# Erin K. H. Saitta

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# Education

# University of Central Florida (Orlando, FL)

*S*pring 2011- Spring 2013

Post-Doctoral Associate

Joint position between the Department of Chemistry and the Faculty Center for Teaching and Learning

### University of Central Florida (Orlando, FL)

August 2006-December 2010

Doctor of Philosophy in Chemistry

<u>Dissertation</u>: Laboratory Studies to Field Evaluation; Remediation of Polychlorinated Biphenyl Contaminated Painted Surfaces through the use of Activated Metal Treatment Systems (Advisor: Dr. Cherie Yestrebsky)

# University of Central Florida (Orlando, FL)

August 2001-May 2006

Bachelor of Science in Science Education, Chemistry Track

Minor in Chemistry

# **Relevant Employment History**

Associate Professor

UCF Chemistry Department Fall 2019- Summer 2025

**Assistant Professor** 

UCF Chemistry Department Fall 2015- Spring 2019

Lecturer & Chemistry Education Researcher

UCF Faculty Center for Teaching and Learning Spring 2013-Summer 2015

**Assistant Director** 

UCF Faculty Center for Teaching and Learning Spring 2011-Spring 2013

Science Education Coordinator & Postdoctoral Associate

UCF Chemistry Department Fall 2010-Spring 2013

Chemistry II Laboratory Inquiry Teaching Coordinator

# **Teaching**

### **Courses Taught**

Fundamentals of Discipline Based Education Research in STEM Disciplines (ISC 5404, ISC 4932)

Analytical Chemistry Lab (CHM3120L) Four sections of 24 students

Coordinate 4 GTAs

Analytical Chemistry (CHM3120) Approximately 95 students

Chemistry Fundamentals II Laboratory (CHM2046L) 900 students in 40 sections per semester

Coordinate 20 GTAs per semester

Chemistry Fundamentals II Laboratory (CHM2046L) Online adjusted for COVID

Chemistry Fundamentals I (CHM2045) large lecture enrolls up to 400 students

Coordinate 3 GTAs and curriculum for recitation sections

Chemistry Fundamentals I Honors (CHM2045H) enrolls 40 students per section

Chemistry Fundamentals II (CHM2046) large lecture enrolls up to 450 students

Preparing Tomorrow's Faculty a non-credit graduate course approx. 50 students per semester

### **Students Supervised**

Post Docs (2)

- 1. Christopher Nix 2023-2024
- 2. Tong Wan (co-mentored with Dr. J Chini) 2017-2020

### PhD Students

In Progress (3)

- 3. Esther Francom (expected graduation 2028): *Mitigating teaching anxiety among Graduate Teaching Assistants (GTAs) through the use of rehearsal-based professional development*
- 4. Jarah Nelson (expected graduation 2027): Creating more inclusive classrooms for blind and visually impaired chemists, GTAs, and Faculty
- 5. Kathleen Lugo (expected graduation 2025): Investigating the creation and use of video-based professional development to increase the implementation of universal design for learning (UDL) strategies by chemistry Graduate Teaching Assistants (GTAs)

Graduated (3)

- 6. AJ Sona (Summer 2023): Supporting the Needs of Graduate Teaching Assistant in Active Learning Chemistry Environments
- 7. Christopher Nix (Spring 2023): Knowledge Transfer and Retention During a Biochemistry Program Redesign
- 8. Ashley Geraets (Summer 2021): Developing a GTA instructional toolbox, how does the utilization of a mixed reality teaching simulator for professional development help improve GTA instruction?

### Undergraduate Honors in the Major

Graduated (1)

9. Alexis Hyacinthe (Summer 2018:)

# **Undergraduate Research Students**

In progress (9)

Diego Rodriguez-Sandoval (expected 2027) Sebastian Velasquez (expected 2027), Birdie Diaz (expected 2027), Pocahontas Halperin (expected 2026), Ramses Rojas (expected 2026), Emanuella Dolcine (expected 2025), Emily Rentz (expected 2025) Dev Chari (expected 2026), Ashley Santonil (expected 2026)

# Graduated (16)

Sloan Berry (Spring 2025), Jabdiel Laboy Santana (Fall 2024), Lauriernst Frederique (Fall 2024). Esther Francom (Spring 2024), Keven Lucciano (2024), Cynthia Georges (Spring 2024), Maria Ribot (Spring 2024), Samantha Partlow (fall 2023), Dylan Leemook (Spring 2023), Hartley Hughes (spring 2022), Melanie Kwaschyn (Sumer 2021), Isadore Nottolini (Spring 2021), Andrew Cheshire (Spring 2021), Nicholas Soto (Spring 2020), Ashley Sierra (Spring 2020), Danquang Nguyen (Fall 2018), Victoria Torres (Fall 2017)

#### Other Mentoring (2)

Faculty mentor for student in NSF funded summer research program, ReTOOL for minority students interested in cancer research

10. Alexandra Jean-Louis (Summer 2020)

Faculty mentor for an NSF funded program to support transfer students with significant need

11. Oluwagbotemi Akinsoji (2020-2022)

### Dissertation committee mentees

In Progress (5)

- 12. Stephanie Nauth (Chemistry) expected 2025: Sorption of polycyclic aromantic sulfur heterocycles onto nylon microplastics
- 13. Julia Wilison (Physics) expected 2026: Multi-tiered Professional Development on Universal Design for Learning in Post-Secondary STEM
- 14. Aditya Mann (Materials Science) Expected Spring 2025: Development of Tamarind Seed Gum based composites and hydrogels as potential biocompatible materials for energy harvesting and other biological applications.
- 15. Cameron Bechard (Chemistry) expected 2026: Investigating STEM Identity at a Large Hispanic Serving Institution

- 16. Marjan Roshandel (Chemistry) expected 2026: Reflective Practice of Undergraduate Learning Assistants (ULAs) and Graduate Teaching Assistants (GTAs) using the Vitruvian Model of Reflective Practice (VMRP).
- 17. Nina Steigerwald (I/O Psychology) expected 2026: Going Green: Testing an Ambient Nature Work Environment As An Employee Energy Charger

#### Graduated (4)

- 18. Ahmed Comas (chemistry) Summer 2023: *Improvements of excising HPLC method (EPA-610) for the quantification of high molecular weight polycyclic aromatic hydrocarbons with the aid of shpol'skii spectroscopy*
- 19. Constance Doty (physics) Fall 2021: Optimizing Mixed-reality Simulation to Support STEM Graduate Teaching Assistants in Developing Student-centered Pedagogical Skills
- 20. Julie Donnelly (chemistry) Spring 2018: Integration of Fundamental Research and CER: The Role of Authenticity in Developing Views on the Nature of Teaching, Learning, and Doing Science
- 21. Matthew Wilcox (physics) Summer 2018: Undergraduate Student Agreement with Reformed Introductory Physics Classes

# **Grants & Funding**

1. Investigating Video-based Graduate Teaching Assistant Professional Development to Support Universal Design for Learning in Undergraduate Chemistry Courses

PI: Erin Saitta Co-PI: Jacquelyn Chini, Erin Scanlon

National Science Foundation (NSF) Improving Undergraduate STEM Education: Education and

Human Resources (IUSE: EHR) February 2023-Janary 2026 \$493,840

Credit: 33.3%

2. COVID Contingency funding for Simulated Practice: Using Socially-Responsive Avatars to Prepare STEM GTAs for Student-Centered Instruction

PI: Jacquelyn Chini Co-PIs: Erin Saitta, Charles Hughes

National Science Foundation (NSF) Covid Contingency Funding

Awarded September 2022 but post doc postponed acceptance \$100,000

Credit: 30%

3. Towards a Center for Discipline-based Education Research at UCF: Flexible, Accessible, Equitable and Transferable Strategies for Post-Secondary STEM Education

