland, TX
2014 – 6	<b>Badger greeter</b> <i>Answered student questions and helped them find their classrooms on the first days of classes</i>	Amarillo, TX
2014	<b>Advisor for honors student project</b> <i>Helped an honors student formulate a research question, use the published primary scientific research to answer it, identify areas for future research, and present her ideas to a lay-audience</i>	Amarillo, TX
2014	<b>Research presentation to the Amarillo College Biology club</b> <i>Presented research data from my time at Oxford College of Emory University to students and faculty</i>	Amarillo, TX
2014	<b>Summer research with Biology students and colleagues</b> <i>Helped students explore the unknown by asking unique research questions about the local environment, including local water sources were contaminated by bacteria</i>	outside Austin, TX
2013 – 4	<b>Advisor to SSS-STEM students</b> <i>Advised two STEM students about their current academic progress, as well as their long-term career goals</i>	Amarillo, TX
2011 – 3	<b>Oxford Scholars Committee</b> <i>Initiated, coordinated and participated in educational and cultural outings for Oxford College scholars</i>	Oxford, GA
2010 – 3	<b>Oxford College Academic Advisor</b> <i>Advised twenty-three freshmen and sophomore students</i>	Oxford, GA

## SERVICE TO THE DEPARTMENT & COLLEGE

2019 –	<b>Development of Program Readiness Test for Students &amp; Recommendations for Advisors</b> <i>Led faculty efforts at South Plains College to develop a tool for advisors, the advising office and faculty that would promote student success by better assessing a student's readiness for Anatomy &amp; Physiology and Microbiology courses.</i>	Levelland, TX
2019 –	<b>Departmental hiring committee</b> <i>Evaluated candidates for an Instructor of Anatomy &amp; Physiology position at South Plains College.</i>	Levelland, TX
2019 –	<b>Faculty mentor for a new adjunct faculty member</b>	Levelland, TX
2018 –	<b>South Plains College Science Building discussions</b> <i>Actively participated in discussions for upgrades and additions to the South Plains College science building. Coordinated efforts of Anatomy &amp; Physiology faculty in submitting room design plans and prepared room design paperwork.</i>	Levelland, TX
2018 –	<b>Amarillo College Anatomy &amp; Physiology Online Redesign Committee</b> <i>Redeveloped the college's online Anatomy &amp; Physiology courses to better promote student success. Assessed the effectiveness of curricular changes.</i>	Amarillo, TX
2017 –	<b>South Plains College Honors Program committee</b> <i>Collaboratively developed criteria for honors program coursework at South Plains College through discussions with faculty from across the college. Evaluated submitted coursework for inclusion into the curriculum.</i>	Levelland, TX
2016 –	<b>South Plains College Anatomy &amp; Physiology assessment</b> <i>Actively participated in discussions aimed at assessing the impact of revised prerequisites on student success. Designed, along with others, a chemistry tutorial and pre-/post-test to promote and assess student success.</i>	Levelland, TX
2017	<b>South Plains College Science Conference discussion</b> <i>Actively participated in discussions aimed at holding a science conference at South Plains College.</i>	Levelland, TX

- 2016 – 7 **Emergency staffing needs** Amarillo, TX  
*Taught overload courses beginning two days before the start of the semester (Fall 2016) and beginning two weeks after the start of the semester (Fall 2017) to help with emergency staffing needs in the department.*
- 2015 – 6 **Biology Assessment Committee** Amarillo, TX  
*Helped create a rubric to assess critical thinking, as a part of the College’s curriculum mapping effort. Newly developed the assessment for assessing critical thinking in Anatomy and Physiology courses at Amarillo College.*
- 2015 – 6 **Blackboard liaison for Biology department** Amarillo, TX  
*Served as the first point of contact for colleagues needing help with Amarillo College’s online learning management system.*
- 2015 – 6 **Amarillo College Academic Technology Committee** Amarillo, TX  
*Actively participated in discussions about technological barriers for student success, updating of computer software in computer labs, accessibility issues, and faculty education about technology.*
- 2015 – 6 **Amarillo College Developmental Education Committee** Amarillo, TX  
*Actively participated in discussions about how to restructure developmental education to better serve the needs of its students and promote student success.*
- 2014 – 6 **Amarillo College Lab Safety Committee** Amarillo, TX  
*Helped finalize Department safety guidelines and procedures. Developed student safety quizzes that would be implemented in all Biology Department courses and distributed these quizzes to colleagues in a common software program.*
- 2013 – 6 **Amarillo College Biology Department** Amarillo, TX  
*Actively participated in Departmental discussions, including conversations about policies and procedures at the Science Enrichment Center and the Science Testing Center, implementation of State curricular changes, safety policies, textbook adoptions, updates to department policies, and which courses meet SACS accreditation requirements*
- 2013 – 5 **Amarillo College Anatomy & Physiology Redesign Committee** Amarillo, TX  
*Redeveloped the college’s Anatomy & Physiology courses to better promote student success. Assessed the effectiveness of curricular changes.*
- 2015 **Co-led a New Faculty Orientation discussion** Amarillo, TX  
*Co-led a discussion for new faculty at Amarillo College about student engagement techniques.*
- 2015 **Reacting to the Past presentation to faculty** Amarillo, TX  
*Presented information from a “Reacting to the Past” conference, along with two other faculty, at an Amarillo College general faculty meeting.*
- 2015 **Problem-based learning presentation to faculty** Amarillo, TX  
*Presented information from a problem-based learning workshop, along with four other faculty, at an Amarillo College general faculty meeting.*
- 2015 **Organization Committee for the Foundations of Excellence project** Amarillo, TX  
*Evaluated Amarillo College’s organizational structure and policies related to a student’s first year experience, recommending some changes.*
- 2015 **Faculty workshop about online testing integrity** Amarillo, TX  
*After piloting new online exam proctoring software for all of Amarillo College, I presented my findings, lessons learned and suggestions for best practices at a Center for Teaching and Learning workshop.*
- 2015 **WOW Challenge team member** Amarillo, TX  
*Collaboratively developed and presented an idea for improving recruitment and enrollment efforts at Amarillo College.*
- 2014 **Coordinated with the Clinical Medical Assistant program** Amarillo, TX  
*Collaborated with grant-funded support staff to help struggling and at-risk students succeed at Amarillo College.*
- 2014 **Departmental hiring committees** Amarillo, TX  
*Reached consensus with my colleagues about hiring decisions for a Science Enrichment Center director position and an Instructor of Biology position at Amarillo College.*
- 2013 **Emergency staffing needs** Amarillo, TX  
*Began teaching an overload course mid-semester at Amarillo College to help with departmental emergency staffing needs.*



