

### **Academic Appointments**

<b>The University of Texas at El Paso</b>	<b>El Paso, TX</b>
Director; Institute for Scholarship, Pedagogy, Innovation, and Research Excellence	Jan. 2023 - Present
Provost Faculty Fellow in Curriculum Effectiveness and Improvement	Sept. 2021 – Dec. 2023
Associate Professor in Biological Sciences	Sept. 2021 - Present
Assistant Professor in Biological Sciences	Sept. 2015 - Aug. 2021
<b>University of Northern Colorado</b>	<b>Greeley, CO</b>
Postdoctoral Teaching/Research Fellow, Bioeducation	Aug. 2013 - July 2015
<b>Grand Rapids Community College</b>	<b>Grand Rapids, MI</b>
Adjunct Instructor, Biological Sciences	Aug. 2012 - May 2013
<b>University of Maryland, College Park</b>	<b>College Park, MD</b>
Affiliate Instructor, Biological Sciences	Jan. 2009 - Present

### **Education and Skills**

<b>Inclusive STEM Teaching Project</b>	<b>Virtual</b>
Inclusive STEM Teaching Certification	Dec. 2021
<b>The University of Texas at El Paso</b>	<b>El Paso, TX</b>
HyFlex Teaching Academy Certification	July 2022
Teaching Online Academy Certification	Oct. 2018
<b>National Research Mentoring Network (NRMN)</b>	<b>Virtual</b>
NRMN Mentor Professional Development Certification	July 2016
<b>Grand Rapids Community College</b>	<b>Grand Rapids, MI</b>
Online Teaching Certification	May 2013
<b>University of Maryland, College Park</b>	<b>College Park, MD</b>
Ph.D., Curriculum & Instruction (Science Education/Teacher Education)	Dec. 2013
M.S., Cell Biology & Molecular Genetics	Aug. 2010
M.A., Curriculum & Instruction (Science Education)	Dec. 2009
<b>Ursinus College</b>	<b>Collegeville, PA</b>
B.S., Biology, Biostatistics (Minor), Music (Minor)	May 2006
<b>Ursinus College - Semester Abroad Program</b>	<b>London, UK</b>
British Literature, Theatre, Society & Culture	Aug. 2004 - Dec. 2004

**SKILLS:** Online course development; SPSS/MAXQDA analysis software; Assessment design

### **Selected Honors**

**American Association for the Advancement of Science (AAAS) Fellow, Education (2022)**

**SENCER Ambassador, National Center for Science & Civic Engagement (2022)**

**Provost Faculty Fellow in Curriculum Effectiveness and Improvement, 2021 - 2023**

- Co-facilitate core (general education) course reform efforts to increase inclusion of high-impact practices designed to promote student success and retention
- Coordinate interdisciplinary professional learning communities consisting of individuals dedicated to achieving the above goals
- Liaison with the Center for Faculty Leadership and Development as well as the Center for Community Engagement to provide support to partners

**UTEP Hispanic Servingness Research Council, Member, 2020 - Present**

- Work collaboratively with council members and university leadership to better understand how servingness is conceptualized and operationalized at the departmental and institutional levels on campus
- Contribute to research efforts that aim to advance the preparedness of students, faculty, staff, and community partners to engage in practices aligned with UTEP's mission of access and excellence

**ASM Conference for Undergraduate Educators, Chair, 2018**

- Assisted with conference programming (e.g., reviewed abstracts; determined session layout)
- Delivered introductions for invited speakers, including both scientific and education sessions
- Facilitated discussion among conference sub-committees and acted as a liaison with ASM leadership personnel

**PKAL Leadership Institute, Invited Participant, 2018**

- Participated in institute activities, which focused on leadership in higher education
- Collaborated with attendees to outline new, transformative institutional initiatives in STEM

**ASM Conference for Undergraduate Educators, Vice-Chair, 2017**

- Assisted with conference programming (e.g., reviewed abstracts; determined session layout)
- Coordinated introductions for invited speakers as well as the anchor plenary session

**CUREnet (NSF RCN-UBE), Invited Member, 2017 - Present**

- Co-developed an online template for submitting novel CURE descriptions to the CUREnet site
- Provided feedback on the general layout of and core areas needed for the revised CUREnet site

**BioTAP Scholars (NSF RCN-UBE), Invited Member, 2017 - Present**

- Participated in a two-day workshop focused on GTA professional development
- Created a blueprint to enact a research initiative focused on current PD practices in CUREs

**TeachTech Fellow, 2017 - 2018**

- Engaged in cohort-style discussion around evidence-based practices for teaching with technology
- Developed, implemented, and evaluated a series of online homework assignments in the BIOL 1305: General Biology classroom using the EdPuzzle platform

**Compact for Faculty Diversity – Research Mentoring Institute, Invited Participant, 2016**

- Engaged in an interactive, four-day conference focused on enhancement of mentoring processes in academia and professional contexts
- Served as a mentor to postdoctoral fellows and graduate students interested in faculty careers

**National Academies Education Fellow in the Life Sciences, 2016 - 2017**

- Engaged in an interactive, week-long HHMI summer institute on scientific teaching
- Prepared active-learning-based materials focused on scientific literacy and communication

**American Society for Microbiology (ASMCUE) International Educator Mentor, 2014 - 2016**

- Mentored educators from Mongolia, Nepal, and Egypt as they developed curricula for introductory biology and microbiology courses at their institutions

- Facilitated collaborative outreach efforts to implement activities at mentees' home institutions following the 2014, 2015, and 2016 American Society for Microbiology Conference for Undergraduate Educators (ASMCUE)

**ACED BIO (NSF RCN-UBE), Invited Member, 2016 - 2019**

- Participated in an intensive symposium focused on students' development of scientific process skills in the context of introductory lecture and laboratory coursework in the biological sciences
- Contributed to the SciCARD database on student misconceptions regarding experimental design and scientific reasoning skills

**University of Maryland: Center for Teaching Excellence, Lilly Fellow, 2009 - 2010**

- Developed a series of podcasts aimed at providing faculty with resources and knowledge on various academic and non-academic literacies
- Developed workshops for graduate teaching assistants and mentored discipline-based graduate students interested in teaching and educational research

**National Center for Science and Civic Engagement, Noyce Fellow, 2008 - 2009**

- Selected to participate in the NCSCE Symposium on informal science education initiatives in secondary and postsecondary education
- Met with congressional delegates to discuss issues in science education curriculum design, implementation, and assessment

**Ursinus College Leadership Scholar, 2005 - 2006**

- Participated in an intensive, four-day leadership and problem solving training program
- Completed, with distinction, a four-credit leadership studies course
- Directed a Project Pericles service project involving tutoring at a local high school

***BUILDing SCHOLARS Mentor Award (2017)***; The University of Texas at El Paso (UTEP) ***First Year Scholar's*** award recipient (given by a student achieving a GPA of 3.5 or higher in their first semester to a faculty member who "made a difference"); University of Northern Colorado ***University of Maryland's Excellence in Teaching*** award recipient (2006 - 2010)

### **Research Interests**

Assessment of cognitive and noncognitive outcomes associated with student engagement in course-based undergraduate research experiences (CUREs); Impacts of professional development opportunities on the academic and career growth of Graduate and Undergraduate Teaching Assistants (GTAs/UTAs)

### **Previous Research Experience**

**Biology Education**

Aug. 2013 - July 2015

Collaborator: Dr. Sue Ellen DeChenne, University of Northern Colorado

- Conducted mixed methods studies exploring the relationship between student and faculty expectations and student persistence in introductory biology courses (majors and non-majors)
- Designed and assessed novel learning environments (e.g., inquiry-based laboratory courses; immersive discussion sections)
- Created, implemented, and evaluated active-learning pedagogy in lecture and laboratory sections of introductory biology courses (cell/molecular biology emphasis)
- Designed and evaluated professional development experiences for undergraduate and graduate teaching assistants facilitating introductory lab experiences

**Chemistry Education – Chemistry Visualizations**

Aug. 2010 - Dec. 2013

Advisor: Dr. Bonnie Dixon, University of Maryland, College Park

- Constructed and implemented laboratory and classroom-based interventions to assess the relationship between students use of concrete models and their performance on representational translation tasks in Organic Chemistry
- Analyzed novice and expert faculty perceptions of teaching and learning in Organic Chemistry with a focus on linking these perceptions to student outcomes, particularly those involving model use in chemistry courses
- Developed and coordinated undergraduate research projects in the laboratory; responsible for three undergraduate students

#### **Biology Education – Professional Development/Curriculum**

Aug. 2008 - Aug. 2020

Collaborator: Dr. Patricia Shields, University of Maryland, College Park

- Created a teaching practicum course designed to introduce students in the biological sciences to the field of science education, curriculum development, and instructional methods in the sciences
- Curriculum created by upperclassman in the practicum course were utilized in introductory biology courses at the secondary and tertiary levels to improve student learning outcomes

#### **Biochemistry and Virology**

Aug. 2006 - Aug. 2010

Advisor: Dr. Jeffrey DeStefano, University of Maryland, College Park

- Analyzed the binding affinity of HIV-1, AMV, and MuLV retroviral reverse transcriptases to various RNA and DNA templates
- Performed viral competition assays to test the significance of the HIV-1 nucleocapsid protein in viral packaging and virulence in cell culture

