Marino J. E. Resendiz

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PROFESSIONAL

2019 – present **University of Colorado Denver**, Denver, CO
Department of Chemistry
- Associate Professor

2012 – 2019 **University of Colorado Denver**, Denver, CO
Department of Chemistry
- Assistant Professor

2008 – 2012 **Johns Hopkins University**, Baltimore, MD
Department of Chemistry
- Postdoctoral Associate, Advisor: Prof. Marc M. Greenberg

EDUCATION

2003 - 2008 **University of California, Los Angeles**, Los Angeles, CA
Department of Chemistry and Biochemistry
- Ph.D Organic Chemistry, Advisor: Prof. Miguel A. Garcia-Garibay

1999 - 2003 **University of Utah**, Salt Lake City, Utah
Department of Chemistry
- B.S. Chemistry, Advisor: Prof. Peter J. Stang

RESEARCH EXPERIENCE / INTERESTS

2012-current **University of Colorado Denver, Department of Chemistry**
- Study oxidative damage of RNA and its relationship to neurodegeneration and disease.
- Structural effects of oxidative stress on RNA
- Modification of RNA to control its structure and function photochemically.
- Synthesis and incorporation of photoresponsive molecules into RNA and their design as sensors for small molecules.

2008-2012 **Marc M. Greenberg Research Group**, Johns Hopkins University, Department of Chemistry
- Studied the mechanisms that lead to RNA strand scission upon oxidative damage.
- Incorporated reactive intermediate precursors into RNA and analyzed their reactivity.
- Studied the control of secondary structures of modified RNA using photochemistry.

2003-2008 **Miguel A. Garcia-Garibay Research Group**, UCLA, Department of Chemistry & Biochemistry
- Developed a green chemistry methodology for the formation of molecules with adjacent quaternary centers.
- Employed solid-to-solid photoreaction as an efficient stereo- and regioselective process.
- Designed scale-up methods using nanocrystalline suspensions in combination with a flow reactor.

2001 - 2003 **Peter J. Stang Research Group**, University of Utah, Department of Chemistry
- Synthesized supramolecular metallacyclic architectures and study their properties as sensors.

Summer 2002 **Miguel A. Garcia-Garibay Research Group**, UCLA**,** Department of Chemistry & Biochemistry
- Synthesized bridged molecular gyroscopes with potential use in materials design.

TEACHING / ADVISING EXPERIENCE

- Current Research Group: Tariq Al-Jarah, Alexander Ball, Vincent Conrad Oppenheimer, Dagoberto Grijalva-Flores, Andrew Nguyen, Vi Tho Nguyen, Haydee Ramirez, Brody Reynolds,
- Previous Students (Chronological, by graduation date and position after leaving the Resendiz lab):

  <u>Research Assistant:</u>

2021-2023
Vashita Jain (PhD, University of Houston)

Master's:

2022 - present
Ekta Rai (Industry-India), Ngan Huynh (Agilent)

2017-2021
Madeline Glennon (PhD, Notre Dame), Courtney Kiggins (Air Force Academy), Chelsea O'Hara (Sepion Technologies),

2014-2016
Stephanie J. Chang (Law-firm in Denver)

Undergraduate:

2023-present
Emily Grimes, Evody Tshianyi

2022-2019
Bryce Maple, Madeline Choi, Amber Eritenel (MS – Clinical Nutrition), Peter Le, Shawn Schowe (PhD program, Univ. of Illinois-Urbana Champaign), Cheyenne Phillips (PhD program, Georgia Tech), Kazuki Hincks (Dept. of Transportation), Austin Skinner (RA – CU Anschutz School of Medicine), Namoos Siddique (MS, Biomedicine-JHU; then Campbell Univ. Medical School)

2018-2015
Cassandra Herbert (PhD program University of Cincinnati), Kokouvi Y. Dzowo (CU, MS-Biomedical Sciences), Andrew S. Francis (Hyde E-C), Yu Jung Choi (Research assistant, CU School of Pharmacy), Krzysztof S. Gibala (CU PhD program-Pharmaceutical Sciences), Jonathan M. Morris (PhD, Bioengineering-CU Denver), Joseph C. Nguyen (Archer DX), Lamont Sharp (Medical School, Univ. of Arkansas), Huy Tran, Douglas Hernandez (Medical School, Univ. of Iowa), Justin Townsend (CordenPharma), Anthony Urban (Pharmacy School, Univ. of Colorado Anschutz), Ana M. Chauca-Diaz (Research Assistant, Dan Theodorescu Lab), Beatrice A. Guillermo (MS Biomedical sciences – Regis Univ), Stanislav Kukatin, Katherine Van deventer (Medical School, CU Anschutz), Kristina S. Bueter (M.S. program Neurobiology, Colorado State Univ.), Tewoderos Ayele (PhD program, University of Utah)