PI: Jackie Chini, Zhongzhou Chen, Katelyn Cooper, Erin Saitta, Chris Randles, Kati Teixeira, Julie Donnelly

UCF Seed Funding IR2 Award Spring 2020- Fall 2021: \$40,000

Credit: 15%

4. Investigation of the Experiences and Motivations of STEM Transfer Students after the First Year PI: Erin Saitta Co-PIs: Lori Dunlop-Pyle, James Cooney, Jason Dodge

Florida Consortium of Metropolitan Research Universities/Helmsley Charitable Trust

Spring 2018: \$1,180

Credit: 25%

5. Simulated Practice: Using Socially-Responsive Avatars to Prepare STEM GTAs for Student-Centered Instruction

PI: Jacquelyn Chini Co-PIs: Erin Saitta, Charles Hughes

National Science Foundation (NSF) November 2017-October 2020: \$599,999

Credit: 30%

Creation of a Florida Consortium Physical Sciences Capstone Course
 PI: Enrique del Barco Co-PIs: Florencio Hernandez, Erin Saitta, Alfons Schulte
 Florida Consortium of Metropolitan Research Universities/Helmsley Charitable Trust

June 2016-August 2016: \$2,000

Credit: 25%

MATH-GAINS: Growing as Adaptive Instructors in Gateway to STEM Courses
 PI: Xin Li Co-PIs: Michele Gill, Erin Saitta, Brian Moore, Melissa Dagley, Jacquelyn Chini National Science Foundation (NSF) Improving Undergraduate STEM Education (IUSE)
 June 15 2015- May 31 2017: \$250,000

Credit: 10%

8. A study of the Effects of Inquiry-Driven, Scaffolded laboratory Report Instruction on Student's Writing Performance in a Chemistry II Laboratory Course

PI: Steffen Guenzel Co-PIs: Lindee Owens, Erin Saitta, Pavel Zemliansky

The Council of Writing Program Administrators Research Grant

Spring 2013: \$1,500

Credit: 25%

9. Prototype Instrument for Assessment of Writing Instruction in Chemistry

PI: Pavel Zemliansky Co-PIs: **Erin Saitta**, Melody Bowdon College of Arts and Humanities Research Incentive Grant

October 2011: \$7,300

Credit: 25%

# Publications Since Current Position<sup>1 2</sup>

### Journal Articles

- 1. <u>Dreamerson, J. T.</u>; **Saitta, E. K. H\*** The Current State of Literature on the Education of Blind and Visually Impaired (BVI) Students in Chemistry and STEMM in Higher Education. *Journal of Chemical Education*, (2025) (Top quartile for Chemistry Education Research)
- 2. <u>Richards, E. R., Luciano, K. M.,</u> Nix, C. A. †, Kolpashchikov, D. M., & **Saitta, E. K. H.**\* Outlooks on Organic Chemistry: Student and Faculty Perspectives as a Model for Change. *Journal of Chemical Education*, 102(4) (2025), 1398-1409. (Top quartile for Chemistry Education Research)
- 3. <u>Francom, E., Saitta, E. K. H.\* Speaking of Organic Chemistry: A Faculty Metaphor Analysis in Organic Chemistry Education. *College Teaching* (2024):1-9. (Mid quartile for higher education instruction)</u>
- 4. Nix, C. A., Hughes, H., Saitta E.K.H\*. Exploration of Student Approaches to Creative Exercises in Undergraduate Biochemistry. *Journal of Chemical Education*, 100(10) (2023), 3784-3794. (Top quartile for Chemistry Education Research)
- 5. <u>Doty, C. M., Geraets, A. A.,</u> Wan, T<sup>†</sup>., <u>Nix</u>, C. A., **Saitta, E. K.**, & Chini, J. J. Impact of high-intensity training with a mixed-reality simulator on graduate teaching assistants use of questioning. *Physical Review Physics Education Research*, *19*(2) (2023), 020101. (Top quartile for Physics Education Research/DBER)
- 6. Wan, T.<sup>†</sup>, <u>Doty, C. M., Geraets, A. A.,</u> **Saitta, E. K.**, & Chini, J. J. Responding to incorrect ideas: science graduate teaching assistants' operationalization of error framing and undergraduate students' perception. *International Journal of STEM Education*, 10(1) (2023): 1-17. (Top quartile for STEM Education)
- 7. Nix, C., Nottolini, I., Caranto, J., Gerasimova, Y., Kolpashchikov, D., Saitta, E.\* Championing the Involvement of Practitioners in the Biochemistry Educational Research Process: A Phenomenological View of the Early Stages of Collaborative Action Research. *International Journal of Higher Education* 11.6 (2022): 114-114. (Low quartile for higher education research)
- 8. <u>Sona, A.J., Kwaschyn, M., Nottolini, I.,</u> **Saitta, E. K. H.\*** Creation of a mixed-reality simulator professional development module to attend to the unique needs of international teaching assistants in

<sup>&</sup>lt;sup>1</sup> Underlined indicates student, † indicates Post Doc, Bold indicates Saitta, and \* indicates Saitta is corresponding author

<sup>&</sup>lt;sup>2</sup> Journal ranking is described as low, mid, or top Quartile for the subdiscipline. All *Journal of Chemical Education* manuscripts are in the research category and not a lab or class activity which is valued differently in the CER field.

- active learning classrooms. *International Journal of Higher Education* 11.6 (2022): 140-140. (Low quartile for higher education research)
- 9. <u>Sona, A. J., Laboy Santana, J.,</u> & **Saitta, E. K. H.\*** Looking through a Prism: A Systematic Review of LGBTQ+ STEM Literature. Journal of Chemical Education, 100(1) (2022), 125-133. (Top quartile for Chemistry Education Research)
- 10. Donnelly, J. Miller, A., Krsmanovic, M., **Saitta, E. K. H.** Response of STEM and Social Science Faculty to the COVID-19 Crisis: an Application of Organizational Learning. *College Teaching* (2021): 1-9. (Mid quartile for higher education instruction)
- 11. Geraets, A.; Nottolini, I.; Doty, C.; Wan, T.†; Chini, J.; Saitta, E.\* Creation of an authentic teaching experience through the development of rehearsal modules for a mixed-reality simulator. *Journal of Science Education and Technology* (2021): 1-12. (Top quartile for Discipline Based Education Research, DBER)
- 12. Wan, T.†; <u>Doty, C. M.; Geraets, A. A.; Nix, C. A.;</u> **Saitta, E. K. H.**; Chini, J. J. Evaluating the impact of a classroom simulator training on graduating teaching assistants' instructional practices and undergraduate student learning. *Physical Review Physics Education Research*, 17(1), (2021) 010146. (Top quartile for Physics Education Research/DBER)
- 13. Wan, T.†; Geraets, A. A.; M. Doty, C. M.; Saitta, E. K. H.; Chini, J. Characterizing science graduate teaching assistants' instructional practices in reformed laboratories and tutorials. *International Journal of STEM Education* 7.1 (2020): 1-21. DOI: https://doi.org/10.1186/s40594-020-00229 (Top quartile for STEM Education)
- Saitta, E. \*, Wilcox, M., James, W., Chini, J. The views of GTAs impacted by cross-tiered professional development: Messages intended and received *International Journal of Research in Undergraduate Mathematics Education* 6.3 (2020): 421-445. DOI: https://doi.org/10.1007/s40753-020-00115-8 (Top quartile for Math Education Research/DBER)

### **Peer Reviewed Book Chapters**

- 15. Scanlon, E. M.; Lugo Charriez, K.; Legron-Rodriguez, T.; Saitta, E. K. H.; Chini, J. J. Applying Universal Design for Learning in Postsecondary Chemistry Courses: Examples from Practice. In *Inclusive and Accessible Chemistry for Further and Higher Education*. Accepted chapter and in final edits by editorial staff. In Press Summer 2025
- 16. **Saitta, E. K. H.\***; Donnelly, J. *The Role and Influence of the Discipline-Based Education Research (DBER) Community on STEM Faculty Development* in the Handbook of STEM Faculty Development. (2022): 61.