#### **Developmental Biology**

Aug. 2003 - May 2006

Advisor: Dr. Rebecca Lyczak, Ursinus College

- Performed mapping projects to identify the position of the *C. elegans* gene, *pam-1*, utilizing techniques such as PCR and gel electrophoresis
- Used GFP-labeling and confocal microscopy to view meiotic spindle formation and chromosome separation in *pam-1* mutants

### **Selected Mentored Student and Postdoctoral Research Experiences**

#### ***Teaching Assistants as Effective Facilitators of Course-based Undergraduate Research Experiences in the Biological Sciences***

Amie M. Kern

Postdoctoral Fellow in Biological Sciences, The University of Texas at El Paso; Jan. 2019 - Present

#### ***Exploring Students' and Instructors' First-Day Experiences in CUREs***

Anthony M. Ramirez

Ph.D. Student in Biological Sciences, The University of Texas at El Paso; Jan. 2021 - Present

#### ***Representations of the Scientific Process in Collegiate Introductory Biology Textbooks***

Thomas M. McCabe, Antonio Lazos, Isabela Perez, Valeria Sanchez

Undergraduates in Biological Sciences, The University of Texas at El Paso; Aug. 2019 - Present

#### ***Examining the Intersection of Ethics/RCR and CURE Instruction in the Biological Sciences***

Jay M. Bhatt, Stephanie Corral, Aimee A. Hernandez

Postdoctoral Fellow and [Under]graduates in Biological Sciences (respectively), The University of Texas at El Paso; Jan. 2017 - Present

#### ***Characterization of Instructor and Student Behaviors in Traditional vs. Authentic Introductory Biology Laboratory Experiences***

Denise A. Borja, David Esparza, Naseem Hajir, Aimee A. Hernandez

Undergraduates in Biological Sciences, The University of Texas at El Paso; Aug. 2016 - June 2020

***Longitudinal Impacts of Engagement in Authentic Research Experiences on Latin@ Students' Motivation and Career Clarification in the Biological Sciences***

Kendra Rosales

Undergraduate in Speech Language Path., The University of Texas at El Paso; Aug. 2016 - Aug. 2017

***The Impact of Course-based Undergraduate Research Experiences on Hispanic Students' Development of Experimental Design Skills and Affect in the Biological Sciences***

Haidar Ahmed, Denise A. Borja, David Esparza

Undergraduates in Biological Sciences, The University of Texas at El Paso; Jan. 2016 - Aug. 2019

***Implementation of the MUET Learning Activity in an Introductory Organismal Biology Course***

Yi Kong, Ph.D.

Postdoctoral Fellow, The University of Texas at El Paso; Sept. 2015 - Aug. 2016

*\*Yi successfully completed her postdoctoral position at UTEP and is now an Associate Professor in the College of Education at Fujian Normal University in Fujian Province, China*

***Evaluating the Inquiry Level of Biology Laboratory Assessments***

Matthew Crewse

Undergraduate in Biological Sciences, University of Northern Colorado; Jan. 2014 - July 2015

**Teaching Experience**

**Instructor - Biological Sciences**

(Biosciences) Seminar Fall 2021  
Masters/Doctoral, The University of Texas at El Paso

Genetics Spring 2020/21/22/23  
Undergraduate, The University of Texas at El Paso

Marine Ecophysiology (CURE) Spring 2020  
Undergraduate, The University of Texas at El Paso  
*\*Co-Taught with Dr. Thomas McCabe, Ms. Julie Schlichte, and Ms. Aimee Hernandez*

Advanced Research Methods in Epidemiology and Public Health Fall 2018  
Undergraduate, The University of Texas at El Paso

Health Disparities II Spring 2018, 2023  
Undergraduate, The University of Texas at El Paso  
***\*Development, Teaching, and Evaluation of a Novel CURE***

Disease and the Environment: Health Disparities in the Border Region Fall 2017, Fall 2021/22/23/24  
Undergraduate, The University of Texas at El Paso  
***\*Development, Teaching, and Evaluation of a Novel CURE***

Professional Development Seminar Fall 2016  
Undergraduate, The University of Texas at El Paso

General Biology (Majors – Cell/Molecular Emphasis) Fall 2015 - Present  
Undergraduate, The University of Texas at El Paso

Cellular and Molecular Lab Spring 2014  
Undergraduate/Masters/Doctoral, University of Northern Colorado

Principles of Biology (Majors – Cell/Molecular Emphasis) Undergraduate, University of Northern Colorado <b>*Coordination/Teaching of both Lecture and Laboratory Components</b>	Fall 2013/14; Summer 2014/15
General Biology (Non-Majors) Undergraduate, Grand Rapids Community College <b>*Coordination/Teaching of both Lecture and Laboratory Components</b>	Fall 2012 - Spring 2013
Epidemiology & Public Health (aka. Epidemiology of Microbial Pathogens) Undergraduate, University of Maryland, College Park	Summer 2010 - Present

### **Instructor - Science/Teacher Education**

Mentoring in Postsecondary STEM Undergraduate/Masters/Doctoral, The University of Texas at El Paso	Summer 2022
Scientific Teaching Undergraduate/Masters/Doctoral, The University of Texas at El Paso	Spring 2017/19
Practicum in College Biological Science Instruction Undergraduate, University of Northern Colorado	Fall 2013 - Spring 2015
Introductory Biology Curriculum & Instruction Practicum Undergraduate, University of Maryland, College Park	Spring 2009 - Fall 2013
Epidemiology for Public Health Educators Masters, University of Maryland, College Park	Summer 2011

### **Related Experiences**

<b>edTPA Assistant</b> University of Maryland, College Park Director: Dr. Maria Hyler	Aug. 2013 - Dec. 2013
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- Assisted in coordinating edTPA performance assessment for pre-service teacher candidates
- Maintained edTPA support site for the university

<b>Teacher/Professional Development Intern</b> Ballou Senior High School, Washington, DC (8/10 - 6/11) Montgomery Blair High School, Silver Spring, MD (8/11 - 8/12)	Aug. 2010 - Aug. 2012
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- Responsible for teaching lessons with focus on Cell Biology, Genetics, & Developmental Biology; team teaching with faculty and pre-service teachers
- Worked with Biology faculty at Ballou Senior High School to develop an active-learning, evidence-based curricula for 10<sup>th</sup> grade Biology unit on Ecology
- Worked with Biology faculty at Montgomery Blair High School to integrate and improve laboratory experiences and student-directed inquiry
- Responsible for collaborating with and designing appropriate professional development experiences for pre-service, first-year, and veteran teachers that focused on student success in biology

<b>Strategic Research Consultant: Science Education</b> The Saylor Foundation	Mar. 2010 - Sept. 2010
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- Researched available e-learning and e-textbook sources in the sciences
- Designed open courseware based on outlines and available resources

## **Publications and Presentations**

### **Peer-Reviewed Journals**

<sup>†</sup>Undergraduate, Graduate, or Postdoctoral Mentee; \*Joint Authorship

1. **Olimpo, J.**, & Day, E. (under review, invited submission). Getting started with mixed methods research: A primer. *Scholarship and Practice of Undergraduate Research*.
2. Fisher, G., Floyd, K., & **Olimpo, J.** (in press). A process for scaling an independent course-based undergraduate research experience: Lessons learned from expansion of the *Tigriopus* CURE to diverse institutions. *Journal of College Science Teaching*.
3. Madison, M., Esparza, D.<sup>†</sup>, Oliveira, A., Schormann, S., **Olimpo, J.**, & Raut, S. (in revision). "Osmotion": An active learning module improves comprehension of osmosis and diffusion in a freshman introductory biology course. *Journal of Microbiology & Biology Education*.
4. Esparza, D.<sup>†</sup>, Hernández-Gaytan, A.<sup>†</sup>, & **Olimpo, J.** (2023). Gender identity and student perceptions of peer research aptitude in CUREs and traditional laboratory courses in the biological sciences. *CBE-Life Sciences Education*, 22(4), ar53.
5. Shortlidge, E., Kern, A.<sup>†</sup>, Goodwin, E.<sup>†</sup>, & **Olimpo, J.** (2023). Preparing teaching assistants to facilitate course-based undergraduate research experiences (CUREs) in the biological sciences: A call to action. *CBE-Life Sciences Education*, 22(4), es4.
6. Kern, A.<sup>†</sup>, & **Olimpo, J.** (2023). SMART CUREs: A professional development program for advancing teaching assistant preparedness to facilitate course-based undergraduate research experiences. *Journal of Microbiology & Biology Education*, 24(1), e00137-22.
7. D'Arcy, C., Lapsov, L.<sup>†</sup>, Navarro, V.<sup>†</sup>, Nevarez, D.<sup>†</sup>, & **Olimpo, J.** (2023). Converting a brain chemoarchitecture mapping CURE to an online environment: Lessons learned from remote teaching. *Advances in Physiology Education*.
8. Kong, Y.<sup>†</sup>, Apodaca, J., & **Olimpo, J.** (2022). Implementation and evaluation of the Model of the Use of Evolutionary Trees (MUET) curricular module in an introductory organismal biology course. *International Journal of Science Education*, <https://doi.org/10.1080/09500693.2022.2124132>.
9. Donegan, N.<sup>†</sup>, Zachariah, J.<sup>†</sup>, & **Olimpo, J.** (2022). Integrating museum education into an introductory biology CURE leads to positive perceptions of scientific research and museum exhibitions among students, faculty/staff, and museum patrons. *Journal of Biological Education*, <https://doi.org/10.1080/00219266.2022.2103168>.
10. Gavaldon, L.<sup>†</sup>, Nieto-Gavaldon, S.<sup>†</sup>, D'Arcy, C., & **Olimpo, J.** (2022). No cameras, no problem: Creating an inclusive research-driven classroom environment using student-generated avatars. *Journal of Microbiology & Biology Education*, 23(1), e00251-22.
11. Smith, M.A.\*<sup>\*</sup>, **Olimpo, J.\***, Santillan, K.<sup>†</sup>, & McLaughlin, J. (2022). Addressing foodborne illness in Côte d'Ivoire: Connecting the classroom to the community through a nonmajors course-based undergraduate research experience. *Journal of Microbiology & Biology Education*, 23(1), e00212-21.
12. Esparza, D.<sup>†</sup>, Lynch-Arroyo, R., & **Olimpo, J.** (2022). Empowering current and future educators: Using a scalable action research module as a mechanism to promote high-quality teaching and learning in STEM. *Frontiers in Education*, 6, 754097.
13. **Olimpo, J.**, & Kern, A.<sup>†</sup> (2021). The DoC IT: a professional development tool to support and articulate alignment of one's course with the five dimensions of CUREs. *Journal of Microbiology & Biology Education*, 22(3), doi:10.1128/jmbe.00162-21.
14. Khan, A., D'Arcy, C., & **Olimpo, J.** (2021). A historical perspective on training students to create standardized maps of novel brain structure: Newly-uncovered resonances between past and present research-based neuroanatomy curricula. *Neuroscience Letters*, 759, 136052.
15. Diaz-Martinez, L., Hernandez, A.<sup>†</sup>, D'Arcy, C., Corral, S.<sup>†</sup>, Bhatt, J., Esparza, D.<sup>†</sup>, Rosenberg, M., & **Olimpo, J.** (2021). Current approaches for integrating responsible and ethical conduct of research (RECR) education into course-based undergraduate research experiences: A national assessment. *CBE-Life Sciences Education*, 20(3), ar38.