2012-2014
Emily Oprish (Medical School, Touro Univ. Henderson NV), Kaitlyn Green (MS at LSHTM), Bemenet Ayele, Charles Johnsen (Medical School, Univ. of Grenada), Tri Le (Dental School, CU), Matthew Marzo (PhD program, Colorado State University)

- Internships: Michaela Lindemann (Summer 2022, CU Denver), Nathan Jett (Summer 2022 CU Denver, EUReCA program), Jacobo Guevara (Summer 2021 from RMSREE program); Luis Tinajero-Areola (Spring/Summer 2021 and Fall 2020); Nicole Oberlag (Fall 2020 from Harvey Mudd); Mara Krutsinger (Summer 2018 from Smith College); Joshua Sturgell (Summer 2017 from Brigham Young University, Idaho).
- High School Student Research: Suhani Dureja (Summer 2022); Luis Tinajero-Areola (Spring/Summer 2021 and Fall 2020), Andrew Yant (Fall 2019), Elias Morales (Fall 2019), Claire Veldkamp (Summer 2016), Marina Lopez (Summer 2014), Anna Newman (Summer 2013).

Before 2012
- Teaching Assistant; UCLA; 10 quarters (Sep. 2003 - May, 2007).
- Designed projects and supervised graduate and undergraduate students.
- Mentored four UCLA undergraduate students: Jennifer Taing (May 2004 - Sep 2006); Alexander Buitrago (June 2004 – May 2008); Brent Martinez (Jan 2007 - May 2007); Kerrian Fuller (May 2007 – May 2008).

Teaching:

- Lecturer, University of Colorado Denver: Organic Chemistry I (CHEM 3411), Organic Chemistry II (CHEM3421); Advanced Organic Chemistry (CHEM 5310); Honors/Majors Organic Chemistry I (CHEM 3481); Organic Chemistry Laboratory (CHEM 3418 & 3428); Majors Organic Chemistry Laboratory (CHEM 3481).

PUBLICATIONS

Independent Career (*corresponding author):