### **Published Refereed Conference Papers**

- 17. Willison, J., Rojas, F., Lugo, K., Saitta, E. K. H., Scanlon, E. M., & Chini, J. J. (2024) Validation of the Student Inclusive Teaching Strategies Inventory (ITSI-S) for instructional STEM laboratory settings, 2024 PERC Proceedings. DOI:10.1119/perc.2024.pr.Willison.
- 18. <u>Sharkey, D.</u>, Doty, C. M., Wan, T., **Saitta, E. K.**, & Chini, J. J. Physics Graduate Teaching Assistant Use of Error Framing in Recitations and Laboratories. In *Proceedings of the Physics Education Research Conference*. American Association of Physics Teachers (2023).
- 19. Chini, J. J.; **Saitta, E. K. H.**; Abdelkader, K.; Scanlon, E. Explicating Universal Design for Learning-aligned instructional practices for postsecondary STEM. In Physics Education Research Conference Proceedings (2021).
- 20. <u>Doty, C. M.</u>, Wan, T.<sup>†</sup>, <u>Geraets, A. A., Nix, C. A.</u>, **Saitta, E. K. H.**, & Chini, J. J. Impact of changing physical learning space on GTA and student behaviors. In Physics Education Research Conference Proceedings (2020). (2020) DOI:10.1119/perc.2020.pr.Doty
- 21. Wan, T. †, <u>Doty, C., Geraets, A.,</u> **Saitta, E.K.H**, & Chini, J. Characterizing graduate teaching assistants' teaching practices in physics "mini-studios." In Physics Education Research Conference Proceedings (2019) DOI: 10.1119/perc.2019.pr.Wan

# Manuscripts Under Review<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Underlined indicates student, † indicates Post Doc, Bold indicates Saitta, and \* indicates Saitta is corresponding author

Lugo, K., Berry, S., Scanlon, E., Chini, J. Saitta, E. K. H.\* Graduate Teaching Assistants'
Understanding and Conceptualization of Inclusive Teaching Practices in Undergraduate Chemistry
Classrooms. Under review by Journal of Chemical Education. (Top quartile for Chemistry Education
Research)

# Manuscripts In Final Preparation<sup>2</sup>

- 1. Sona, A.J., Kwaschyn, M., Saitta, E. K. H.\* Teaching Anxiety and Uncertainty using Active Learning Techniques in Chemistry. To be submitted May 2025 to Journal of Chemical Education (Top quartile for Chemistry Education Research)
- 2. Santana, J. L., Sona, A. J., LaNoble, C., Saitta, E. K. H.\* Resilience through rehearsal: Analyzing the effect of a virtual mixed-reality simulator on graduate teaching assistant teaching anxiety. To be submitted in May 2025 to CBE Life Sciences. (Top quartile for Biology Education Research/DBER)
- 3. <u>Lugo, K., Berry, S.,</u> Scanlon, E., Chini, J. **Saitta, E. K. H.**\* *Navigating Multilingual Landscapes: A Conceptual Framework for Multilingual Universal Design for Learning (UDL) Research Studies*. To be submitted in May 2025.
- 4. Richards, E. R.; Dolcine, E., Sharkey, D.; Doty, C. M.; Chini, J. J.; Saitta, E. K. H.\* Stretching the Applications of Simulator Rehearsal: Preparing Chemistry GTAs in Questioning Techniques. To be submitted June 2025 to Journal of Science Education and Technology. (Top quartile for Discipline Based Education Research, DBER)
- 5. Nix, C.<sup>†</sup>, <u>Francom, E.</u>, Hashin, A., Caranto, J., Gerasimova, Y., Kolpashchikov, D., **Saitta, E. K. H.\*** *Collaborative Action Research as a Change Initiative; Faculty Experiences Integrating Creative Exercises in an Undergraduate Biochemistry Course.* To be submitted in June 2025 to Journal of Chemical Education. (Top quartile for Chemistry Education Research)
- 6. Nix, C. †, <u>Francom, E., Lucciano</u>, K., Lawrence, P. Kolpashchikov, D., **Saitta, E. K. H\*** *Moving towards an Organic View, Modification and Development of a Concept inventory for the Purpose of Examining Conceptual Understanding in Undergraduate Organic Chemistry*. To be submitted in July 2025 to Journal of Chemical Education. (Top quartile for Chemistry Education Research)

# **Publications Prior to Current Position**

- 1. Saitta, E. Morrison, B. Waldrop, J. B., Bowdon, M. Introduction: Joining the Flipped Classroom Conversation. in Waldrop, J. & Bowdon, M. *Best Practices for Flipping the College Classroom* (pg 1-24) (2016).
- 2. Saitta, E. K. H., Zemliansky, P., Turner, A. A Model for Program-Wide Assessment of the Effectiveness of Writing Instruction in Science Laboratory Courses. Journal on Excellence in College Teaching (2015) 26 (4), 149-172.
- 3. Saitta, E. K. H., Gittings, M., Novae-Card, S., Quinn, J., Clausen, C., O'Hara, S., Yestrebsky, C., Case Study of a Non-Destructive Treatment Method for the Remediation of Military Structures Containing Polychlorinated Biphenyl Contaminated Paint. Journal of Environmental Management (2015) 158, 40-48.
- 4. Saitta, E. K. H.; Gittings, M. J.; Clausen, C.; Quinn, J.; Yestrebsky, C. L. *Laboratory Evaluation of a Prospective Remediation Method for PCB-Contaminated Paint.* Journal of Environmental Health Science & Engineering (2014) 12:57.
- 5. Saitta, E. K. H.; Legron-Rodgriguez, T.; Bowdon, M. *An Inquiry into the Water Around Us.* Science (2013), 341, 971-972.
- Griffin, M.; Saitta, E.; Bowdon, M.; & Walters, L. J. Engaging STEM: Service-Learning, Technology, Science Education and Community Partnerships. In M. Bowdon, & R. Carpenter (Eds.), Higher Education, Emerging Technologies, and Community Partnerships: Concepts, Models and Practices (pp. 51-56) (2011). Only got pic
- 7. Saitta, E.H.; Gittings, M.; Geiger, C. *Learning Dimensional Analysis through Cooperatively Working with Manipulatives*. Journal of Chemical Education (2011), 88 (7), 910-915.
- 8. Saitta, E. K. H.; Bowdon, M.; Geiger, C. *Incorporating Service-Learning, Technology, and Research Supportive Teaching Techniques into the University Chemistry Classroom*. Journal of Science Education and Technology (2011) 20: 790-795.
- 9. Maloney, P.; DeVor, R; Novaes-Card, S.; Saitta, E.; Quinn, J.; Clausen, C.; Geiger, C. *Declorination of Polychlorinated Biphenyls using Magnesium and Acidified Alcohols*. Journal of Hazardous Materials (2011), 187, 235-240.