*\*This publication was featured in the National Institute on Scientific Teaching (NIST) newsletter and was selected to be featured as an "Online with LSE" webinar.*

16. McCabe, T.<sup>†</sup>, & **Olimpo, J.** (2020). Advancing metacognitive practices in experimental design: A suite of worksheet-based activities to promote reflection and discourse in laboratory contexts. *Journal of Microbiology & Biology Education*, 21(1), doi:10.1128/jmb3.v21i1.2009.
17. Koroshetz, W., Behrman, S., Brame, C., Branchaw, J., Brown, E., Clark, E., Dockerman, D., Elm, J., Gay, P., Green, K., Hsi, S., Kaplitt, M., Kolber, B., Kolodkin, A., Lipscombe, D., MacLeod, M., McKinney, C., Munafò, M., Oakley, B., **Olimpo, J.**, Percie du Sert, N., Raman, I., Riley, C., Shelton, A., Uzzo, S., Crawford, D., & Silberberg, S. (2020). Research culture: Framework for advancing rigorous research. *eLife*, 9, doi:10.7554/eLife.55915.
18. Esparza, D.<sup>†</sup>, Wagler, A., & **Olimpo, J.** (2020). Characterization of instructor and student behaviors in CURE and non-CURE learning environments: Impacts on student motivation, science identity development, and perceptions of the laboratory experience. *CBE-Life Sciences Education*, 19(1), ar10.
19. D'Arcy, C.<sup>†</sup>, Martinez, A.<sup>†</sup>, Khan, A., & **Olimpo, J.** (2019). Cognitive and non-cognitive outcomes associated with student engagement in a novel brain chemoarchitecture mapping course-based undergraduate research experience. *Journal of Undergraduate Neuroscience Education*, 18(1), A15-A43.
20. Fisher, G., Esparza, D.<sup>†</sup>, & **Olimpo, J.** (2019). Place-based case studies: A new approach to an effective teaching practice. *Journal of Microbiology & Biology Education*, 20(1), doi:10.1228/jmbe.v20i1.1611.
21. Diaz-Martinez, L., Fisher, G., Esparza, D.<sup>†</sup>, Bhatt, J.<sup>†</sup>, D'Arcy, C.<sup>†</sup>, Apodaca, J., Brownell, S., Corwin, L., Davis, W., Floyd, K.<sup>†</sup>, Killion, P., Madden, J., Marsteller, P., Mayfield-Meyer, T., McDonald, K., Rosenberg, M., Yarborough, M., & **Olimpo, J.** (2019). Recommendations for effective integration of ethics and responsible conduct of research (E/RCR) education into course-based undergraduate research experiences: A meeting report. *CBE-Life Sciences Education*, 18(2), ar12-mr2.
22. **Olimpo, J.**, Apodaca, J., Hernandez, A.<sup>†</sup>, & Paat, Y.-F. (2019). Disease and the environment: A health disparities CURE incorporating civic engagement education. *Science Education and Civic Engagement: An International Journal*, 11(1), 13-36.
23. Fisher, G., **Olimpo, J.**, McCabe, T.<sup>†</sup>, & Pevey, R.<sup>†</sup> (2018). The *Tigriopus* CURE – a course-based undergraduate research experience with concomitant supplemental instruction. *Journal of Microbiology & Biology Education*, 19(1), doi:10.1128/jmbe.v19i1.1503.
24. **Olimpo, J.**, Pevey, R.<sup>†</sup>, & McCabe, T.<sup>†</sup> (2018). Incorporating an interactive statistics workshop into an introductory biology course-based undergraduate research experience (CURE) enhances students' statistical reasoning and quantitative literacy skills. *Journal of Microbiology & Biology Education*, 19(1), doi:10.1128/jmbe.v19i1.1450.
25. Mayfield, T., **Olimpo, J.**, Floyd, K.<sup>†</sup>, & Greenbaum, E. (2018). Collaborative posters develop students' ability to communicate about undervalued scientific resources to nonscientists. *Journal of Microbiology & Biology Education*, 19(1), doi:10.1128/jmbe.v19i1.1442.
26. **Olimpo, J.**, Rodriguez, R., Lougheed, V., & Tweedie, C. (2018). CUREcasts: An innovative mechanism to increase communication of scientific outcomes to novice and expert audiences within the context of course-based undergraduate research experiences. *Journal of Microbiology & Biology Education*, 19(1), doi:10.1128/jmbe.v19i1.1426.
27. Cleveland, L., McCabe, T.<sup>†</sup>, & **Olimpo, J.** (2018). A call for programmatic assessment of undergraduate students' conceptual understanding and higher-order cognitive skills. *Journal of Microbiology & Biology Education*, 19(1), doi:10.1128/jmbe.v19i1.1368.
28. **Olimpo, J.**, D'Arcy, C.<sup>†</sup>, Diaz-Martinez, L., & Bhatt, J.<sup>†</sup> (2017). Integration of RCR and ethics education into course-based undergraduate research experiences in the biological sciences: A needed discussion. *Journal of Microbiology & Biology Education*, 18(2), doi:10.1128/jmbe.v18i2.1344.
29. **Olimpo, J.**, Quijas, D.<sup>†</sup>, Quintana, A. (2017). A focus on polarity: Investigating the role of orientation cues in mediating student performance on mRNA synthesis tasks in an introductory cell and molecular biology course. *Biochemistry & Molecular Biology Education*, 1-15 (DOI 10.1002/bmb.21067).
30. Cleveland, L.<sup>†</sup>, **Olimpo, J.**, & DeChenne-Peters, S.E. (2017). Investigating the relationship between instructors' use of active-learning strategies and students' conceptual understanding and affective changes in introductory biology: A comparison of two active-learning environments. *CBE-Life Sciences Education*, 16(2), ar19.



31. Marsan, L.<sup>†</sup>, D'Arcy, C.<sup>†</sup>, & **Olimpo, J.** (2016). The impact of an interactive statistics module on novices' development of scientific process skills and attitudes in a first-semester research foundations course. *Journal of Microbiology & Biology Education*, 17(3), 436-443.

*\*This publication was featured in the Journal of Microbiology & Biology Education "Spotlight" issue for 2017 as well as by the American Society for Microbiology education blog series.*

32. **Olimpo, J.**, Fisher, G., & DeChenne, S.E. (2016). Development and evaluation of the *Tigriopus* course-based undergraduate research experience: Impacts on students' content knowledge, attitudes, and motivation in a majors introductory biology course. *CBE-Life Sciences Education*, 15(4), ar72.
33. Burleson, K\*, & **Olimpo, J.\*** (2016). ClueConnect: A word array game to promote student comprehension of key terminology in an introductory anatomy and physiology course. *Advances in Physiology Education*, 40(2), 223-228.
34. Cleveland, L.<sup>†</sup>, & **Olimpo, J.** (2015). Deciphering primary and popular literature: An interactive approach for promoting students' development of scientific, digital, and information literacy in post-secondary contexts. *Journal of Microbiology & Biology Education*, 16(2), 256-257.
35. **Olimpo, J.** (2015). The Biology Experimental Design Challenge: An interactive approach to enhance students' understanding of scientific inquiry in the context of an introductory biology course. *Journal of Microbiology & Biology Education*, 16(1), 75-76.