- Selective 8-oxoG stalling occurs in the catalytic core of polynucleotide phosphorylase (PNPase) during degradation. Miller, L. G.; Kim, W.; Schowe, S.; Taylor, K.; Han, R.; Jain, V.; Park, R.; Sherman, M.; Fang, J.; Ramirez, H.; Ellington, A.; Tamamis, P.; Resendiz, M. J. E.*; Zhang, Y. J.*; Contreras, L.* **2024**, *Proc. Natl. Acad. Sci. U.S.A.* addressing minor reviews.
- Modification at the C2'-O-Position with 2-Methylbenzothiophene Induces Unique Structural Changes and Thermal Transitions on Duplexes of RNA and DNA. Phillips, C. N.; Choi, M.; Huynh, K. N.; Wang, H.; Resendiz, M. J. E.* *ACS Omega*, **2022**, 7, 37782-37796. https://doi.org/10.1021/acsomega.2c04784. PMID: 36312363.
- Oxidative Damage of RNA: Structure, Function, and Biological Implications - From Nucleotides to Short and Long RNAs in Chemistry and Biology. Aung, L. H. H.; Li, P.; Perez-Cruz, C.; Polacek, N.; Resendiz, M. J. E.* *Front. Mol. Biosci.* **2022**, 9:853725. https://www.frontiersin.org/articles/10.3389/fmolb.2022.853725/full. PMID: 35381264.
- Identification of RNA fragments resulting from enzymatic degradation using MALDI-TOF mass spectrometry. Schowe, W. S.; Langeberg, C. J.; Chapman, E. G.; Brown, K.; Resendiz, M. J. E.* *J. Vis. Exp.* **2022**, 182, e63720, doi: 10.3791/63720. PMID: 35467656.
- Processing of RNA containing 8-Oxo-7,8-dihydroguanosine (8-oxoG) by the exoribonuclease Xrn-1. Phillips, C. N.; Schowe, S.; Langeberg, C. J.; Siddique, N.; Chapman, E. G.; Resendiz, M. J. E.* *Front. Mol. Biosci.* **2021**, 8:780315. doi: 10.3389/fmolb.2021.780315. PMID: 34869601.
- Exploring the links between oxidative stress, RNA damage and disease. Resendiz, M. J. E.* **2021.** https://doi.org/10.33548/SCIENTIA628. Not peer-reviewed.
- Experimental and Theoretical Rationalization for the Base Pairing Abilities of Inosine, Guanosine, Adenosine, and their Corresponding 8-Oxo-7,8-dihydropurine, and 8-Bromopurine Analogues within A-form Duplexes of RNA. Skinner, A.; Yang, C-H.; Hincks, K.; Wang, H.; Resendiz, M. J. E.* *Biopolymers*, **2020**, 111, 12, e23410. https://onlinelibrary.wiley.com/doi/epdf/10.1002/bip.23410; Selected for the "*Cover Image"* of this issue. https://onlinelibrary.wiley.com/toc/10970282/2020/111/12
- Translesion synthesis by AMV, HIV, and MMLVreverse transcriptases using RNA templates containing inosine, guanosine, and their 8-oxo-7,8-dihydropurine derivatives. Glennon, M.; Skinner, A.; Krutsinger, M.; Resendiz, M. J. E.* *PLoS ONE*, **2020**, 15(8), e0235102. http://doi.org/10.1371/journal.pone.0235102. PMID: 32857764.
- 8-Oxo-7,8-dihydroguanosine Inhibits or Changes the Selectivity of the Theophylline Aptamer. Kiggins, C.; Skinner, A.; Resendiz, M. J. E.* *ChemBioChem*, **2020**, 21, 1347-1355. http://dx.doi.org/10.1002/cbic.201900684. Included in the "Hot Topics: RNA" issue. PMID: 31845489.
- Photocycloaddition of *S,S*-dioxo-benzothiophene-2-methanol. Reactivity in the solid-state and in solution: Mechanistic studies and formation of cyclobutyl rings. O'Hara, C.; Yang, C-H.; Francis, A. J.; Newell, B. S.; Wang, H.; Resendiz, M. J. E.* *J. Org. Chem.* **2019**, 84, 9714-9725. DOI: 10.1021/acs.joc.9b01354. PMID: 31298854.
- Mesomorphic Behavior in Silver(I) N-(4-Pyridyl) Benzamide with Aromatic π–π Stacking Counterions Torres, I.; Ruiz, M.; Phan, H.; Dominguez, N.; Garcia, J.; Nguyen, T-Q.; Evans, H.; Resendiz, M. J. E.; Baruah, T.; Metta, A.; Arif, A.; Noveron, J. C. *Materials*, **2018**, 11, 1666. DOI: 10.3390/ma11091666
- Modeling of Canonical and C2'-O-thiophenylmethyl Modified hexamers of RNA. Insights into the Nature of Structural Changes and Thermal Stability. Dzowo, Y. K.; Wolfbrandt, C.; Resendiz, M. J. E.;* Wang, H.* *New J. Chem.* **2018**, 42, 10177-10183. *Equal contribution. DOI: 10.1039/C8NJ01739E
- Reactivity and Specificity of RNase T1, RNase A, and RNase H Towards Oligonucleotides of RNA Containing 8-Oxo-7,8-dihydroguanosine. Herbert, C.; Dzowo, Y. K.; Urban, A.; Kiggins, C. N.; Resendiz, M. J. E.* *Biochemistry.* **2018**, 57, 2971-2983. DOI: 10.1021/acs.biochem.8b00277. PMID: 29683663.
- Enduring Exposure: Methodology from Tracking Information Literacy in Science Students (TILISS). Pan, D.; Bruehl, M.; Knight, J.; Resendiz, M. J. E.* Abstract published on 12th International Conference on Performance Measurement in Libraries - Communicating value and leadership: from strategic to micro assessment, **2017**.
- Protocol for the solid-phase synthesis of oligonucleotides of RNA containing a 2'-O-thiophenylmethyl modification and characterization via Circular Dichroism. Francis, A. J.; Resendiz, M. J. E.* *J. Vis. Exp.* **2017**, 125, e56189, doi:10.3791/56189. doi:10.3791/56189
- 8-Oxo-7,8-dihydroadenine and 8-Oxo-7,8-dihydroadenosine — Chemistry, Structure, and Function in RNA; and Presence in Natural Products and in Potential Drug Derivatives. Choi, Y. J.; Chang, S. J.; Gibala, K. S.; Resendiz, M. J. E.* *Chem. Eur. J.* **2017**, 23, 6706-6716. DOI: 10.1002/chem.2016051633
- Biophysical Properties, Thermal Stability, and Functional Impact of 7,8-dihydro-8-oxoguanosine on Oligonucleotides of RNA. A Study of Duplex, Hairpins, and the Aptamer for preQ1 as Models. Choi, Y. J.; Gibala, K. S.; Ayele, T.; Van deventer, K.; Resendiz, M. J. E.* *Nucleic Acids Res.* **2017**, 45, 4, 2099-2111. Featured in *Biomedical Advances*, Editor's pick – Neuroscience, June 2017: http://biomedical-advances.org/ep-20175-2/ - DOI: 10.1093/nar/gkw885. PMID: 28426093.
- Synthesis, Thermal Stability, Biophysical Properties, and Molecular Modeling of Oligonucleotides of RNA Containing 2'-O-2-Thiophenylmethyl Groups Nguyen, J.; Dzowo, Y. K.; Wolfbrandt, C.; Townsend, J. S.;

Wang, H.; Resendiz, M. J. E.* *J. Org. Chem.* **2016**, 81, 19, 8947-8958. DOI: 10.1021/acs.joc.6b01615. PMID: 27584708.