- 10. Albo, R. L.; Legron, T.; Gittings, M. J.; Elie, M. R.; Saitta, E. H.; Sigman, M., E.; Geiger, C. L.; Clausen, Christian. *Degradation of Triacetone Triperoxide (TATP) Using Mechanically Alloyed Mg/Pd.* Propellants, Explosives, Pyrotechnics (2009), 35, 2, 100-104.
- 11. DeVor, R.; Carvalho-Knighton, K.; Aitken, B.; Maloney, P.; **Holland, E.**; Talalaj, L.; Elsheimer, S.; Clausen, C. A.; Geiger, C. L. *Mechanism of the degradation of individual PCB congeners using mechanically alloyed Mg/Pd in methanol*. Chemosphere (2009), 76(6), 761-766.
- 12. DeVor R.; Carvalho-Knighton K.; Aitken B.; Maloney P.; **Holland E.**; Talalaj L.; Fidler R.; Elsheimer S.; Clausen C. A.; Geiger C. L. *Dechlorination comparison of mono-substituted PCBs with Mg/Pd in different solvent systems*. Chemosphere (2008), 73(6), 896-900.

### **Published Refereed Conference Papers**

- 13. Wan, T.†, <u>Doty, C., Geraets, A., Saitta, E., & Chini, J. Characterizing graduate teaching assistants'</u> teaching practices in physics "mini-studios". Paper presented at Physics Education Research Conference 2019, Provo, UT. (2019). DOI: 10.1119/perc.2019.pr.Wan
- 14. <u>Doty, C., Geraets, A.,</u> Wan, T.<sup>†</sup>, **Saitta, E.**, & Chini, J. Student perspective of GTA strategies to reduce feelings of anxiousness with cold-calling. Paper presented at Physics Education Research Conference 2019, Provo, UT. (2019). DOI: 10.1119/perc.2019.pr.Doty
- 15. Dagley, M. A., Gill, M., Saitta, E., Moore, B., Chini, J., Li, X. Using Active Learning Strategies in Calculus to Improve Student Learning and Influence Mathematics Department Cultural Change. *Proceedings of the Interdisciplinary STEM Teaching and Learning Conference* (2018) Vol. 2, Article 8. DOI: 10.20429/stem.2018.020108

# Conference Presentations & Posters since Current Position

# **International Meetings**

- 16. Nix, C.<sup>†</sup>, <u>Francom, E.,</u> **Saitta, E. K. H.\*** (February 2024) *Experiences of Biochemistry Faculty Engaging in Scholarly Teaching and Learning Through Collaborative Action Research*. SoTL Commons International Conference, Savannah Ga, Oral Presentation.
- 17. Saitta, E. K. H.\* (July 2023) Rehearsal-based training in a mixed-reality teaching simulator to support GTAs implementing active learning. Gordon Research Conference on Chemistry Education Research and Practice, Lewiston, Maine, Poster Presentation.
- 18. **Saitta, E. K. H.\***, Nix, C. (February 2022) Facilitating Change Beyond Early Adopters: Working with Faculty to Elucidate Key Moments in a Biochemistry Curricular Change. SoTL Commons International Conference, Savannah Ga, Oral Presentation.

### **National Meetings**

- 19. <u>Lugo, K. C.; Berry, S.; Rojas, R.; Halperin, P.; Nelson, J.;</u> Chini, J.: Scanlon, E.; **Saitta, E.\*** (August 2024) *Understanding GTAs' Perspectives on Inclusive and Accessible Chemistry Lab Instruction.*American Chemical Society National Meeting, Denver CO, Oral Presentation.
- 20. <u>Santana, J. L.</u>; **Saitta, E.\*** (July 2024) Overcoming Adversity in the Classroom: Using a Mixed-Reality Training Simulator to Instill Resilience Among Graduate Teaching Assistants. 2024 Biennial Conference on Chemical Education. Lexington, KY, Oral Presentation.
- 21. Nix, C.<sup>†</sup>, <u>Francom, E., Luciano, K.,</u> Lawrence, P., Kolpashchikov, D., **Saitta, E.** (2024, August), *Adaptation and Validation of a Concept Inventory for Undergraduate Organic Chemistry*. Biennial Conference on Chemical Education. Lexington, KY, Oral Presentation.
- 22. Saitta, E.\* (July 2024) Rehearsal-Based Training in a Mixed-Reality Teaching Simulator to Support the Diverse Needs of GTAs in Active Learning Environments. 2024 Biennial Conference on Chemical Education. Lexington, KY, Oral Presentation.
- 23. Nelson, J.: Saitta, E.\* (July 2024) *The Current State of Literature on the Education of Blind and Visually Impaired (BVI) Students in Chemistry*. 2024 Biennial Conference on Chemical Education. Lexington, KY, Poster Presentation.
- 24. Berry, S.; Lugo, K.; Willison, J., Scanlon, E. M., Chini, J. J., Saitta, E.\* (July 2024) Capturing GTAs Authentic Use of UDL-Aligned Practices in University Chemistry Labs. 2024 Biennial Conference on Chemical Education. Lexington, KY, Poster Presentation.
- 25. <u>Lugo, K.</u> Scanlon, E. Chini, E. **Saitta, E. K. H.\*** (March 2024) *Unveiling trends: GTA perspectives on inclusive laboratory instruction in chemistry education*. American Chemical Society National Meeting. New Orleans, LA, Oral Presentation.