*\*This publication was featured by the American Society for Microbiology:*

<http://www.asm.org/index.php/education-blog/item/97-teach-undergraduates-to-think-like-scientists>

36. **Olimpo, J.**, Kumi, B., & Dixon, B. (2015). Examining the relationship between 2D diagrammatic conventions and students' success on representational translation tasks in organic chemistry. *Chemistry Education Research and Practice*, 16(1), 143-153.
37. Kumi, B., **Olimpo, J.**, Bartlett, F.<sup>†</sup>, & Dixon, B. (2013). Evaluating the effectiveness of Organic Chemistry textbooks in promoting representational fluency and understanding of 2D-3D diagrammatic relationships. *Chemistry Education Research and Practice*, 14(2), 177-187.
38. **Olimpo, J.**, Davis, S.<sup>†</sup>, Lagman, S.<sup>†</sup>, Parekh, R.<sup>†</sup>, & Shields, P. (2010). Learning can be all fun and games: Constructing and utilizing a Biology Taboo Wiktionary to enhance student learning in an introductory biology course. *Journal of Microbiology and Biology Education*, 11(2), 164-165.
39. **Olimpo, J.**, & DeStefano, J. (2010). Duplex structural differences and not 2'-hydroxyls explain the more stable binding of HIV reverse transcriptase to RNA-DNA versus DNA-DNA. *Nucleic Acids Research*, 38(13), 4426-4435.

### Book Chapters

1. **Olimpo, J.** (under review, invited submission). Development and evaluation of course-based undergraduate research experiences (CUREs) across the disciplines. *COUER 2.0 (CUR)*.
2. **Olimpo, J.**, & Esparza, D.<sup>†</sup> (2020; invited submission). Active learning and conceptual understanding in biology. J. Mintzes & E. Walter (Eds.), *Active Learning in College Science: The Case for Evidenced-based Practice*. Netherlands: Springer International Publishing AG.
3. Kong, Y.<sup>†</sup>, Pelaez, N., Anderson, T., & **Olimpo, J.** (2019). Examining teaching assistants' (TA) experiences facilitating traditional vs. active learning-based tree-thinking curricula: TA perceptions, student outcomes, and implications for teaching and learning about evolution. U. Harms & M. Reiss (Eds.), *Evolution Education Re-Considered: Understanding What Works*. Netherlands: Springer International Publishing AG.
4. **Olimpo, J.** (2017). Asynchronous blogging as a mechanism to enhance students' conceptual understanding of the epidemiological and public health ramifications of microbial diseases. S. Ferris & H. Wilder (Eds.), *The Unplugged Professor*. Oxford, UK: Chandos Publishing.
5. **Olimpo, J.**, & Shields, P. (2013). The Biology Taboo Wiktionary: A tool for improving student comprehension of key terminology in introductory biology courses. S. Ferris & H. Wilder (Eds.), *The Plugged-In Professor*. Oxford, UK: Chandos Publishing.

## Conference Presentations

1. Santillan, K.<sup>†</sup>, Branchaw, J., & **Olimpo, J.** (2023, July). Fostering a culture of inclusive and equitable mentoring in course-based undergraduate research experiences (CUREs). Workshop presented at the *2023 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
2. Kajic, C.J.<sup>†</sup>, Subramanian, K., **Olimpo, J.**, and L.T.V.T. (2023, July). Instructor talk in CURE, inquiry, and traditional lab courses. Poster presented at the *2023 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
3. Hernández-Gaytan, A.<sup>†</sup>, Baker, D., Barry, R., Berry, C., Esparza, D.<sup>†</sup>, Johnson, S., Mathur, V., Sartin, C.<sup>†</sup>, Thomas, A., Townsend, H., & **Olimpo, J.** (2023, July). Strategies for effectively integrating responsible and ethical conduct of research (RECR) education into course-based undergraduate research experiences (CUREs). Roundtable presented at the *2023 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
4. Hernández-Gaytan, A.<sup>†</sup>, Santillan, K.<sup>†</sup>, & **Olimpo, J.** (2023, June). Strategies for integrating responsible and ethical conduct of research (RECR) education into CUREs. Roundtable presented at the *2023 Association for Biology Laboratory Education* conference, San Diego, CA.
5. **Olimpo, J.**, Bitner, E., Duran, J., Hill, J., Meza, A., Miramontes, A., & Overstreet, M. (2023, June). Driving pedagogical innovation from the ground up through strategic on-campus partnerships. Interactive talk presented at the *2023 Transforming Institutions* conference, Minneapolis, MN.
6. Blum, T., Iscapa, K., & **Olimpo, J.** (2023, March). Moving beyond access to achieving equity-minded excellence at scale. Poster presented at the *2023 AAC&U Diversity, Equity, and Student Success* conference, Henderson, NV.
7. Santillan, K.<sup>†</sup>, Rediske, A., & **Olimpo, J.** (2022, November). Mentoring in the context of an online introductory biology CURE: A case study. Poster presented at the *2022 AAC&U Transforming STEM Higher Education* conference, Arlington, VA.
8. Hernandez, A.<sup>†</sup>, & **Olimpo, J.** (2022, July). The ENCOUR Fellowship Program: A national model for advancing responsible and ethical conduct of research education in CUREs. Research talk presented at the *2022 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
9. Santillan, K.<sup>†</sup>, Eddy, S., & **Olimpo, J.** (2022, July). The influence of mentoring on students' researcher self-efficacy, sense of belonging, perceptions of instructor trust, and research persistence in the context of an online introductory biology CURE. Poster presented at the *2022 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
10. Esparza, A.<sup>†</sup>, & **Olimpo, J.** (2022, July). COVID-19 remote instruction prepares STEM students for the return to face-to-face learning. Poster videocast presented at the *29<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, virtual.
11. Kern, A.<sup>†</sup>, **Olimpo, J.**, & D'Arcy, C. (2022, June). Creating meaningful professional development opportunities for teaching assistants facilitating course-based undergraduate research experiences (CUREs). Major workshop presented at the *2022 Association for Biology Laboratory Education* conference, Victoria, British Columbia, CAN.
12. Kern, A.<sup>†</sup>, D'Arcy, C., & **Olimpo, J.** (2021, July). Advancing CURE graduate teaching assistants' professional development through an online learning community intervention. Research talk presented at the *2021 National Meeting of the Society for the Advancement of Biology Education Research*, virtual.
13. Esparza, D.<sup>†</sup>, Wagler, A., Hernandez, A.<sup>†</sup>, Zachariah, J.<sup>†</sup>, & **Olimpo, J.** (2021, July). Who do students talk to about their course research? An investigation of CURE students' ego networks. Research talk presented at the *2021 National Meeting of the Society for the Advancement of Biology Education Research*, virtual.
14. Carrillo, E.<sup>†</sup>, Lee, M.<sup>†</sup>, Aikens, M., **Olimpo, J.**, & Schuchardt, A. (2021, July). Students' perceptions of the usefulness of statistics in course-based undergraduate research experiences (CUREs) versus real-world biological contexts. Poster presented at the *2021 National Meeting of the Society for the Advancement of Biology Education Research*, virtual.