- The use of dialkyl acetals in the N-Alkylation of 8-oxoadenosine and guanosine. Mechanistic studies and rate determination. Ayele, T.; Chang, S. J.; Resendiz, M. J. E.* *Tetrahedron Lett.* **2015**, 56, 4532-4536. doi:10.1016/j.tetlet.2015.06.002
- Biophysical Properties and Thermal Stability of Oligonucleotides of RNA Containing 7,8-Dihydro-8-hydroxyadenosine. Chauca-Diaz, A. M. Choi, Y. J. Resendiz, M. J. E.* *Biopolymers,* **2015**, 103, 3, 167-174. DOI: 10.1002/bip.22579

Mentored:

- Photochemical Control of RNA Structure by Disrupting π-Stacking. Resendiz, M. J. E.; Schön, A.; Freire, E.; Greenberg, M. M. *J. Am. Chem. Soc.* **2012**, 134, 12478-12481. Recommended article for F1000 Prime, New Finding, Technical Advance, posted May 14th 2013.
- Direct Strand Scission in Double Stranded RNA via a C5-Pyrimidine Radical. Resendiz, M. J. E.; Pottiboyina, V.; Sevilla, M.; Greenberg, M. M. *J. Am. Chem. Soc.* **2012**, 134, 3917-3924.
- Product and Mechanistic Analysis of the Reactivity of a C6-Pyrimidine Radical in RNA. Jacobs, A. C.; Resendiz, M. J. E.; Greenberg, M. M. *J. Am. Chem. Soc.* **2011**, 133, 5152-5159.
- Direct Strand Scission from a Nucleobase Radical in RNA. Jacobs, A. C.; Resendiz, M. J. E.; Greenberg, M. M. *J. Am. Chem. Soc.* **2010**, 132, 3668-3669. Selected for JACS Select on *JACS*$^{\beta}$ #12, Chemical Mechanisms in Biochemical Reactions.
- The Missing Link Between Molecular Triplets and Spin-Polarized Free Radicals: Room Temperature Triplet States of Nanocrystalline Radical Pairs. Lebedeva, N. V.; Tarasov, V. F.; Resendiz, M. J. E.; Garcia-Garibay, M. A.; White, R. C.; Forbes, M. D. E. *J. Am. Chem. Soc.* **2010**, 132, 82-84. Highlighted in *C & EN*: Better View of Solid-State Reactions, Wilson, E. K.; *C & EN*: **2010**, 88, 26.
- Photochemical Generation and Reactivity of the 5,6-Dihydrouridin-6-yl Radical. Newman, C. A.; Resendiz, M. J. E.; Sczepanski, J. T.; Greenberg, M. M. *J. Org. Chem.* **2009**, 74, 7007-7012.
- Radical Reactions with Double Memory of Chirality (^{2}MOC) for the Enantiospecific Synthesis of Adjacent Stereogenic Quaternary Centers in Solution: Cleavage and Bonding Faster than Radical Rotation. Resendiz, M. J. E.; Family, F.; Fuller, K.; Campos, L. M.; Khan, S. I.; Lebedeva, N. V.; Forbes, M. D. E.; Garcia-Garibay, M. A. *J. Am. Chem. Soc.* **2009**, 131, 8425-8433. Highlighted in nature.com blogs: The Way We Were: Double Memory of Chirality, posted on Saturday, June 27th, 2009.
- Diastereoselective synthesis and spin-dependent photodecarbonylation of di(3-phenyl-2-pyrrolidinon-3-yl)ketones: synthesis of nonadjacent and adjacent stereogenic quaternary centers. Resendiz, M. J. E.; Natarajan, A.; Garcia-Garibay, M. A. *Chem. Commun.* **2008**, 193-195.
- Unexpected Solid-State Photochemistry of an α-Thiophenyl-α'-Thiophenyl-*S*,*S*-dioxo-Substituted Ketone. Resendiz, M. J. E.; Taing, J.; Khan, S. I.; Garcia-Garibay, M. A. *J. Org. Chem.* **2008**, 73, 638-643.
- Photodecarbonylation of 1,3-Dithiophenyl Propanone: Using Nanocrystals to Overcome the Filtering Effect of Highly Absorbing Trace Impurities. Resendiz, M. J. E.; Taing, J.; Garcia-Garibay, M. A.; *Org. Lett.* **2007**, 9, 4351.
- Large-Scale Photochemical Reactions of Nanocrystalline Suspensions: A Promising Green Chemistry Method. Veerman, M.; Resendiz, M. J. E.; Garcia-Garibay, M. A. *Org. Lett.* **2006**, 8, 2615.
- Hammett Analysis of Photodecarbonylation in Crystalline 1,3-Diarylacetones**.** Resendiz, M. J. E.; Garcia-Garibay, M. A., *Org. Lett.* **2005**, 7, 371-374.
- Self-Assembly of Flexible Supramolecular Metallacyclic Ensembles: Structures and Adsorption Properties of Their Nanoporous Crystalline Frameworks. Chatterjee, B.; Noveron, J. C.; Resendiz, M. J. E.; Liu, J.; Yamamoto, T.; Parker, D.; Cinke, M.; Nguyen, C. V.; Arif, A. M.; Stang, P. J. *J. Am. Chem. Soc.* **2004**, 126, 10645-10656.
- A Self-Assembled Supramolecular Optical Sensor for Ni(II), Cd(II), and Cr(III). Resendiz, M. J. E.; Noveron, J. C.; Disteldorf, H.; Fischer, S.; Stang, P. J. *Org Lett.* **2004**, 6, 651-653.