- 26. Santana, J. L., Sona, A. J., LaNoble, C., Saitta, E. K. H.\* (March 2024) Resilience through rehearsal: Analyzing the effect of a virtual mixed-reality simulator on graduate teaching assistant teaching anxiety. American Chemical Society National Meeting. New Orleans, LA, Oral Presentation.
- 27. Santana, J. L., Sona, A., LaNoble, C., Saitta, E. \* (August 2023) Addressing the unease of teaching: Examining graduate teaching assistant anxiety through a workplace resilience framework. American Chemical Society National Meeting. San Francisco, CA, Poster Presentation
- 28. <u>Lugo, K., Berry, S., Willison, J.,</u> Scanlon, E. M., Chini, J. J., **Saitta, E.\*** (August 2023) *Addressing Hidden Barriers: Describing Graduate Teaching Assistant Beliefs and Understanding of Accessibility in Chemistry Education*. American Chemical Society National Meeting. San Francisco, CA, Oral Presentation.
- 29. <u>Sona, A.,</u> **Saitta, E. K. H.\*** (May 2023) *Professional development community to mitigate teaching anxiety in chemistry graduate teaching assistants.* Chemistry Laboratory: Evaluation, Assessment, and Research Symposium (CLEAR Symposium). Virtual Conference. Oral Presentation.
- 30. **Saitta, E.\*** (April 2023) DBER and Facilitating Change Beyond Early Adopters: A Case for Collaborative Faculty Action Research. X-DBER Conference. Lincoln, Nebraska, Poster Presentation
- 31. Sona, A., Kwaschyn, M., Saitta, E. K. H.\* (August 2022) Creating Professional Development to Combat Teaching Anxiety and Discomfort in Graduate Teaching Assistants. 2022 Biennial Conference on Chemical Education. West Lafayette, IN, Oral Presentation
- 32. Nix, C., Caranto, J., Gerasimova, Y., Kolpashchikov, D., Saitta, E\* (August 2022) Adapting Creative Exercises to an Undergraduate Biochemistry Course Sequence. 2022 Biennial Conference on Chemical Education. West Lafayette, IN, Oral Presentation
- 33. Sharkey, D., M., Saitta, E. K. H.\*, (July 2022) Investigating the Effect of Discipline in Mixed-reality STEM GTA Training. 2022 American Association of Physics Teachers Summer Meeting. Grand Rapids, MI, Oral Presentation
- 34. <u>Saitta, E</u>\*, Chini, J. (June 2022) Customizing a mixed-reality teaching simulator module to support graduate teaching assistants in active-learning environments.2022 IUSE Summit. Washington DC, Oral Presentation.
- 35. Sona, A., Kwaschyn, M., Saitta, E. K. H.\*, (March 2022) Professional development of international teaching assistants through a mixed-reality teaching simulator module. American Chemical Society National meeting, Virtual Conference, Oral Presentation.
- 36. Sona, A., Saitta, E. K. H.\*, (March 2022) *LGBT+ Research in Chemistry and STEM*. American Chemical Society National meeting, Virtual Conference, Oral Presentation.
- 37. Nix, C.; Hughes, H. M., Saitta, E. K. H.\*, (March 2022) Exploring Student Approaches to Creative Exercises in Undergraduate Biochemistry American Chemical Society National meeting, Virtual Conference, Oral Presentation.
- 38. Nix, C.; Nottolini, I; Gooding, G.; Caranto, J.D.; Gerasimova, Y.: Kolpashchikov, D; Saitta, E. K. H.\* (April 2021) Examining Student Key Conceptual Understanding & Faculty Perspectives on Undergraduate Biochemistry Education. American Chemical Society National Meeting, Virtual Conference, Oral Presentation
- 39. Sona, A.; Kwaschyn, M.; Saitta, E. K. H. \* (April 2021) Professional Development of International Teaching Assistants Through a Mixed-Reality Teaching Simulator Module. American Chemical Society National Meeting, Virtual Conference, Oral Presentation
- 40. <u>Geraets, A.; Doty, C.;</u> Wan, T.<sup>†</sup>; Chini, J.; **Saitta, E. K. H.\*** (April 2021) Exploring GTA Experience and Practice in Multiple Sessions of a Mixed Reality Teaching Simulator. American Chemical Society National Meeting, Virtual Conference, Oral Presentation
- 41. Geraets, A.; Doty, C.; Wan, T.†; Chini, J. \*; Saitta, E. K. H. \* (April 2021) How do GTAs Conceptualize and Utilize Error Framing in a Mixed-Reality Classroom Simulator? National Association of Research and Science Teaching (NARST) 94<sup>th</sup> Annual International Conference, Virtual Conference, Oral Symposium
- 42. Saitta, E. K. H.\*, Geraets, A. Diversity and inclusion in chemistry education research. 2020 Biennial Conference on Chemical Education. Abstract accepted March 31, 2020. Because of the global COVID-19 pandemic, the 2020 Biennial Conference on Chemical Education was terminated on April 2, 2020, by the Executive Committee of the Division of Chemical Education, American Chemical Society; and, therefore, this presentation could not be given as intended.
- 43. **Saitta, E. K. H.**\*, <u>Geraets, A. A., Doty C. D.</u>, Wan T.<sup>†</sup>, Chini J. J. Scaffolding practice-based training for graduate teaching assistants who facilitate inquiry-based general chemistry labs. American

- Chemical Society National Meeting and Exposition. Philadelphia, PA. Oral Presentation (Conference cancelled)
- 44. Geraets, A. A.; Doty, C. M.; Wan, T.†; Chini, J. J.; Saitta, E. K. H.\*. (March 2020) Determining the impact of multiple sessions in a mixed reality teaching simulator on GTA teaching practices. American Chemical Society National Meeting and Exposition. Philadelphia, PA. Oral Presentation (Conference cancelled)
- 45. <u>Sona, A.</u>, **Saitta, E. K. H\*.** (March 2020) LGBT+ STEM literature and where the path leads. American Chemical Society National Meeting and Exposition. Philadelphia, PA. Oral Presentation (Conference cancelled)
- 46. Nix, C., Sierra, A. E., Chini, J., Saitta, E. K. H.\* (March 2020) Describing the Nature of Verbal Interactions of Graduate Teaching Assistants in an Inquiry-based General Chemistry Laboratory. American Chemical Society National Meeting and Exposition. Philadelphia, PA. Poster Presentation (Conference cancelled)
- 47. Nottolini, I., Geraets, A. A., Chini, J., Saitta, E. K. H.\* (March 2020) Targeted Professional Development to Support International Graduate Teaching Assistants Facilitate Active Learning. American Chemical Society National Meeting and Exposition. Philadelphia, PA. Poster Presentation (Conference cancelled)
- 48. Geraets A. A.; Doty, C. M.; Wan, T.†; Chini, J. J.; and Saitta, E. K. H.\*. (January 2020) *Impact of multiple practices in a mixed-reality teaching simulator*, Winter Meeting of the American Association of Physics Teachers, Orlando, Fl. Oral Presentation
- 49. Wan, T.†; <u>Doty, C. M.</u>; <u>Geraets, A. A.</u>; **Saitta, E. K. H.**; Chini. J. J. (January 2020) *Evaluating the impact of Teaching in a mixed-reality classroom simulator on GTAs' teaching practice.* Winter Meeting of the American Association of Physics Teachers, Orlando, Fl. Oral Presentation
- 50. <u>Doty, C. M.; Geraets, A. A.;</u> Wan T.†; **Saitta, E. K. H.**; Chini, J. J. (January 2020) *Practice with dysfunctional avatar student groups in a mixed-reality classroom simulator.* Winter Meeting of the American Association of Physics Teachers, Orlando, Fl. Oral Presentation

#### **State Meetings**

- 1. <u>Halperin, P., Lugo Charriez, L.;</u> Chini J. J; Scanlon, E..; **Saitta E. K.H.\*** (February 2025) Analysis of Chemistry GTA Attitudes on Inclusive Classroom Practices, Florida Undergraduate Research Conference (FURC), Tampa Fl., Poster Presentation
- 2. <u>Chary D.</u>; Nix C. †; Gerasimova Y.; **Saitta E. K.H.**\* (February 2025) Improving Biochemistry Education through Creative Exercises. Florida Undergraduate Research Conference (FURC), Tampa Fl., Poster Presentation
- 3. <u>Santonil A.</u>; Lawrence P.; Kolpashchikov D.M.; Nix C. †; **Saitta E. K.H**.\* (February 2025) Development of an Organic Chemistry Concept Inventory using Mixed Methods. Florida Undergraduate Research Conference (FURC), Tampa, FL., Poster Presentation
- 4. <u>Richards R. E., Dolcine E., Sharkey D.,</u> Doty C., Chini J. J, **Saitta E. K. H\***. (February 2025), Orienting GTAs to Stretch-It Questioning using Simulator Training: How Can This be Applied?, Florida Undergraduate Research Conference (FURC), Tampa, FL, Poster Presentation
- 5. Nelson, J.: Saitta, E.\* (June 2024) The Current State of Literature on the Education of Blind and Visually Impaired (BVI) Students in Chemistry and Successfully Implemented Practices. American Chemical Society Florida Annual Meeting and Exposition (FAME), Innisbrook FL, Oral Presentation
- 6. <u>Berry, S.; Lugo, K.; Willison, J.</u>, Scanlon, E. M., Chini, J. J., **Saitta, E.\*** (June 2024) *Practical Application of UDL-Aligned Practices by Graduate Teaching Assistants*. American Chemical Society Florida Annual Meeting and Exposition (FAME), Innisbrook FL, Oral Presentation
- 7. <u>Dolcine, E.; Francom, E.; Nix, C<sup>†</sup>,; Donnelley, J.; Saitta, E.\* (June 2024) Examining Undergraduate Learning Assistant's Experiences in a Mixed-Reality Simulator.</u> American Chemical Society Florida Annual Meeting and Exposition (FAME), Innisbrook FL, Poster Presentation
- 8. Santana, J. L.; Georges, C.; Sona, A. J.; Saitta, E.\* (June 2023) Mitigating Teaching Anxiety through the use of an adaptable virtual community of practice. American Chemical Society Florida Annual Meeting and Exposition (FAME), Innisbrook FL, Oral Presentation
- 9. <u>Francom, E.:</u> Kolpashchikov, D.; **Saitta, E. K. H\*** (June 2023) *Assessing Challenges of Organic Chemistry Education: Foundations for Faculty Action Research*. American Chemical Society Florida Annual Meeting and Exposition (FAME), Innisbrook FL, Poster Presentation
- 10. <u>Berry, S.; Ribot Dominguez, M.; Lugo, K.; Willison, J.</u>, Scanlon, E. M., Chini, J. J., **Saitta, E.\*** (June 2023) Assessing Graduate Teaching Assistant's Understanding of Inclusive Teaching through the Lens