- 2013 **Biology Replacement Committee** Amarillo, TX  
*Formulated purchasing recommendations for Introductory Biology courses at Amarillo College.*
- 2012 – 3 **Oxford College Faculty Development Committee** Oxford, GA
- 2011 – 2 **Oxford College Division of Natural Science and Mathematics** Oxford, GA  
*Coordinated divisional spending of the Harrison Foundation Grant award*
- 2011 – 2 **Philosophy Candidate Search Committee** Oxford, GA
- 2011 **Temple Scholarship Selection Committee** Oxford, GA
- 2010 – 3 **Oxford College Lyceum Committee** Oxford, GA  
*Hosted Lyceum lecturers: Jessica Wyndham (The American Association for the Advancement of Science), Donna Barry (Partners in Health), Dr. Mark Frankel (The American Association for the Advancement of Science), Dr. Shirley Malcom (The American Association for the Advancement of Science), Dr. Laura Hoopes (Pomona College) & Dr. Nathaniel Comfort (The Johns Hopkins University School of Medicine)*
- 2009 – 13 **Oxford College Biology Department** Oxford, GA  
*Coordinated and assembled the departmental academic course schedule.  
 Actively contributed to developing student surveys for the Harrison Foundation and assessing equipment needs for the Harrison Foundation Grant.  
 Actively contributed to assessing equipment and classroom needs for a new science building.  
 Actively contributed to discussions on clarifying the promotion and tenure process, pre-nursing curricular changes, staff hiring for a laboratory prep position, and implementing the INQ, Honors and general education programs at Oxford College.*

#### SERVICE TO THE COMMUNITY

- 2017 – 19 **Grader for UIL academic competitions** Levelland, TX  
*Graded student work for the yearly UIL academic competition that was held on the South Plains College campus.*
- 2016 – 17 **Pre-revision review of online laboratory publication** Levelland, TX & Amarillo, TX  
*Reviewed chapters in two different drafts of an online laboratory publication for Pearson publishing company.*
- 2016 – 17 **Peer-reviewer for the *European Journal of Inflammation*** Levelland, TX
- 2013 – 16 **Peer-reviewer for the *Journal of Physiobiochemical Metabolism and Poultry Science*** Amarillo, TX
- 2014 – 16 **Board member for Chamber Music Amarillo** Amarillo, TX  
*Hosted musician home stays, helped with fund-raising efforts, and participated in collaborative discussions about the direction of the organization.*
- 2015 **Volunteer for AC Cares Day** Amarillo, TX  
*Joined 200 other Amarillo College volunteers in providing a day of service to the community at Amarillo's Habitat for Humanity.*
- 2014 **Pre-revision review of textbook chapters** Amarillo, TX  
*Reviewed two chapters of the 11th edition of *Fundamentals of Anatomy & Physiology*, providing a perspective about the needs of community college students.*
- 2009 – 10 **Oxford College Service Project** Oxford, GA  
*Coordinator of Fall 2009 service project for students in the Alpha Epsilon Upsilon Honor Society.*
- 2007 – 9 **Wadsworth Center** Albany, NY  
*Co-chair, Postdoctoral Association*
- 2007 – 9 **The Damien Center** (a community center for persons living with HIV/AIDS) Albany, NY  
*Volunteer*
- 2005 **The Johns Hopkins University School of Medicine** Baltimore, MD  
*Voter-registration coordinator, Graduate Student Association*