AWARDS & HONORS

2021 Henry Dreyfus Teacher-Scholar Award
2019 CLAS Award for Excellence in Leadership and Service
2017 CLAS - Excellence in Enhancing Diversity and Inclusion in Teaching
2017 Carl Storm Underrepresented Minority Fellowship
2016 Washington DC – Linton-Poodry SACNAS Leadership Institute
2015 University of Colorado Diversity and Excellence Grant
2010 *NIGMS* Research Supplement to Promote Diversity in Health-Related Research
2007 The *UCLA* Majeti-Alapati Fellowship Award for Excellence in Research

2006 – 2007 *UCLA* Fellowship for Continuing Graduate Studies
2002 *WAESO* (Western Alliance to Expand Student Opportunities) Undergraduate Research Fellowship
2001 - 2003 Summer *CARE* (Center for Academic and Research Excellence) Research Stipend

FUNDING

2023 NIH (NIGMS), Sponsor Award #: 2R15GM132816-02
2023 CU Denver CLAS Capital Equipment Funding (Isothermal Titration Calorimeter)
2022 Jean Dreyfus Lectureship Award (BL-22-010)
2021 Henry Dreyfus Teacher-Scholar Award (TH-21-028)
2020 Organic Syntheses, Research Grant for Faculty at Principally Undergraduate Institutions
2019 CLAS Dissemination Grant, University of Colorado Denver
2019 NIH (NIGMS), Sponsor Award #: 1R15GM132816-01
2018 DIIF, Diversity and Inclusion Grant, University of Colorado Denver
2018 ORS Large Grant, University of Colorado Denver
2018 CLAS Dissemination Grant, University of Colorado Denver
2017 CLAS Research Innovation Seed Program
2014 CLAS Dissemination Grant, University of Colorado Denver
2014 Young Upwardly Mobile Professors Grant, University of Colorado Denver
2013 Faculty Development Grant, University of Colorado Denver
2012 Young Upwardly Mobile Professors Grant, University of Colorado Denver

WORKSHOPS

2023 Training on difficult conversations & inclusive meetings
2023 Inclusion makes us stronger: Expanding equity at CU Denver
2021 BIPOC Digital Storytelling – CU Denver
2021 ACUE Micro-credential in Creating an Inclusive and Supportive Online Learning Environment
2020 NSF Aspire Alliance's short course – Teaching Online in Fall 2020: How to design and run an effective and equitable online course
2016 Arlington, VA – NSF Chemistry Early Career workshop
2015 CU Denver - CAREER Working Group
2014 *NINDS* Grant Writing Workshop for Diverse Researchers
2010 *ACS:* Postdoc to Faculty Workshop
2010 Advancing Biomedical Research Workforce Diversity: *NIGMS* Workshop for Postdocs Transitioning to Independent Positions
2009 Johns Hopkins Medicine, Research Leadership Course
2009 Natural Products & Biomedical Science Symposium, *NIH*, Bethesda, MD.
2009 Poster Judge, 16th Annual Undergraduate and Graduate Research Symposium, Morgan State University
2007 *HUTEP* (Howard University and Texas El Paso) Preparing Future Faculty Summer Institute
2005 International Center for Materials Research (*ICMR*) Summer School, Santa Barbara, California
2005 *ACS* Summer School on Green Chemistry, Washington, D.C.