- of Universal Design for Learning. American Chemical Society Florida Annual Meeting and Exposition (FAME), Innisbrook FL, Poster Presentation
- 11. <u>Francom, E., Saitta, E. K. H\*</u> (February 2023) Speaking of Organic Chemistry: A Faculty Metaphor Analysis in Organic Chemistry Education. Maimi, FL, Poster Presentation
- 12. <u>Laboy Santana, J., Sona, A.,</u> **Saitta, E. K. H\***, (August 2022) The State of the STEM Rainbow. American Chemical Society Florida Annual Meeting and Exposition (FAME), Innisbrook FL, Poster Presentation
- 13. <u>Cheshire, A. Geraets A.; Doty C. M.</u>; Wan T.<sup>†</sup>; Chini J. J; **Saitta E. K.H.**\* (February 2020) Chemistry GTAs' Perception of Cold Calling and Error Framing after Rehearsal in a Teaching Simulator. Poster Presentation Florida Undergraduate Research Conference (FURC), Fort Meyers Fl., Poster Presentation

### **University Presentations**

- 1. <u>Berry, S.; Lugo Charriez, K.; Willison, J.</u>; Scanlon, E. M.; Chini, J.J.; **Saitta, E. K. H.\*** (March 2025) *Implementation of UDL-Aligned Training for Graduate Teaching Assistants in Post-Secondary Chemistry*. Student Scholar Symposium. Orlando, FL
- Halperin, P., Lugo Charriez, L.; Chini J. J; Scanlon, E..; Saitta E. K.H.\* (March 2025) Analysis of Chemistry GTA Attitudes on Inclusive Classroom Practices, UCF Student Scholar Symposium (SSS), Orlando Fl., Poster Presentation
- 3. <u>Chary D.</u>; Nix C. †; Gerasimova Y.; **Saitta E. K.H.**\* (March 2025) Improving Biochemistry Education through Creative Exercises. Student Scholar Symposium (SSS) Orlando Fl. Poster presentation
- 4. <u>Santonil A.</u>; Lawrence P.; Kolpashchikov D.M.; Nix C. †; **Saitta E. K.H.**\* (March 2025) Development of an Organic Chemistry Concept Inventory using Mixed Methods. Student Scholar Symposium (SSS), Orlando, FL., Poster Presentation

# Conference Presentations & Posters Prior Current Position

# **International Meetings**

- 1. Edwards, E.; Yestrebsky, C.; **Saitta, E. K**. (February 2014) *Transforming the Freshman Chemistry Laboratory Program at a Large Research University*. 6<sup>th</sup> World Conference on Educational Sciences. Grand Hotel Excelsior, Malta. Poster Presentation
- Novaes-Card, S.E.; Maloney, P.R.; Saitta, E.H.; Geiger, C.L.; Clausen, C.A. (May 2010) Magnesium and Acetic Acid/Ethanol Solution for Degradation of Polychlorinated Biphenyls: From Laboratory Kinetics to Application. Remediation of Chlorinated and Recalcitrant Compounds 7<sup>th</sup> international conference, Monterey, CA. Oral Presentation

### **National Meetings**

- 1. T. Wan, C. M. Doty, A. A. Geraets, E. K. H. Saitta, and J. J. Chini (July 2019) *Characterizing instructional practices in inquiry-oriented laboratories*. Summer Meeting of the American Association of Physics Teachers, Provo, UT. Oral Presentation
- 2. J. J. Chini, T. Wan, C. M. Doty, A. A. Geraets, and E. K. H. Saitta. (July 2019) *Don't just say, 'You are wrong': GTAs normalize error in a classroom simulator*. Summer Meeting of the American Association of Physics Teachers, Provo, UT. Oral Presentation
- 3. C. M. Doty, T. Wan, A. A. Geraets, **E. K. H. Saitta**, and J. J. Chini. (July 2019) *Teaching assistant reflections on practice sessions in a mix-reality classroom simulator*. Summer Meeting of the American Association of Physics Teachers, Provo, UT. Oral Presentation
- T. Wan, C. M. Doty, A. A. Geraets, E. K. H. Saitta, and J. J. Chini, "Student perspective of GTA strategies to reduce feelings of anxiousness with cold-calling," Physics Education Research Conference, Provo, UT, July, 2019. (Poster)
- Geraets A.; Nottolini I.L; Doty C.M; Wan T.; Chini J. J; Saitta E. K.H. Providing an Authentic Instructional Experience through the Development of Rehearsal Concept Modules for a Mixed Reality Teaching Simulator Chemistry Education Research Graduate Student & Post-Doc Professional Development Conference Miami, OH., July 2019. (poster)
- Geraets, A.; Doty, C.; Nottolini, I.; Wan, T.; Chini, J.; Saitta, E. (April 2019) Providing an authentic instructional experience through the development of rehearsal concept modules for a mixed reality teaching simulator. 257<sup>th</sup> American Chemical Society National Meeting and Exposition. Orlando, FL. Oral Presentation

- Saitta, E. W.D. James, M. Wilcox, J. Chini (April 2019) Mixed messages: GTA perceptions of instructional expectations influenced by cross-tiered professional development. 257th American Chemical Society National Meeting and Exposition. Orlando, FL. Oral Presentation
- 8. Saitta, E., Doty, C.M, Nguyen, D., Chini, J. J. (August 2018) *Talking the talk: Investigating the Use of a Mixed Reality Teaching Simulator to Enhance Graduate Teaching Assistant Discourse Moves in Active Learning Environments.* 25<sup>th</sup> Biennial Conference of Chemical Education (BCCE). South Bend, IN. Oral Presentation
- 9. Saitta, E. K. H. (March 2018) Virtual Practice as a Part of STEM Teaching Assistant Professional Development: Effects of a Mixed-Reality Teaching Simulator to Enhance Classroom Discourse in Student-Centered Learning Environments. 225th American Chemical Society National Meeting and Exposition. New Orleans, LA. Poster Presentation
- Gill, M.G., James, W., Saitta, E., Moore, B., Dagley, M., Philps, K., Chini, J. (August 2017)
   *Increasing Undergraduate Student Calculus Efficacy through Teacher Autonomy and Conceptual Change*. 125<sup>th</sup> Annual Convention of the American Psychological Association. Washington, DC. Oral Presentation
- 11. Saitta, E., Chini, J. (June 2017) Enhancing Professional Development with a Mixed-Reality Classroom Simulator to Prepare Teaching Assistants for Active Learning Instruction.
- 12. 2017 Virtual Worlds Education Conference. Melbourne, Florida. Oral Presentation
- 13. Saitta, E. (July 2015) Writing Across the Chemistry Curriculum Using Collaborative Evaluation to Increase the Effectiveness of Writing Instruction in Laboratory Courses. ChemEd2015. Kennesaw Georgia. Oral Presentation.
- 14. Schneider K., Rovito, K., Coles N., and Saitta, E. (June 2015) STEM First-Year Mentees and Graduate Student Mentors: Assessing Alignment in Research Apprenticeship Activity Logs. Undergraduate Research Programs: Building, Enhancing, Sustaining. Norman, OK. Poster presentation
- 15. Zemlianski, P., Bowdon, M., **Saitta, E.**, Legron-Rodriguez, T., Owens, L. (June 2012) *The Future is WAC Partnerships: Overcoming Obstacles to WAC Through Campus-Wide Collaborations*. 11<sup>th</sup> Annual International Writing Across the Curriculum Conference. Savannah Georgia Oral Presentation
- 16. Bowdon, M., Saitta, E., Walters, L. (October 2011) STEM, Service-Learning, and Faculty Development 36th Annual Professional and Organizational Development Network in Higher Education Conference/ 18th Annual Historically Black Colleges and Universities Conference. Atlanta Georgia Oral Presentation/workshop
- 17. Saitta, E.H. (August 2010) Engaging STEM: A case study in chemistry education and community partnerships. 21st Biennial Conference on Chemical Education, Denton TX. Oral presentation
- 18. Bowdon, M,; Crouse, T; Reynolds, D.; Boreman, M,. Griffin, M.; Zeh, A.; Holland, E.(March 2010) Engaging STEM: Using Emerging Technologies to Create Sustainable Partnerships with Secondary Schools. Gulf South Summit on Service-Learning and Civic Engagement Through Higher Education. Athens, GA. Panel Discussion
- 19. Saitta, E. H.; Gittings, M.; Geiger, C. (June 2009) *Learning Dimensional Analysis Through Cooperatively Working with Manipulatives*. Chemistry Education Research Graduate Student Conference, Oxford, OH. Poster presentation
- 20. Holland, E. DeVor, R.; Gittings, M.; Maloney, P.; Clausen, C.; Geiger, C.; Captain, J.; Quinn, J. (March 2008) *In-Situ Remediation of Polychlorinated Biphenyls Using a Bimetallic Treatment System on Various Painted Surfaces*. American Chemical Society National Meeting, New Orleans, LA. Poster session

