

Curriculum Vitae

Tess Shideler, PhD

Assistant Professor of Biology
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Education

- 2013 Ph.D., University of Colorado, Boulder, CO
Molecular Cellular and Developmental Biology
- Thesis: *The guanine nucleotide exchange factors Vps9 and Mon1-Ccz1 coordinate endosome maturation in Saccharomyces cerevisiae.*
- 2003 B.S. Florida State University, Tallahassee, FL
Biological Sciences

Teaching Experience

- 2018 - 2024 Full-Time Professor, Biology Department, Los Medanos College, Pittsburg, CA
- Awarded Tenure in 2022
 - Teach combined lecture and lab courses in Introductory Cell and Molecular Biology and Microbiology for allied health
 - Develop and implement inclusive, student-centered curriculum that promotes success of all students
 - Develop and maintain laboratory curriculum for multiple sections of biology courses
- 2017 - 2018 Part Time Faculty, Central New Mexico Community College, Albuquerque, NM
- Taught Introductory Biology Lab, Microbiology and Anatomy and Physiology Lab.
 - Developed and implemented pedagogical methods designed to enhance student learning and emphasize real world application.
- 2016 - 2017 Teaching Partnership with Central New Mexico Community College, Albuquerque, NM
- Developed and implemented numerous collaborative learning exercises
 - Planned and implemented Introductory Biology curriculum based on backward design
- 2007 - 2008 Graduate Teaching Assistant, University of Colorado, Boulder, CO
Molecular Cellular and Developmental Biology Department.
- *Immunology; Introductory Genetics Lab*
- 2005 - 2007 Teaching Assistant, University of North Florida, Jacksonville, FL.
- Taught General Biology Lab, Principles in Biology Lab and Human Anatomy and Physiology II Lab*

Research Experience

- 2014 - 2018 Postdoctoral Fellow, University of New Mexico, Albuquerque, NM
Department of Pathology, Mentor: Dr. Angela Wandinger-Ness
- Project: *Mechanisms of EGFR mediated control of endosomal Rab GTPase activity.*
- 2008 - 2013 Graduate Research, University of Colorado, Boulder, CO
Department of Molecular Cellular and Developmental Biology
- Project: *The guanine nucleotide exchange factors Vps9 and Mon1-Ccz1 coordinate endosome maturation in Saccharomyces cerevisiae*
- 2004 - 2007 Research Associate, University of North Florida, Jacksonville, FL
Biology Department, PI: Michael Lentz
- Project: *The role of host cell kinase CK2 in nuclear import of papillomavirus E1 replication protein.*

Academic Service

- 2018 - 2024 Biology Department Faculty Member, Los Medanos College
- Lead instructor of Microbiology and Introductory Cell and Molecular Biology
 - Coordinate scheduling, staffing, materials and curricula for lecture and lab courses
 - Screen and interview full-time and part-time faculty using equitable and inclusive strategies
 - Evaluate part-time and full-time faculty to promote equitable teaching practices and student success
 - Lead and supported curriculum assessment of multiple courses
- 2019 - 2024 Curriculum Committee Faculty Member, Los Medanos College
- Approve course and program curricula across the college to promote equitable student success
 - Ensure all college curriculum is in compliance with state law and transfer requirements
 - Supported transition of course catalog to the eLumen digital platform
- 2019 - 2024 MESA program Faculty Support, Los Medanos College
- Mentored students attending 2023 SACNAS NDiSTEM conference
 - Co-Organized 2023 LMC STEM Research Symposium, which allowed 50+ students to present their research.
 - Supported student community building by participating in yearly MESA retreats
- 2016 & 2015 Organizer, *Art of Systems Biology and Nanoscience*, University of New Mexico
- Coordinated multiple hands on science activities for children of all ages
- 2012 Organizer, Graduate Student Symposium, University of Colorado, Boulder

- Organized event attended by 200 people including graduate, undergraduate and high school students, faculty and general public
- Planned venue, food, travel, program, IT support & promotional materials

Pedagogy Training and Professional Development

- 2023 SEPAL Scientific Teaching Summer Institute, San Francisco State University
- Explored how issues of equity and inclusion affect student learning
 - Developed active learning techniques and assessments based on best practices for student learning and success.
 - Worked collaboratively with faculty across institutions and disciplines to improve teaching skills
- 2020 Becoming an Effective Online Instructor (BEOI), Los Medanos College
- Gained proficiency in creating online courses using Canvas learning management system
 - Developed online modules using universal design practices
- 2019 - 2020 Pedagogy Innovation Project, Los Medanos College
- Worked with a small cohort of faculty to incorporate best practices for equitable student success into course design
 - Developed curriculum using backward design
 - Shared ideas and best practices through peer classroom observation
- 2014 - 2016 Academic Science Edu. and Research Training (ASERT), University of New Mexico
- Completed pedagogy training course covering numerous aspects of curriculum development and grounded in evidence based methods
 - Completed numerous education and diversity workshops