PRESENTATIONS

2024 *University of Northern Colorado* - – Invited Seminar – The use of 8-OxoG in aptamers of RNA, for recognition of small molecules, Greeley, CO.
2023 *Colorado College* - – Invited lecture, Colorado College – Oral presentation/lecture: Structural Studies of Z-Duplexes containing the -GUAC- sequence and Incorporation of 8-Oxoguanine, Colorado Springs, CO.
2023 *University of Cincinnati - Oesper Symposium*, Oral Presentation (Insights into the supramolecular behavior of RNA/DNA modified with benzothiophenyl rings at the C2'-O-position), Cincinnati, OH
2023 *University of Colorado Denver*, Oral Presentation (Supramolecular behavior of RNA/DNA modified with benzothiophenyl ring, a step towards functional materials), Denver, CO
2023 *Rocky Mountain Regional Meeting*, Oral Presentation (Estudios para controlar la estructura supramolecular de cadenas de ARN y ADN, via modificaciones con benzotiofeno.), Laramie, WY
2023 *Rocky Mountain Regional Meeting*, Oral Presentation (Structural impact of 8-oxoG in the structure of RNA, and its impact on interactions with small-molecules and ribonucleases), Laramie, WY
2023 *Gordon Research Conference (Nucleosides Nucleotides and Oligonucleotides)*, Poster Presentation (The structural impact of C2'-O-modifications on oligonucleotides of RNA. The case for thiophene-based modifications), Newport, RI
2023 *University of Connecticut*, Invited Seminar (8-oxoG as a building block in aptamers of RNA & insights into its impact on structure/function), Storrs, CT
2022 *Gordon Research Conference (Bioorganic Chemistry)*, Oral Presentation (8-oxoG and its impact on structure and function in aptamers), Andover, NH