15. Kern, A.<sup>†</sup>, D'Arcy, C., McCabe, T., & **Olimpo, J.** (2021, June). Creating meaningful professional development opportunities for teaching assistants facilitating course-based undergraduate research experiences (CUREs). Research talk presented at the *28<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, virtual.
16. Donegan, N.<sup>†</sup>, Zachariah, J.<sup>†</sup>, & **Olimpo, J.** (2021, June). Thinking broadly about broader relevance: Integrating museum education into CUREs. Poster videocast presented at the *28<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, virtual.
17. Hernandez, A.<sup>†</sup>, Oviedo Ramirez, S., D'Arcy, C., Diaz-Martinez, L. & **Olimpo, J.** (2021, June). Integrating ethics and RCR education into CUREs: Early outcomes of the ENCOUR Fellowship Program. Poster videocast presented at the *28<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, virtual.
18. Sanchez, M.<sup>†</sup>, Kern, A.<sup>†</sup>, Bajpeyi, S., & **Olimpo, J.** (2021, April). The CURE for metabolic diseases: Implementation and evaluation of an interdisciplinary, research-driven exercise metabolism laboratory course. Research talk presented at the *UTEP SOL Conference*, virtual.
19. D'Arcy, C., & **Olimpo, J.** (2021, January). Considerations in curriculum design to build a more connected online CURE. Research talk presented at the *2021 Massachusetts PKAL Network Winter Meeting: STEM Ed in the Time of COVID19*, virtual.
20. **Olimpo, J.**, D'Arcy, C., Kern, A.<sup>†</sup>, Ahlawat, J.<sup>†</sup>, Baeza, M.<sup>†</sup>, Ge, Y.<sup>†</sup>, Navarro, V.<sup>†</sup>, Sanchez, M.<sup>†</sup>, Schlichte, J.<sup>†</sup>, & Tena, A.<sup>†</sup> (2021, January). From face-to-face to virtual space: Development and evaluation of online CUREs in STEM. Research talk presented at the *2021 Massachusetts PKAL Network Winter Meeting: STEM Ed in the Time of COVID19*, virtual.
21. McCabe, T.<sup>†</sup>, Lazos, A.<sup>†</sup>, Perez, I.<sup>†</sup>, Wilson, K., & **Olimpo, J.** (2020, July). Evaluating representations of scientific process and ethics and responsible conduct of research in common introductory collegiate biology textbooks. Research talk presented at the *2020 National Meeting of the Society for the Advancement of Biology Education Research*, virtual.
22. Fisher, G., Floyd, K.<sup>†</sup>, & **Olimpo, J.** (2020, July). Identifying the impact of the *Tigriopus* CURE at multiple institutions with diverse student populations. Research talk presented at the *2020 National Meeting of the Society for the Advancement of Biology Education Research*, virtual.
23. Schuchardt, A., Aikens, M., **Olimpo, J.**, & Kirkpatrick, C. (2020, July). Investigating students' statistics attitudes and knowledge in CUREs. Research talk presented at the *2020 National Meeting of the Society for the Advancement of Biology Education Research*, virtual.
24. Carrol, P., Morris, J. J., Raut, S., **Olimpo, J.**, & Sutton, T. (2020, July). The impact of professional development and precision mentorship on the adoption of evidence-based teaching on faculty from non-R1 institutions. Poster presented at the *2020 National Meeting of the Society for the Advancement of Biology Education Research*, virtual.
25. Esparza, D.<sup>†</sup>, Wagler, A., Hernandez, A.<sup>†</sup>, & **Olimpo, J.** (2020, July). The influence of gender on students' perceptions of their peers' research proficiency in course-based undergraduate research experiences and traditional laboratory courses. Research talk presented at the *2020 National Meeting of the Society for the Advancement of Biology Education Research*, virtual.
26. Diaz-Martinez, L., D'Arcy, C., & **Olimpo, J.** (2020, April). Needs and opportunities for ethics and responsible conduct of research (E/RCR) integration in course-based undergraduate research experiences: The ENCOUR fellowship program. Poster presented at the *Experimental Biology 2020 Conference*, San Diego, CA.
27. **Olimpo, J.** (organizer and moderator; 2020, February). Inclusivity and equity in course-based undergraduate research experiences. Symposium presented at the *2020 International Meeting of the American Association for the Advancement of Science*, Seattle, WA.
  - a. Riddell, C.<sup>†</sup>, & **Olimpo, J.** (2020, February). Connecting CUREs and community via civic engagement. Research talk presented at the *2020 International Meeting of the American Association for the Advancement of Science*.
  - b. Gehman, M., & **Olimpo, J.** (2020, February). Food microbiology in Côte d'Ivoire: A CURE for nonmajors, ESL students. Research talk presented at the *2020 International Meeting of the American Association for the Advancement of Science*.
  - c. Esparza, D.<sup>†</sup>, & **Olimpo, J.** (2020, February). More of the same? Exploring dynamics of gender in CUREs. Research talk presented at the *2020 International Meeting of the American Association for the Advancement of Science*.

- d. Santillan, K.<sup>†</sup>, Rediske, A., & **Olimpo, J.** (2020, February). Course-based research experiences: Mentoring underrepresented populations. Research talk presented at the *2020 International Meeting of the American Association for the Advancement of Science*.
28. Riddell, C.<sup>†</sup>, & **Olimpo, J.** (2020, February). Evaluating undergraduate student perceptions of air quality in the border region. Poster presented at the *2020 International Meeting of the American Association for the Advancement of Science*, Seattle, WA.
29. Floyd, K.<sup>†</sup>, Fisher, G., Esparza, D.<sup>†</sup>, & **Olimpo, J.** (2019, July). Can course-specific CUREs be broadly applicable at diverse institutions? Poster presented at the *2019 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
30. Esparza, D.<sup>†</sup>, Reyes, N.<sup>†</sup>, Leon, K.<sup>†</sup>, Quintana, A., & **Olimpo, J.** (2019, July). Using NeuroNotebooks to improve students' understanding of developmental neurobiology, attitudes toward research, and experimental design competency. Poster presented at the *2019 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
31. Kern, A.<sup>†</sup>, Esparza, D.<sup>†</sup>, Kulesza, A., Pieterston, C., Rivera, S., & **Olimpo, J.** (2019, July). Designing professional development initiatives for graduate teaching assistants facilitating course-based undergraduate research experiences (CUREs). Roundtable presented at the *2019 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
32. Boyett, J., Schormann, S., Esparza, D.<sup>†</sup>, **Olimpo, J.**, & Raut, S. (2019, July). Assessing the impact of "Osmotion": An active learning module focused on improving comprehension of osmosis and diffusion for underrepresented minority students. Poster presented at the *2019 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
33. Kern, A.<sup>†</sup>, Esparza, D.<sup>†</sup>, Kulesza, A., Pieterston, C., Rivera, S., & **Olimpo, J.** (2019, June). Developing, implementing, and evaluating professional development initiatives for graduate teaching assistants facilitating course-based undergraduate research experiences (CUREs). Extended mini-workshop presented at the *2019 Association for Biology Laboratory Education Conference*, Ottawa, CAN.
34. **Olimpo, J.**, Esparza, D.<sup>†</sup>, & Wagler, A. (2019, June). Estimation of peer research aptitude and outspokenness among male and female students enrolled in CURE and non-CURE introductory biology laboratory courses. Poster presented at the *2019 Gordon Research Conference*, Lewiston, ME.
35. Hernandez, A.<sup>†</sup>, & **Olimpo, J.** (2019, June). Health disparities in the border region: A course-based undergraduate research experience (CURE) with concomitant civic engagement education. Poster presented at the *2019 Association for Biology Laboratory Education Conference*, Ottawa, CAN.
36. Hernandez, A.<sup>†</sup>, Canaba, K., Diaz-Martinez, L., & **Olimpo, J.** (2019, June). Infusing critical conversations about cultural awareness, identity, and mental health into a research-intensive program for Hispanic/Latinx undergraduates in STEM. Poster presented at the *2019 Association for Biology Laboratory Education Conference*, Ottawa, CAN.
37. Esparza, D.<sup>†</sup>, Wagler, A., & **Olimpo, J.** (2019, June). Characterization of student and instructor behaviors in CURE and non-CURE learning environments: Implications for non-cognitive student outcomes. Poster presented at the *2019 Association for Biology Laboratory Education Conference*, Ottawa, CAN.
38. **Olimpo, J.**, & Diaz-Martinez, L. (2018, December). National survey on ethics/RCR integration within course-based undergraduate research experiences (CURES). Poster presented at the *2018 ASCB/European Molecular Biology Organization Conference*, San Diego, CA.
39. Hernandez, A.<sup>†</sup>, Diaz-Martinez, L., Echegoyen, L., & **Olimpo, J.** (2018, November). ACSScellence: Empowering underrepresented students at an HSI. Poster presented at the *2018 AAC&U Transforming STEM Higher Education Conference*, Atlanta, GA.
40. Floyd, K.<sup>†</sup>, Bautista, E.<sup>†</sup>, & **Olimpo, J.** (2018, October). iNaturalist provides local biodiversity context to introductory organismal biology concepts. Research talk presented at the *2018 North American Association for Environmental Education Conference*, Spokane, WA.
41. Diaz-Martinez, L., Fisher, G., Bhatt, J.<sup>†</sup>, Esparza, D.<sup>†</sup>, Hernandez, A.<sup>†</sup>, & **Olimpo, J.** (2018, July). ENCOUR: Establishing a network for the integration of ethics/RCR education into CUREs in the

- biological sciences. Poster presented at the *2018 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
42. Martin, A.<sup>†</sup>, Landerholm, T.<sup>†</sup>, **Olimpo, J.**, & McDonald, K. (2018, July). Integrating scaffolded responsible conduct of research instruction into a multi-disciplinary course-based undergraduate research experiences program. Poster presented at the *2018 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
  43. Floyd, K.<sup>†</sup>, Fisher, G., Esparza, D.<sup>†</sup>, & **Olimpo, J.** (2018, July). Setting the dial: How do we construct scalable and sustainable laboratory environments that foster students' science identity development, science process skills, and affect in the biological sciences?. Roundtable presented at the *2018 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
  44. Esparza, D.<sup>†</sup>, Fernando, D.<sup>†</sup>, Wagler, A., & **Olimpo, J.** (2018, July). Characterization of student and instructor behaviors in CURE and non-CURE contexts: Impacts on student motivation and science identity formation. Research talk presented at the *2018 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
  45. Hernandez, A.<sup>†</sup>, Diaz-Martinez, L., & **Olimpo, J.** (2018, July). Achieve career success in science through excellence (ACSScellence): Impacts of a longitudinal, research-intensive program on students' development of scientific process skills, science identity, and attitudes in STEM. Poster presented at the *25<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Austin, TX.
  46. Diaz-Martinez, L., Fisher, G., Bhatt, J.<sup>†</sup>, Esparza, D.<sup>†</sup>, Hernandez, A.<sup>†</sup>, & **Olimpo, J.** (2018, July). ENCOUR: Establishing a network for the integration of ethics/RCR education into CUREs in the biological sciences. Poster and dissemination station presented at the *25<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Austin, TX.
  47. Apodaca, J., Paat, Y.-F., Hernandez, A.<sup>†</sup>, & **Olimpo, J.** (2018, July). Engagement in a place-based health disparities CURE increases students' science process skills development, grit, and intracommunity collaborations. Poster presented at the *25<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Austin, TX.
  48. Esparza, D.<sup>†</sup>, Schorman, S.<sup>†</sup>, Jones, A.<sup>†</sup>, Raut, S., & **Olimpo, J.** (2018, July). Enhancing introductory biology students' conceptual understanding of and attitudes towards osmosis and diffusion through an interactive learning module. Poster presented at the *25<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Austin, TX.
  49. **Olimpo, J.**, Lougheed, V., & Tweedie, C. (2018, July). Horizontal infusion of arctic/polar science research into a quantitative methods in ecology course results in enhancement of students' statistical reasoning abilities, statistics attitudes, and scientific process skills. Poster presented at the *25<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Austin, TX.
  50. **Olimpo, J.**, Esparza, D.<sup>†</sup>, Rowland-Goldsmith, M., & Rosenberg, M. (2018, July). Implementation and evaluation of experimental design concepts in course-based undergraduate research experiences (CUREs) in the biological sciences. Workshop presented at the *25<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Austin, TX.
  51. Seitz, H., **Olimpo, J.**, Elliott, S., & Rediske, A. (2018, July). The essentials of education research: From development to publication. Workshop presented at the *25<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Austin, TX.
  52. **Olimpo, J.**, Apodaca, J., & Paat, Y.-F. (2018, March). Place-based undergraduate research experiences increase campus-community interactions and promote students' conceptual understanding, science process skills development, and grit in the biological sciences. Research talk presented at the *National Center for Science and Civic Engagement Washington Symposium – Public Engagement with Science*, Washington, D.C.
  53. Esparza, D.<sup>†</sup>, & **Olimpo, J.** (2017, November). Implementing a comprehensive action research workshop within an upper-division scientific teaching course improves pre-service teachers' knowledge of and attitudes toward action research methodologies. Poster presented at the *2017 National Association of Biology Teachers (NABT) Conference*, St. Louis, MO.
  54. **Olimpo, J.**, McCabe, T.<sup>†</sup>, & Shields, P. (2017, July). Characterization of undergraduate teaching assistant instructional practices in the context of an introductory cell and molecular biology course. Research talk presented at the *24<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Denver, CO.