Awards

- 2015 - 2017 K12 NIGMS (IRACDA) Postdoctoral Fellowship, University of New Mexico
- 2014 - 2015 R25 Trainee, NCI Cancer Nanotechnology Training Center, University of NM
- 2007 - 2009 T32 Trainee, NIH Creative Training in Molecular Biology, University of CO, Boulder

Mentored Undergraduate Students

- 2019 Talia Lahham, Undergraduate Research Project, Los Medanos College
- Mentored student project development, scientific writing and presentations
- 2019 Amudalat Lanval, Honors Research Project, Los Medanos College
- Mentored student project development, scientific writing and presentations
- 2016 Allison Kirk, Undergraduate Research Project, University of New Mexico

- Mentored student in all aspects of the summer program including project development, scientific writing and presentations

2009 - 2011 Dustin Chernick, Undergraduate Research Project, University of Colorado, Boulder

- Mentored student in all aspects of honors thesis project including research project, writing and presentation.

Publications

Lentz MR, **Shideler T** (2015) Phosphorylation of bovine papillomavirus E1 by the protein kinase CK2 near the nuclear localization signal does not influence subcellular distribution of the protein in dividing cells. *Archives of Virology*.

Shideler T, Nickerson DP, Merz AJ, Odorizzi G. (2015) Ubiquitin-binding by the CUE domain promotes endosomal localization of the Rab5 GEF Vps9. *Molecular Biology of the Cell*. 26, 1345–1356

Russell MR, **Shideler T**, Nickerson DP, West M, Odorizzi G. (2012) Class E compartments form in response to ESCRT dysfunction in yeast due to hyperactivity of the Vps21 Rab GTPase. *Journal of Cell Science*. 125, 5208–5220

Presentations, Posters and Meetings

Oct. 2023 SACNAS NDiSTEM Conference, Portland, OR - Supported MESA students

July 2019 IRACDA Annual Conference, Ann Arbor, MI - Invited Panelist

Sep. 2016 FASEB Conference on GTPases in Trafficking, Autophagy and Disease, West Palm Beach, FL - Invited Speaker

Jul. 2016 Q-bio Summer School, Albuquerque, NM - Guest Lecturer

Jun. 2016 Gordon Research Conference on Lysosomes and Endocytosis, Andover, NH - Poster

Jun. 2016 Gordon Research Seminar on Lysosomes and Endocytosis, Andover, NH - Session chair

Dec. 2015 American Society for Cell Biology, San Diego, CA - Poster

Dec. 2012 American Society for Cell Biology, San Francisco, CA - Poster

Jan. 2012 Keystone Symposia, Membranes in Motion, Lake Tahoe, CA - Poster

Dec. 2011 American Society for Cell Biology, Denver, CO - Poster

Research Skills and Training

Proficient in maintenance and manipulation of mammalian, yeast and bacterial cell culture

Confocal Microscopy

- Proficient in sample preparation and imaging of mammalian cells and *S. cerevisiae*
- Strong working knowledge of high resolution confocal imaging including acquisition parameters and deconvolution.
- Proficient in quantitative fluorescence analysis methods including colocalization analysis

Computational Modeling of biological systems

- Acquired broad knowledge of biological modeling methods by attending Q-bio summer school
- Built a model describing endosomal Rab GTPase activity in response to EGFR activation

Biochemistry

- Proficient in protein purification from bacteria
- Proficient in sub-cellular fractionation
- Experienced in *in vitro* and *in vivo* protein binding assays

Electron Microscopy

- Proficient in high pressure freezing, low temperature embedding, chemical fixation, sectioning, subcellular structure identification and image acquisition.
- Adapted a protocol for quantification of frequency and size of endosomes

Molecular Biology

- Proficient in genomic manipulations in *S. cerevisiae*
- Experienced in plasmid construction and verification for *S. cerevisiae* and *E. coli*
- Experienced in yeast-two-hybrid assay

Software

- Proficient in Adobe Illustrator, InDesign and Photoshop;
- Proficient in Fiji/ImageJ