2020 *UNAM - Mexico City*, Invited Seminar (8-OxoG cambia la estructura de ARN y altera sus interacciones con proteinas y otras moleculas), virtual mode
2020 *University of Connecticut*, Invited Seminar (8-oxoG in RNA: structure and function), virtual mode
2019 *Gordon Research Conference (Nucleosides Nucleotides and Oligonucleotides)*, Poster Presentation (Modification of RNA at the 2'-O-position to control its structure and stability. Synthesis and modeling), Newport, RI
2019 *Arizona State University*, Invited seminar (Exploring the structural and functional impact of 8-oxo-7,8-dihydropurines (8-oxoG, 8-oxoA, 8-oxoI) on RNA. Ribonucleases and Aptamers), Tempe, AZ
2019 *University of Arizona*, Invited seminar (Exploring the structural and functional impact of 8-oxo-7,8-dihydropurines (8-oxoG, 8-oxoA, 8-oxoI) on RNA. Ribonucleases and Aptamers), Tucson, AZ
2019 *Drexel University*, Invited seminar (Exploring the structural and functional impact of 8-oxo-7,8-dihydroguanosine (8-oxoG) on RNA using aptamers as models), Philadelphia, PA
2019 *The University of Maryland, College Park*, Invited seminar (Exploring the structural and functional impact of 8-oxo-7,8-dihydroguanosine (8-oxoG) on RNA using aptamers as models), College Park, MD
2018 *International Table of Nucleosides, Nucleotides and Oligonucleotides*, Poster Presentation (Effects of benzothiophene on duplex structures of RNA: Modeling and Synthesis), San Diego, CA
2018 *University of Texas El Paso*, Invited seminar (Oxidative Damage of RNA: Structural Changes/Stability Using 8-Oxo-purines as Models), El Paso, TX
2018 *Wayne State University*, Invited seminar (Oxidative Damage of RNA: Structural Changes/Stability Using 8-Oxo-purines as Models), Detroit, MI
2018 *Oakland University*, Invited seminar (Oxidative Damage of RNA: Structural Changes/Stability Using 8-Oxo-purines as Models), Rochester, MI
2018 *Colorado College*, Invited seminar (Structural and functional impact of 8-oxoG on RNA using aptamers as models), Colorado Springs, CO
2017 *Rocky Mountain Regional Meeting – ACS*, Oral Presentation (Synthesis and incorporation of thiophene and benzothiophene groups to stabilize RNA structure), Loveland, CO
2017 *Gordon Research Conference (Nucleosides Nucleotides and Oligonucleotides)*, Selected seminar (Effects of 8-oxo-7,8-dihydropurines on RNA structure and function using aptamers as models and their reactivity towards RNase T1, A, and H), Newport, RI
2017 *University of Texas Arlington*, Invited seminar (Structural and functional effects of 8-oxo-7,8-dihydropurines on RNA using hairpins and aptamers as models), Arlington, TX
2016 *Aurora Central High School*, Oral Presentation (Chemistry and Science in our Lives: Personal Experiences) Aurora, CO
2016 *ACS, Division of Biological Chemistry*, Oral Presentation (Thermal Stability and Functional Implications of RNA Strands Containing 7,8-dihydro-8-oxoguanosine in aptamers of RNA), San Diego, CA
2016 *University of Colorado Denver*, Oral Presentation (Structural an functional effects from the presence of 8-oxopurines in RNA)
2015 *Palmer High School*, Oral Presentation (Chemistry and Science in our Lives: Personal Experiences) Colorado Springs, CO
2015 *Keystone Symposia – MicroRNAs and Noncoding RNAs in Cancer*, Poster Presentation (Oxidative stress on miRNAs and its relationship to function: The role of miR153 in cancer), Keystone, CO
2015 *ACS, Division of Biological Chemistry*, Poster Presentation (Thermal Stability and Functional Implications of Short RNA Strands Containing 7,8-dihydro-8-hydroxyadenosine), Denver, CO
2014 *SACNAS, Chemistry at the Biology and Materials Interface,* Oral Presentation (Oxidative damage to RNA: Relationship between structure and neurodegeneration), Los Angeles, CA
2014 *University of Colorado Cancer Center*, Anschutz Medical Campus, Oral Presentation (Oxidatively Modified Synthetic miRNA: Structural Changes/Stability Using 8-Oxo-Adenosine as a Model), Aurora, CO
2014 *Rocky Mountain Regional Neuroscience Group,* Anschutz Medical Campus, Poster Presentation (Structural Changes Imposed by Oxidative Lesion '8-Oxo-7,8-dihydroadenosine' on Short Strands of RNA), Aurora, CO
2013 *Butcher Symposium*, Biofrontiers Institute, Westminster, CO, Poster Presentation (RNA: Oxidative Damage, Structure and Reactivity)
2013 *RNA Stuff Club*, Department of Biochemistry and Molecular Genetics – Anschutz Medical Campus, Aurora, CO, Oral Presentaion (RNA: Oxidative damage, Photoactive Probes, Therapeutics)
2013 *Metropolitan State University of Denver*, Denver Metro Chem Scholars Oral Presentation, (RNA: Oxidative damage, structure and reactivity), Denver, CO
2012 *Morgan State University*, Interdisciplinary Seminar Series, Oral Presentation, Spring (Photochemical Control of RNA Structure, Working at the Bio-organic Interface), Baltimore, MD
2010 *JHU/CBI*, Poster Presentation, Annual Retreat (Formation of the 5,6-dihydrouridin-6-yl radical in RNA results in direct strand scission),
2010 *ACS:* Oral Presentation (Formation of the 5,6-dihydrouridin-6-yl radical in RNA results in direct strand scission)
2009 *JHU/CBI* Annual Retreat (Radical Cleavage in RNA: What a Difference a Hydroxyl Group Makes)
2007 *ACS:* Poster Presentation (Decarbonylation of Phenyl-pyrrolidinones in the Solid-State and Advances towards Total Synthesis of Natural Products), Boston, MA
2007 *ACS:* Poster Presentation (Decarbonylation of Phenyl-pyrrolidinones in the Solid-State as an Entry to the Total Synthesis of Natural Products), Chicago, IL
2007 *Fred Wudl Symposium*: Poster Presentation (Solid-State Transformations of thiophene containing ketones)

2005 *PACIFICHEM*: Poster Presentation (Decarbonylation of heterocyclic tetra-Substituted ketones in the crystalline solid-state)
2005 *ACS*: Poster Presentation (Hammett Analysis of Photodecarbonylation in Crystalline 1,3-Diarylacetones)
2004 *SACNAS*: Poster Presentation (Hammett Analysis of Photodecarbonylation in Crystalline 1,3-Diarylacetones)
2002 *UCLA CARE* Science Poster Day

MEMBERSHIPS/AFFILIATIONS

ACS – American Chemical Society
AAAS – American Association for the Advancement of Science
CCTSI – Colorado Clinical and Translational Science Institute
COADSS – Colorado Organization for the Advancement of Diverse Scholars in Science, Faculty Advisor and founder
CU RNABI – University of Colorado RNA Bioscience Institute
IS3NA – International Society of Nucleosides, Nucleotides & Nucleic Acids
RNA – The RNA Society
SACNAS – Society for Advancement of Chicanos and Native American in Science, Campus Faculty Advisor
UCCC – University of Colorado Cancer Center