## FACULTY DEVELOPMENT

2018	Human Anatomy & Physiology Society annual conference	Columbus, OH
2018	Colleague software training	Levelland, TX
2018	Flipped Learning with Jon Bergmann workshop	Amarillo, TX
2018	Title V presentation, <i>No Greater Odds</i>	Levelland, TX
2018	Quality Matters course: <i>Improving Your Online Course</i>	online course
2018	Gale Interactive Human Anatomy & Physiology demonstration	Levelland, TX
2017	ALiCE Active Shooter training	Levelland, TX
2017	Title V guest speaker, Dr. Janet Nay Zadina	Levelland, TX
2017	TXVSN Online Learning Conference	Texas Region 10 ESC
2017	Title V guest speaker, Dr. Juan S. Muñoz	Levelland, TX
2015	Problem-based Learning workshop	Amarillo, TX
2015	Reacting to the Past Conference	New York, NY
2015	Generation NeXt Comes to College workshop	Amarillo, TX
2014	iPads in Education workshop	Pittsburg, TX
2014	Respondus software training	online webinar
2014	Amarillo College Teaching Seminar	Santa Fe, NM
2014	Blackboard Collaborate software training	Amarillo, TX
2014	Respondus Monitor software training	online webinar
2014	Creating Interactive eBooks software training	online webinar
2013 – 14	New faculty academy	Amarillo, TX
2013	The 32 <sup>nd</sup> Annual American Society for Virology Conference	University Park, GA
2013	The 2013 American Society for Pharmacognosy Annual Meeting	St. Louis, MO
2012	The 2012 Association for Biology Laboratory Education Conference	Chapel Hill, NC
2012	The Annual Meeting of the Association of Southeastern Biologists	Athens, GA
2011	Institute for Pedagogy in the Liberal Arts	Oxford, GA
2011	18 <sup>th</sup> Annual American Society for Microbiology Conference for Undergraduate Educators	Baltimore, MD
2011	The Annual Meeting of the Association of Southeastern Biologists	Huntsville, AL.
2010	Project Kaleidoscope, “What we know about planning learning spaces and what we still need to know,”	Chantilly, VA
2010	Institute for Pedagogy in the Liberal Arts	Oxford, GA.
2010	17 <sup>th</sup> Annual American Society for Microbiology Conference for Undergraduate Educators	San Diego, CA.
2010	The Annual Meeting of the Association of Southeastern Biologists	Asheville, NC.

## OTHER TEACHING EXPERIENCE

- 2009 **The University at Albany, SUNY** Albany, NY  
*Guest lecturer*
- Designed two interactive PowerPoint presentations for a biomedical sciences graduate student course.
  - Topics: ‘Interactions of Microbial Pathogens with Host Cells: Entry and Intracellular Survival’ & ‘Interactions of *Yersinia pestis* with Host Cells’
  - Designed and graded an assessment that tested for conceptual understanding of that day’s topic.
- 2009 **The University at Albany, SUNY** Albany, NY  
*Guest lecturer*
- Designed an interactive PowerPoint presentation for a biomedical sciences graduate student course.
  - Topic: ‘Tuberculosis: re-emergence of an age-old killer’.
  - Designed and graded an assessment that tested for conceptual understanding of that day’s topic.
- 2008 **Wadsworth Center** Albany, NY  
*Laboratory research mentor*
- Trained a graduate student to become independent in using bacteriology techniques, biochemistry techniques, and critical thinking to screen for differences in the proteomes of wild type versus mutant bacteria.
- 2008 **The University at Albany, SUNY** Albany, NY  
*Course co-coordinator*
- Designed handouts for a biomedical sciences graduate student journal club course that detailed course expectations and how students could succeed in the course.
  - Facilitated discussion among students on the first day of class as they picked journal club topics.
- 2006 **The Johns Hopkins University School of Professional Studies in Business and Education** Baltimore, MD  
*Program development panel member*
- Contributed to discussions that restructured the ‘Teaching Adults’ graduate certificate program.
- 2003 – 6 **The Johns Hopkins University School of Medicine** Baltimore, MD  
*Laboratory research mentor*
- Trained an undergraduate student to use various laboratory techniques, bioinformatics resources, and critical thinking skills to evaluate interactions between two proteins.
  - This student remained in the lab and completed an independent Master’s degree research project.
- 2003 **The Johns University Professional Development Office** Baltimore, MD  
*Guest lecturer*
- Co-designed and co-taught a class using interactive, problem-based learning methods.
  - Topic: ‘Effective Teaching as a Graduate Student or Postdoc’.
  - Developed a website (<http://www.angelfire.com/pro/effectiveteaching/index.html>) to facilitate student learning.
- 2003 **The Johns University School of Medicine** Baltimore, MD  
*Laboratory research mentor*
- Trained a rotating graduate student to use recombinant DNA techniques to express a viral gene in bacteria.
- 1996 – 2000 **Brigham Young University & Ricks College** Provo, UT & Rexburg, ID  
*Biology and chemistry tutor*