55. Pevey, R.<sup>†</sup>, McCabe, T.<sup>†</sup>, & **Olimpo, J.** (2017, July). Implementation of an interactive statistics workshop within the context of an introductory biology course-based undergraduate research experience: Impacts on novices' quantitative reasoning and literacy skills. Research talk presented at the *24<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Denver, CO.
56. Floyd, K.<sup>†</sup>, Mayfield, T., & **Olimpo, J.** (2017, July). iNaturalist: Creating digital biodiversity collections in an introductory, inquiry-driven laboratory course. Microbrew presented at the *24<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Denver, CO.
57. **Olimpo, J.**, D'Arcy, C.<sup>†</sup>, Esparza, D.<sup>†</sup>, Fisher, G., & McCabe, T.<sup>†</sup> (2017, July). Development, implementation, and assessment: Designing course-based undergraduate research experiences that effectively maximize learning for all students. Pre-conference workshop presented at the *24<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Denver, CO.
58. Esparza, D.<sup>†</sup>, Ahmed, H.<sup>†</sup>, & **Olimpo, J.** (2017, July). Characterization of students' experimental design approaches in traditional laboratories *versus* course-based undergraduate research experiences. Research talk presented at the *2017 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
59. **Olimpo, J.**, Quijas, D.<sup>†</sup>, & Quintana, A. (2017, July). A focus on polarity: Investigating the role of orientation cues in mediating student performance on mRNA synthesis tasks in an introductory cell and molecular biology course. Research talk presented at the *2017 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
60. Mayfield, T., Portillo, F., Greenbaum, E., & **Olimpo, J.** (2017, June). Establishing a CURE for biodiversity literacy in undergraduate education: Impacts on student learning and attitudes in an introductory organismal biology laboratory course. Research talk presented at the *2017 Association for Academic Museums and Galleries (AAMG) Conference*, Eugene, OR.
61. Kong, Y.<sup>†</sup>, & **Olimpo, J.** (2017, April). The influence of spatial aptitude on undergraduate students' tree-thinking abilities. Research talk presented at the 2017 International Meeting of the *National Association for Research in Science Teaching*, San Antonio, TX.
62. Holguin, A., & **Olimpo, J.** (2017, February). Evidence-based practices for integration of group work into interdisciplinary learning environments. Research talk presented at the *2017 Conference on Higher Education Pedagogy*, Blacksburg, VA.
63. D'Arcy, C.<sup>†</sup>, Martinez, A.<sup>†</sup>, Wells, C., Khan, A., & **Olimpo, J.** (2016, November). Implementation of a brain mapping course-based undergraduate research experience in introductory biology: Impacts on novices' competency and affect. Poster presented at the *2016 Neuroscience Conference (Society for Neuroscience)*, San Diego, CA.
64. **Olimpo, J.**, Yin, D.<sup>†</sup>, & Marsan, L.<sup>†</sup> (2016, July). Identification of cognitive and non-cognitive predictors of Hispanic students' development of scientific process skills in an introductory biology course. Roundtable presented at the *2016 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
65. Borja, D.<sup>†</sup>, **Olimpo, J.**, Nelson, J., & Davis, B. (2016, July). Assessing the impact of course-based undergraduate research experiences on novices' attitudes and motivation in the biological sciences: A multi-institutional perspective on historically underrepresented individuals in the STEM disciplines. Poster presented at the *2016 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
66. Kong, Y.<sup>†</sup>, Apodaca, J., **Olimpo, J.** (2016, July). Implementation and evaluation of the MUET curriculum in an introductory organismal biology course. Research talk presented at the *2016 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
67. **Olimpo, J.**, McCabe, T.<sup>†</sup>, & Shields, P. (2016, July). The impact of structured professional development experiences on biology undergraduate teaching assistants' pedagogical beliefs and attitudes: A multi-institutional, comparative study. Research talk presented at the *23<sup>rd</sup> Annual ASM Conference for Undergraduate Educators*, Bethesda, MD.
68. Marsan, L.<sup>†</sup>, D'Arcy, C.<sup>†</sup>, & **Olimpo, J.** (2016, July). The impact of an interactive statistics module on novices' development of scientific process skills and attitudes in a first-semester research foundations course. Poster presented at the *23<sup>rd</sup> Annual ASM Conference for Undergraduate Educators*, Bethesda, MD.

69. **Olimpo, J.**, & Fisher, G. (2016, April). Impacts of a course-based undergraduate research experience on novice students' attitudes and motivation in biology. Research talk presented at the 2016 International Meeting of the *National Association for Research in Science Teaching*, Baltimore, MD.
70. Kong, Y.<sup>†</sup>, & **Olimpo, J.** (2016, March). Implementation of the MUET curriculum: Assessing novices' tree-thinking abilities. Roundtable presented at the *3<sup>rd</sup> Life Discovery – Doing Science Education Conference*, Baltimore, MD.
71. D'Arcy, C.<sup>†</sup>, Khan, A., & **Olimpo, J.** (2016, March). Implementation of a connectomics course-based undergraduate research experience in introductory biology. Poster presented at the *13<sup>th</sup> International Sun Conference on Teaching and Learning*, El Paso, TX.
72. **Olimpo, J.**, Fisher, G., & DeChenne, S.E. (2015, November). Implementation and evaluation of a course-based undergraduate research experience in introductory biology. Poster presented at the *AAC&U Crossing Boundaries: Transforming STEM Education Conference*, Seattle, WA.
73. **Olimpo, J.** (2015, September). Implementation and evaluation of a novel course-based undergraduate research experience in introductory biology. Research talk presented in the Ecology and Evolutionary Biology weekly seminar. UTEP; El Paso, TX.
74. **Olimpo, J.**, & Cleveland, L. (2015, July). Faculty, graduate teaching assistants', and undergraduate teaching assistants' beliefs regarding the role of the non-majors biology laboratory experience. Roundtable presented at the *2015 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
75. **Olimpo, J.**, Fisher, G., & DeChenne, S.E. (2015, July). Implementation of a course-based undergraduate research experience in introductory biology: Impacts on students' experimental design skills, motivation, and attitudes in the discipline. Poster presented at the *2015 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
76. **Olimpo, J.**, DeChenne, S.E., Ronquillo, S., Lenh, R., Le, J., & Munyaka, B.S.<sup>†</sup> (2015, May). Implementation of active learning in the biology classroom: An observational study. Research talk presented at the *22<sup>nd</sup> Annual ASM Conference for Undergraduate Educators*, Austin, TX.
77. **Olimpo, J.**, & Cleveland, L. (2014, July). Reconsidering the non-majors laboratory experience: An examination of the impact of traditional laboratory coursework and students' expectations for laboratory learning on student outcomes. Research talk presented at the *2014 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
78. **Olimpo, J.**, DeChenne, S.E., & Munyaka, B.<sup>†</sup> (2014, July). A comparative examination of student and faculty expectations for learning in an inquiry-based advanced cellular and molecular biology laboratory course. Poster presented at the *2014 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
79. DeChenne, S.E., **Olimpo, J.**, & Munyaka, B.<sup>†</sup> (2014, July). Factors impacting student success and persistence in the biology major. Research talk presented at the *2014 National Meeting of the Society for the Advancement of Biology Education Research*, Minneapolis, MN.
80. **Olimpo, J.**, DeChenne, S.E., & Munyaka, B.<sup>†</sup> (2014, May). Should I stay, or should I go?: An examination of factors influencing student persistence in the biology major. Research talk presented at the *21<sup>st</sup> Annual ASM Conference for Undergraduate Educators*, Danvers, MA.
81. **Olimpo, J.**, & Shields, P. (2013, May). Project BETA: Engaging undergraduate biology majors in issues in teaching, learning, and curriculum design for introductory biology courses. Research talk presented at the *20<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Denver, CO.
82. **Olimpo, J.**, Bartlett, F.<sup>†</sup>, & Dixon, B. (2013, April). Exploring the impact of directionality on students' success on representational translation tasks in Organic Chemistry. Research talk presented at the annual meeting of the *American Educational Research Association*, San Francisco: CA.
83. **Olimpo, J.**, & Dixon, B. (2013, April). 2D vs. 3D: Students use of representations and models to solve representational translation tasks in Organic Chemistry. Research talk presented at the 2013 International Meeting of the *National Association for Research in Science Teaching*, Rio Grande, PR.
84. **Olimpo, J.**, & Dixon, B. (2012, July). Exploring students' perceptions of concrete models and the role of modeling in solving visuospatial tasks in Organic Chemistry. Research talk presented at the *Biennial Conference on Chemistry Education*, State College, PA.
85. **Olimpo, J.**, & Dixon, B. (2012, July). Constructing versus using pre-built models: An analysis of the role of concrete models in increasing student performance on representational tasks in Organic Chemistry. Poster presented at the *Biennial Conference on Chemistry Education*, State College, PA.