# **Regional Meetings**

- 21. Saitta E. K., Legron-Rodriguez T., Bowdon M. A. (November 2011) *Synchronous communication in service-learning: A comparison of the technologies used to aid in university/K-12 partnerships*. 67<sup>th</sup> Southwest Regional Meeting of the American Chemical Society. Austin Texas Oral Presentation
- 22. T. Legron-Rodriguez, **E.K. Saitta**, M.A.Bowdon (November 2011) *Developing student attributes through guided-inquiry and service-learning in the freshman chemistry laboratory*. 67<sup>th</sup> Southwest Regional Meeting of the American Chemical Society. Austin Texas Oral Presentation
- 23. Saitta, E. K. H. (March 2011) *The Learning Cycle Approach to Guided Inquiry*. Southern Regional Faculty and Instructional Development Consortium. Auburn, Alabama Oral Presentation

### **State Meetings**

- 24. Nottolini I.L; Geraets A.; Doty C.M; Wan T.; Chini J. J; Saitta E. K.H. (May 2019) *Implementing* rehearsal concept modules for graduate teaching assistant professional development. Oral Presentation FAME, Tampa Fl., Oral Presentation
- 25. Geraets A.; Nottolini I.L; Doty C.M; Wan T.; Chini J. J; **Saitta E. K.H.** (May 2019) *Implementing rehearsal concept modules for graduate teaching assistant professional development*. Oral Presentation FAME, Tampa Fl., Oral Presentation
- 26. Saitta, E. K. H. Nguyen, D. Doty, C. M, Chini, J. J. (May 2018) *Investigating the Use of Mixed-Reality Teaching Simulator to Analyze Changes in GTA Discourse Decisions*. 94<sup>th</sup> Florida Annual Meeting and Exposition (FAME). Palm Harbor, FL. Oral Presentation
- 27. **Saitta, E.** (February 2017) Discipline-Specific Professional Development for the Widespread Adoption of Evidence-Based Teaching. Sunshine State Teaching and Learning Conference. St Petersburg beach, Florida. Oral Presentation
- 28. Saitta, E, Turner, A., Zemlyanskiy, P., Alber, C., Bowdon, M., Yestrebsky, C. (May 2013) *Teaching General Chemistry Laboratory Students that "Scientists Write!"* 89<sup>th</sup> Annual American Chemical Society Florida Annual Meeting and Exposition. Innisbrook, FL. Oral Presentation
- 29. Saitta, E.H.; Bowdon, M.; Geiger, C. (May 2010) Engaging STEM: Using Emerging Technologies to Initiate Service Learning into University Chemistry Courses. American Chemical Society Florida Annual Meeting & Exposition, Innisbrook, FL. Oral Presentation
- 30. **Holland, E.** (March 2009) Degradation of polychlorinated biphenyls through the use of an activated metallic treatment system. Florida Academy of Science, Saint Leo, FL. Oral presentation
- 31. **Holland, E.** (March 2008) *In-Situ Remediation of Polychlorinated Biphenyls Using a Bimetallic Treatment System on Various Painted Surfaces*. Florida Academy of Science, Jacksonville, FL. Oral presentation
- 32. **Holland**, E. (April 2007) *Polychlorinated Biphenyl Degradation by Use of Bimetallic Treatment Systems*. Florida Academy of Science, St. Petersburg, FL. Oral presentation

# **Selected Invited Lectures since Current Position**

Saitta, E. (November 2024) *Designing GTA support to build resilience and mitigate teaching anxiety*. Invited Seminar Speaker. The Ohio State University Chemistry Department, Columbus, Ohio.

Saitta, E; Lugo, K; (January 2024) *Preparing for the variety of student needs, abilities, and interest with Universal Design for Learning.* Invited workshop for faculty and GTAs. University of Puerto Rico, Rio Piedras. Chemistry Department, San Juan, Puerto Rico.

Saitta, E. (March 2023) Rehearsal-based training in a mixed-reality teaching simulator to support GTAs implementing active learning. Invited Seminar Speaker. University of Nebraska-Lincoln Chemistry Department. Lincoln, Nebraska

Saitta, E. (April 2023) Rehearsal-based training in a mixed-reality teaching simulator to support GTAs implementing active learning. Invited Seminar Speaker. University of Southern Mississippi, Chemistry Department. Hattiesburg Mississippi

Saitta, E. (November 2022) Rehearsal-based training in a mixed-reality teaching simulator to support GTAs implementing active learning. Invited Seminar Speaker. St. Louis University Chemistry Department. St. Louis Missouri

Saitta, E. (September 2022) *Integrating rehearsal training in a mixed-reality teaching simulator to support graduate teaching assistants in active learning environments*. Invited Seminar Speaker. Portland State University Chemistry Department. Portland Oregon

Saitta, E. (September 2021) *Exploring the use of rehearsal training in a mixed-reality teaching simulator to support active learning.* Invited Seminar Speaker. Auburn University Chemistry Department. Auburn Alabama.

Saitta, E. (February 2020) An Exploration into Students' Private Universe. Indian River State College Professional Enhancement Day. Fort Peirce Florida.

### Saitta, 13

Saitta, E.; Locklear, A.; Minton, T., Duslak, M.; Guvendi, M. (February 2020) *Panel Presentation: Evidence of Effectiveness of Curriculum Alignment Work*. 2020 Curricular Alignment Conference. Daytona State College, Daytona, Florida.

Saitta, E. (October 2019) *Innovating GTA Professional Development as a Way to Improve Undergraduate STEM Education*. Leading Edifying Dialogues 18' LED Talks series in the college of community innovation and education. UCF Orlando, Florida.