86. **Olimpo, J., & Shields, P.** (2012, June). Murder in Cancun: Using an interactive case study approach to improve introductory biology students' understanding of restriction digests and molecular biology techniques. Poster presented at the *19<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, San Mateo, CA.
87. **Olimpo, J., & Shields, P.** (2012, May). Utilizing authentic modeling exercises to improve introductory biology students' understanding of mitosis and meiosis. Poster presented at the *Lilly Conference on College & University Teaching*, Washington, DC.
88. **Olimpo, J., & Dixon, B.** (2012, March). Exploring students' model building practices while solving representational translation tasks in Organic Chemistry. Poster presented at the international meeting of the *National Association for Research in Science Teaching*, Indianapolis, IN.
89. **Olimpo, J., & Shields, P.** (2011, August). Preparing today's students to be tomorrow's educators: Designing effective professional development for undergraduate teaching assistants. Research talk presented at the *Third International Conference on Science and Society*, Washington, DC.
90. **Olimpo, J., Davis, S.<sup>†</sup>, Lagman, S.<sup>†</sup>, Parekh, R.<sup>†</sup>, & Shields, P.** (2011, June). The Biology Taboo Wiktionary: A student-developed tool to promote learning in an introductory biology course. Poster presented at the *Lilly Conference on College & University Teaching*, Washington, DC.
91. **Olimpo, J., & Shields, P.** (2011, June). Developing interdisciplinary undergraduate-faculty learning communities that promote professional growth and student learning. Poster presented at the *Lilly Conference on College & University Teaching*, Washington, DC.
92. **Olimpo, J., & Shields, P.** (2011, June). Guided worksheet discussion sessions improve student success and understanding of complex phenomena in an introductory biology course. Poster presented at the *18<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, Baltimore, MD.
93. Kreftin, R., Perez, A., **Olimpo, J.**, Clover, B., Geary, T., Lai, Y., Demoranville, L., & Barry, K. (2010, June). Using podcasts to develop student literacies and engagements. Research talk presented at the *Lilly Conference on College & University Teaching*, Washington, DC.
94. **Olimpo, J., & Shields, P.** (2010, June). Undergraduates as curriculum designers: Student-driven pedagogical practices in the introductory science classroom. Poster presented at the *Lilly Conference on College & University Teaching*, Washington, DC.
95. **Olimpo, J., & Shields, P.** (2010, May). Curriculum designers: Undergraduate learning assistants in the introductory biology classroom. Poster presented at the *17<sup>th</sup> Annual ASM Conference for Undergraduate Educators*, San Diego, CA.
96. **Olimpo, J.** (2010, February). More than meets the *i*: Maintaining a sense of classroom community in today's tech-savvy world. Research talk presented at the *2010 Conference on Higher Education Pedagogy*, Blacksburg, VA.
97. **Olimpo, J., & DeStefano, J.** (2009, November). A comparative study of the binding affinity of HIV-1 reverse transcriptase to DNA vs. RNA substrates. Poster presented at the *2009 Bioscience Research and Technology Conference*, College Park, MD.
98. **Olimpo, J.** (2009, October). Interdisciplinary studies and the everyday student: The role of active learning in promoting student exploration of educational phenomena. Research talk presented at the meeting of the *International Society for Excellence in Teaching & Learning*, Philadelphia, PA.
99. **Olimpo, J., Gangaramani, D., & Lai, Y.** (2008, April). Assessing the impact of technology and supplemental materials on the development of critical thinking skills in courses taught by graduate teaching assistants. Poster presented at the *Teaching with Technology Conference*, College Park, MD.
100. **Olimpo, J., Snyder, C., & Lyczak, R.** (2005, October). *Caenorhabditis elegans* early embryo analysis of the location of the meiotic exit defect in *scu-1* mutants. Poster presented at the *2005 Haverford Undergraduate Research Symposium*, Haverford, PA.
101. **Olimpo, J., Washam, L., & Lyczak, R.** (2005, July). Analyzing meiotic defects in *scu-1* embryos of the nematode *Caenorhabditis elegans*. Poster presented at the *Merck Summer Undergraduate Research Symposium*, West Point, PA.
102. Group, T., **Olimpo, J.**, Snyder, C., Washam, L., Appleman, V., Brewer, A., Mazor, A., Murrow, M., Smith, K., & Lyczak, R. (2005, June). Uncovering the paternal and maternal roles for the *scu-1* gene in meiotic progression in sperm and early embryos of *Caenorhabditis elegans*. Poster presented at the *2005 International C. elegans Meeting*, Los Angeles, CA.



### Invited Presentations

1. **Olimpo, J.**, & Alam, I.<sup>†</sup> (2022, November). Assessment of CUREs. Inaugural conference on CUREs @ HSI, Phoenix, AZ.
2. **Olimpo, J.** (2022, November). Examining CUREs from the inside out: Connecting context to outcomes. Texas A&M – San Antonio (TAMUSA) Department of Biology Seminar Series, San Antonio, TX.
3. **Olimpo, J.**, Blum, T., & Sirin, C. (2022, August). Building a better curriculum through inclusive and equitable teaching practices. 2023 UTEP conference, *Enacting Inclusive Excellence through Leadership, Teaching, and Learning*.
4. **Olimpo, J.**, & Korstange, R. (2021, July). Assessing critical thinking in STEM. Inaugural Conference on Critical Thinking in STEM, virtual.
5. **Olimpo, J.** (2021, May). Exploring the contextual features of CUREs and their impact on student outcomes. Cornell University Ecology & Evolutionary Biology Seminar Series.
6. Imad, M., Dewsbury, B., Fernandez, O., **Olimpo, J.**, & Schinske, J. (2020, May). Prioritizing diversity, equity, and inclusion in the age of COVID-19. Summer Institutes on Scientific Teaching Happy Hour.
7. **Olimpo, J.** (2021, March). Using metacognitive approaches to advance students' research competencies in laboratory contexts. American Society for Microbiology Texas Regional Meeting.
8. **Olimpo, J.** (2020, December). Context matters: CUREs as dynamic learning environments. University of Minnesota; Department of Biology Teaching and Learning Seminar Series.
9. **Olimpo, J.** (2020, October). Research funding and professional development. QUBES BIOME Faculty Learning Community, virtual.
10. **Olimpo, J.** (2019, August). Evaluating the impact of your intervention: From research question to dissemination. The University of Texas at El Paso; BUILDing SCHOLARS eConference.
11. D'Arcy, C., Khan, A., & **Olimpo, J.** (2019, July). Re-examining freshmen potential: Application of the CURE format to big data neuroanatomy problems. REIL-Biology Workshop at the 2019 Meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN.
12. **Olimpo, J.** (2019, July). Introducing ethics education in the context of CUREs. REIL-Biology Workshop at the 2019 Meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN.
13. **Olimpo, J.** (2019, April). The *Tigriopus* CURE: A scalable model for engaging students in authentic scientific practices. The University of Texas at El Paso; STEMERS Seminar Series (College of Education).
14. **Olimpo, J.**, Esparza, D.<sup>†</sup>, Shields, P., & Raut, S. (2019, March). A framework for the advancement and assessment of students' experimental design competencies in biological sciences learning environments. Biology Leadership Community Conference, Las Vegas, NV.
15. **Olimpo, J.** (2018, December). Characterization of student and instructor behaviors in CURE and non-CURE contexts: Implications for teaching and learning. University of Alabama at Birmingham, ROSE Monthly Seminar Series.
16. **Olimpo, J.**, & Brame, C. (2018, October). Teaching the principles of rigor and reproducibility: A model for providing curricular resources. NINDS/National Institutes of Health.
17. **Olimpo, J.**, Esparza, D.<sup>†</sup>, & Santillan, K.<sup>†</sup> (2018, August). EdPuzzle: An online, video-based platform for advancing student learning. The University of Texas at El Paso; Fall Instructor Retreat.
18. **Olimpo, J.** (2018, March). Course-based undergraduate research experiences (CUREs) as multidimensional learning contexts. The University of New Mexico; Biochemistry and Molecular Biology Journal Club.
19. **Olimpo, J.** (2018, February). Course-based undergraduate research experiences (CUREs): A mechanism for advancing students' conceptual understanding and affect in the biological sciences. New Mexico State University; HHMI Biology Seminar Speaker Series.
20. **Olimpo, J.** (2017, July). Preparing students for today's workforce needs. Moderator for anchor session at the 24<sup>th</sup> Annual ASM Conference for Undergraduate Educators, Denver, CO.
21. **Olimpo, J.** (2017, May). Characterization of students' experimental design approaches in traditional laboratories versus course-based undergraduate research experiences. 2017 ACED BIO Meeting, Highlands, NC.

22. **Olimpo, J.** (2016, December). Applications of mathematical thinking to authentic research experiences in the biological sciences. American Society for Microbiology Massively Open Online Course (ASM M[ICRO]OOCs).
23. **Olimpo, J.** (2016, September). CUREs: A mechanism to engage all students in authentic scientific opportunities. University of Northern Colorado; Biological Sciences Seminar Series.

## Grants and Awards

### **Grants (Funded)**

**Collaborative Research: HSI Implementation and Evaluation Project: Studying Equitable and Inclusive Strategies for Mentoring in CUREs (SEISMic)**

*\$929,157 awarded by the NSF HSI IUSE Program; Role: PI*

**RCN-UBE: Advancing CURE Teaching Assistant Professional Development via the CURE TAPESTRy Network**

*\$482,409 awarded by the NSF RCN-UBE Program; Role: PI*

**Accelerating STEM Success through Experiences for Transfer/Third-Year Students (ASSETS)**

*\$1,483,492 awarded by the NSF S-STEM Program; Oct. 2021 - Sept. 2027; Role: PI*

**Louis Stokes Regional Center of Excellence: Inclusive Mentoring in STEM**

*\$319,306 awarded by the NSF LSAMP Program; June 2021 - May 2026; Role: Co-PI*

**Collaborative Research: Instructor Talk in Research Courses**

*\$74,856 awarded by the NSF IUSE Program; Oct. 2020 - Sept. 2022; Role: PI*

**RCN-UBE: Ethics Network for Course-based Opportunities in Undergraduate Research: Phase II**

*\$497,588 awarded by the NSF RCN-UBE Program; Sept. 2019 - Aug. 2023; Role: PI*

**The El Paso Partnership for the Preparation of STEM Teachers to Implement Project-based Learning**

*\$1,999,693 awarded by the NSF Robert Noyce Teach. Scholar. Prog.; July 2019 - June 2024; Role: Co-PI*

**Phase II of BUILDing SCHOLARS**

*\$2,540,566 awarded by the NIH; July 2019 - June 2024; Role: Co-I*

**Development, Implementation, and Evaluation of Place-based Experimental Design Exercises in Multi-Institutional Introductory Biology Classrooms: Opportunities to Promote Learning and Affect Among Historically Underrepresented Populations**

*\$5,000 awarded by Pearson; Jan. 2019 - Sept. 2020; Role: PI*

**RCN-UBE: The ROSE Network: Improving Research Inclusivity through a Grassroots Culture of Scientific Teaching**

*\$77,982 awarded by the NSF RCN-UBE Program; Sept. 2018 - Aug. 2023; Role: PI*

**RCN-UBE Incubator: Consortium for the Integration of Ethical Research Practices into Course-based Undergraduate Research Experiences in the Biological Sciences**

*\$49,989 awarded by the NSF RCN-UBE Incubator Program; Sept. 2017 - Aug. 2019; Role: PI*

**Collaborative Research: Infusing Authentic Research into the Introductory Biology Curriculum: A Multi-Institutional Study (Supplemental Award)**

*\$9,959 awarded by the NSF IUSE Program; Sept. 2017 - Aug. 2020; Role: PI*

**Outcomes Associated with Latin@ Student Engagement in an Interdisciplinary CURE**

\$30,138 awarded by the NIH BUILDing SCHOLARS SEED Program; Aug. 2016 - Dec. 2017; Role: PI

**Collaborative Research: Infusing Authentic Research into the Introductory Biology Curriculum: A Multi-Institutional Study**

\$320,599 awarded by the NSF IUSE Program; Sept. 2016 - Dec. 2020; Role: PI

**Polar (NSF 15-114): Research Opportunities in Arctic Data Science for Minorities (ROAM2)**

\$298,983 awarded by the NSF Polar IUSE Program; Nov. 2016 - Oct. 2020; Role: Co-PI

**Achieve Career Success in Science through Excellence (ACSScellence)**

\$999,614 awarded by the NSF S-STEM Program; Aug. 2016 - July 2021; Role: Co-PI

**Examining the Cognitive, Non-Cognitive, and Contextual Outcomes Associated with Hispanic Student Engagement in Course-Based Undergraduate Research Experiences in Introductory Biology**

\$5,000 awarded by the University Research Institute (UTEP); Jan. 2016 - Dec. 2016; Role: PI

**Examining the Intersectionality of Science and Society: The Impact of Place-Based Case Study Pedagogy on Novices' Conceptual Understanding, Attitudes, and Motivation in the Biological Sciences**

\$1,000 awarded by the Center for Excellence in Teaching and Learning (CETaL; UTEP); Spring 2016; Role: PI

**Impacting Student Learning by Reforming the Biology First-Year Experience**

\$53,370 awarded by the University of Northern Colorado; Aug. 2014 - May 2016; Role: PI

**Integrating Science and Mathematics Lessons in the Middle and High School Classroom (Northern Colorado STEM Collaboration)**

\$176,757 awarded by Colorado Department of Higher Education; Oct. 2014 - Dec. 2015; Role: Senior Personnel

**Awards**

Excellence in Mentorship Award (BUILDing SCHOLARS)	2017
BUILDing SCHOLARS Faculty Travel Award (UTEP) (\$2000 to support travel to national conferences)	2016, 2017
University of Northern Colorado Provost's Travel Award (\$800 to support travel to national conferences)	2014, 2015
University of Maryland Research/Scholarship Award (\$1500 to support research and tuition costs)	2013
ASMCUE Invited Speaker Grant Support (\$350 grant to attend yearly conference and present work)	2013, 2014, 2015, 2016
University of Maryland, Goldhaber Travel Grant (\$250 to support national travel to attend conferences)	2012
Catalytic Mini-Grant: Introductory Biology Project (\$2000 to support assessment and skills development projects)	2010
ASMCUE Travel Grant	2010

*(\$750 grant to attend yearly conference and present work)*

Center for Teaching Excellence Grant  
*(\$500 grant for curriculum development and presentation)*

2009

Merck Undergraduate Research Fellowship  
*(\$5000/yr. award to perform and present research)*

2004, 2005

### **Selected Professional and Service Activities**

Co-Facilitator, SMART CUREs Teaching Assistant Learning Community, UTEP  
CIRTL Faculty Fellow, UTEP Graduate School/Center for Faculty Leadership and Development  
Director, Ethics Network for Course-based Opportunities in Undergraduate Research (ENCOUR)  
Chair, Steering Committee, ASM Conference for Undergraduate Educators, 2018 Program  
Vice-Chair, Steering Committee, ASM Conference for Undergraduate Educators, 2017 Program  
Faculty Coordinator, APLU Introductory Biology Learning Community (UTEP)  
Coordinator, Noyce Ambassadors Program (UTEP)  
Coordinator, STEM Education Forum (UTEP)  
Member, Faculty Guild – Adaptive Technologies (Every Learner; APLU)  
Member, Ysleta High School T-STEM Academy Advisory Board  
Member, ASPIRE Advisory Board  
Member, Campus Office of Undergraduate Research Initiatives (COURI) Advisory Board  
Member, BUILDing SCHOLARS Assistant Professor in STEM Ed. Research Search Committee (UTEP)  
Member, College of Science Business Center Specialist Search Committee (UTEP)  
Member, Program Advisory Committee (BS - Secondary Education) (UTEP)  
Member, TA Training Committee (UTEP)  
Member, L.A.B. Virtual Laboratories Advisory Board (Cengage)  
Judge; LSAMP, COURI, and BUILDing SCHOLARS Symposia (UTEP)  
Science Fair Judge, Ysleta High School, El Paso, TX (2019, 2020)  
Science Fair Judge, Harmony Science Academy, El Paso, TX (2016)  
Academic Advising, Department of Biological Sciences (UTEP)  
Proposal Reviewer, Society for the Advancement of Biology Education Research  
Proposal Reviewer, National Association for Research in Science Teaching  
Proposal Reviewer, American Society for Microbiology Conference for Undergraduate Educators  
Proposal Reviewer, National Science Foundation  
Senior Editor, *CourseSource* (2019 - Present)  
Tips and Tools Senior Editor, *Journal of Microbiology and Biology Education* (2019 - Present)  
Research Section Editor, *Journal of Microbiology and Biology Education* (2017 - 2018)  
Manuscript Reviewer, *PLoS One*  
Manuscript Reviewer, *International Journal of Science Education*  
Manuscript Reviewer, *CourseSource*  
Manuscript Reviewer, *Journal of Microbiology & Biology Education*  
Manuscript Reviewer, *CBE-Life Sciences Education*

### **Professional Memberships**

*American Society for Microbiology (ASM)*  
*Society for the Advancement of Biology Education Research (SABER)*  
*National Association for Research in Science Teaching (NARST)*  
*National Science Teachers Association (NSTA)*  
*American Association for the Advancement of Science (AAAS)*  
*American Education Research Association (AERA)*  
*National Research Mentoring Network (NRMN)*