# **Selected Professional Development Delivered**

Dorman, T.; Oonge, H., Nader, M., **Saitta, E**. Curriculum Alignment in Gateway Courses: Process, Challenges and Opportunities. UCF Summer Faculty Conference (2023)

Donelly, J.; Saitta, E. Planning for Inquiry Instruction. UCF Summer Faculty Conference (2023)

# Awards

# 2024 William R. Jones Most Valuable Mentor Award

Florida Education Fund

### 2023 Faculty Conference Mentor Award

University of Central Florida- Department of Chemistry

There was one faculty member chosen for this award for sending graduate and undergraduates to conferences

# 2020 Teaching Incentive Program award (TIP)

University of Central Florida

There were 64 people in the College of Sciences who intended to apply and 14 who were chosen

### 2020 Scholarship of Teaching and Learning (SoTL)

University of Central Florida

There were 51 people in the University who applied and 5 who were chosen

# **Student Awards**

# NSF Graduate Research Fellowship Program (Spring 2025)

Honorable Mention

National Science Foundation

Awarded to graduate student Jarah (Nelson) Dreamerson

# Russell V. Ewald Academic Excellence award (Spring 2024)

Florida Education Fund

Awarded to graduate student Kathleen Lugo Charriez

#### **Judge's Choice Award (Spring 2024)**

University of Central Florida Showcase of Undergraduate Research Excellence Awarded to undergraduate student, Cynthia Georges

### Graeme & Hazel Baker Award, Chemistry (April 2024)

University of Central Florida

Chemistry Department

Awarded to students: Esther Francom and Keven Lucciano (both research students in the Saitta lab) Graduating chemistry major with the highest GPA (Usually only one but these two students tied). Both graduated with a 4.0 GPA

#### **Bridge Career Conference award (August 2023)**

American Chemical Society

Awarded to graduate student, Kathleen Lugo

All-expense paid trip to New Orleans conference.

### **HSRU Alliance Conference Award (June 2023)**

Santa Cruz, California Awarded to graduate student, Kathleen Lugo All-expense paid trip.

### Travel Award: FURC (2023)

University of Central Florida Awarded to undergraduate researcher, Esther Francom \$60.00

#### ACS Career Kickstarter Award, Washington DC (October 2022)

American Chemical Society Awarded to graduate student, Kathleen Lugo

# ACS Bridge Travel Award, Chicago (August 2022)

American Chemical Society Awarded to graduate student, Kathleen Lugo

# **Doctoral Research Support (2021)**

University of Central Florida Awarded to Ph.D. Student, AJ Sona \$3,800

# **Service**

#### Professional Service

Reviewer for NSF Innovations for Graduate Education (IGE) Program Spring 2025 Symposium Organizer for South East Regional Meeting American Chemical Society 2024-2025 Discussant leader for Broadening Research & Instructional Designs for Greater Equity in STEM January 2025 Virtual conference (cancelled due to executive orders banning funded DEI activities) Symposium Organizer for Summer Biennial Conference on Chemistry Education Summer 2024

Exploration of Student-Centered Assessments in Chemistry Education

Community Consortium for Advancing Racial Equity in STEM (CARES) Fall 2023- present Conference Planning Committee for ACS Florida Annual Meeting and Exposition 2023 & 2024 Conference Planning Committee- Curriculum Alignment Annual Meeting Fall 2022-Spring 2023 Corresponding Editor- Frontiers in Education Fall 2022-Spring 2023 Expert Reviewer- Chemistry Instrument Review and Assessment Library (CHIRAL) Summer 2022

Workshop Organizer for Summer Biennial Conference on Chemistry Education Summer 2022

- Improving Multiple Choice Test Assessment Items Using The "Item Writing Flaws Evaluation Instrument" (IWFEI). Co-Presenters: Chris Randles, Julie Donnelly, Jared Breakall
- Implementing Simulator-Based Rehearsal Sessions to Prepare GTAs for Active Learning

Symposium Organizer for Summer Biennial Conference on Chemistry Education

Cancelled due to Covid

Curriculum Alignment Representative

2016-Present

Summer 2020

UCF Chemistry faculty representative for a collaboration with the Florida state college system and other community colleges

Reviewer for: 2019-Present

- Chemistry Education Research and Practice
- Journal of Chemical Education
- Physical Review Physics Education Research
- International Journal of STEM Education

#### Community Service Work

Hamilton Elementary School Odyssey of the Mind Science Consultant and volunteer

Fall 2024

Worked on site for 2-4 hours each week with small teams of students preparing for their creative/problem solving competition

Seminole County Public Schools Teach-In volunteer

Fall 2019- 2023

# Saitta, 15

• Visit 4-6 elementary classrooms to introduce Chemistry and Chemistry Education Research

### STEM Connect Guest Speaker

August 26 & November 7 2022

- Work with K-12 faculty and Florida High Tech Corridor to create interactive virtual lesson
  - Meet with K-12 students virtually to talk about their class content and a career in science

Field Trip coordinator for Osceola High chemistry school students

October 12

October 12 & November 15 2022

- Plan logistics of visit
- Escort around campus and arrange lab visits and meetings with faculty and students

ACS local section Earth Day Event Downtown Orlando

Spring 2022

- Plan Hands-on activity
- Day of volunteer at booth

ACS local section Earth Day Event Downtown Orlando

Fall 2021

• Planning committee member

### UCF Chemistry Department Service

Committee chair for CPE review for lecturers	Spring 2023- Present
Chair of the Learning Assistant Committee	Spring 2023-2024
Search committee for chem laboratory lecturer	Fall 2023-Spring 2024
Co-Creator of the Chemistry Education Research Concentration	2018-Present
Student engagement and retention committee	2020-Present
Undergraduate Curriculum committee	2019- 2021
Graduate curriculum committee	2019-Present
Lecturer search committee	2019 and 2022
Textbook adoption committee	2019-2021
Annual ABET accreditation course binder for CECS (CHM2046L)	2019-2021
GTA Chemistry Education Workshop Series	Fall 2017-Present

 Developed and implement a mixed mode workshop series for first year graduate teaching assistants in chemistry to improve understanding in chemistry education and teaching techniques.

### **UCF Service**

Committee member of search committee for Professor and Assistant or Associate Dean of Undergraduate
Programs and Academic and Student Affairs

Chair of search committee for College of Sciences Assistant Dean of Student Success

COS Diversity Committee

For College of Sciences Assistant Dean of Student Success

Fall 2023-Spring 2024

2022-2023

FCTL STEM instructional Specialist search committee

Spring 2022

September Teaching and Learning Day Presenter

Fall 2021

• Erin Saitta, Julie Donnelly, Christopher Randles, Jared Breakall. "Writing High-Quality Multiple-Choice questions."

UCF Summer Faculty Development Conference Session Presenter

Spring 2021

 Erin Saitta, Julie Donnelly, Christopher Randles, Jared Breakall. Writing High-Quality Multiple-Choice Questions"

**Tutoring Technologies** 

Fall 2019 & Spring 2020

• One of 14 people on the University tutoring technologies team with

# **Selected Professional Development Since Current Position**

Oak Ridge National Lab Collaboration Workshop	Fall 2024
AAAS IUSE National Summit	Summer 2022 & 2024
UCF Winter Faculty Retreat	Fall 2023 & Fall 2024
UCF Summer Faculty Conference, HSI track	Spring 2023
UCF Winter Faculty Retreat	Fall 2022
UCF Winter Faculty Development Conference	Fall 2021
UCF Summer Faculty Development Conference	Spring 2020
<ul> <li>Applied to the Diversity track (cancelled due to Covid-19)</li> </ul>	

UCF Safe Zone Training

Spring 2020

Safe Zone LGBTQ+ 101

Safe Zone Advocates

# Saitta, 16

# **Professional Organization Affiliations**

American Chemical Society National Tutoring Association

2002- present 2004-2006