ORGANIZED SYMPOSIA

- Organized Fall 2023 Jean Dreyfus Lectureship:
  Public Lecture Chemistry Lecture Poster Session
  Special Student Interview (podcast)
- In collaboration with Sachamama (http://sachamama.org/en/home/), served as CU Denver liaison for Climate Innovation Lab on the Auraria campus, Spring 2018.
- COADSS – 1st Seminar series to increase diversity in science – Denver, Fall 2016 (Prof. Marcia Levitus, ASU); 2nd seminar – Denver, Spring 2017 (Prof. Alejandro Bugarin, UT Arlington); 3rd seminar – Denver, Fall 2017 (Dr. Alexander Buitrago Santanilla, GlaxoSmithKline); 4th seminar – Denver, Fall 2019 (Prof. May Khanna, University of Arizona).
- ADSE (Alliance for Diversity in Science and Engineering) - Thinking outside the box: Diversity in C-H Functionalization – Denver, Spring 2015

OUTREACH

- 2023 Supported a group of 14 students (11 undergraduate/ 3 Masters), and two faculty, to attend and present their research at the American Chemical Society-Rocky Mountain Regional Meeting (Laramie WY). Organized travel/lodge and meals at the conference. Via Dreyfus Teacher-Scholar funds.
- 2023 Obtained funds to support four undergraduate students, to carry out summer research at CU Denver, via Dreyfus Lectureship funds/Dept. of Chemistry (CU Denver)/College of liberal arts and sciences (CU Denver) 60/20/20%.
- Presented seminars aimed at increasing diversity in STEM fields:
2020 *University of Connecticut,* Podcast with students – Talk about diversity and inclusion in academia
2019 *Drexel University*, Special Seminar – Diversity lunch and discussion (Pathway to Academia), Philadelphia, PA
2019 *The University of Maryland, College Park*, Special Seminar – Diversity lunch and discussion (Pathway to Academia), College Park, MD
- Speaker for the March for Science – Denver 2018 (http://marchforsciencedenver.org/event-schedule/). Also featured and advertised in Full-Press release for SACNAS (http://sacnas.org/2018/03/29/sacnas-announces-march-for-science-speakers-and-organizers/)
- Organized tours for high school (Aurora Central High School) students to visit the CU Denver campus and in particular the chemistry laboratories. The purpose is to promote STEM among populations traditionally underrepresented in these fields. Secured the participation of CU Denver K-12 outreach and Bioengineering to have a broader impact on the students.
(Fall 2017 – 150 students)
(Spring 2018 – 50 students)
- Visited, gave seminar, and interacted with high school students about pursuing careers in the chemical (and STEM) fields to two high schools. (Palmer High School – 2015 & Aurora Central High School – 2016).

OTHER

- Ad Hoc Reviewer NSF- Grant proposals, 2023
- Ad Hoc Reviewer NIH-CBP (Chemical Biology and Probes Study Section) study section, June 2023
- Public commentary for LiveScience (March 2023: https://www.livescience.com/what-is-oxidative-stress)
- Outside evaluator for Tenure appointment case (Spring 2023)

- Judge for LatinXChemOrg 2023 & 2022 conference
- Outside evaluator for Tenure appointment case (Fall 2022)
- Ad Hoc proposal reviewer, Austrian Science Fund (FWF), 2022
- Ad Hoc proposal reviewer (x2), French National Research Agency (Agence Nationale de la Recherche – ANR), 2021
- AdHoc Reviewer NIH-SBCA (Synthetic and Biological Chemistry A) study section, June 2021
- Editor for Research Topic on Frontiers 2020-2021: "Oxidative Damage of RNA: Structure, Function, and Biological Implications - From Nucleotides to Short and Long RNAs in Chemistry and Biology" https://www.frontiersin.org/research-topics/11725/oxidative-damage-of-rna-structure-function-and-biological-implications---from-nucleotides-to-short-a
- Served as reviewer on the panel for the 2020 NSF Graduate Research Fellowship Program
- Guest Editor for Special Issue "Synthesis, Properties, Biological Activity, and Medicinal Chemistry of Marine Nucleosides" **2019** (http://www.mdpi.com/journal/marinedrugs/special_issues/marinenucleosides2018).
- Served as reviewer on the panel for the 2018 NSF Graduate Research Fellowship Program
- Co-Editor for Special Issue "Photoactive Molecules" in *Molecules – Molecular Diversity*, **2016**.

- Reviewer: ACS Chemical Biology, Antibiotics, Applied Sciences, Biochemistry, Biomolecules, Cell, ChemBioChem, Chemical Communications, Chemical Research in Toxicology, Chemical Science, Chemistry A European Journal, ChemistrySelect, Crystal Growth and Design, Environmental Chemistry Letters, European Journal of Organic Chemistry, Free Radical Biology and Medicine, Frontiers of Molecular Biosciences, Journal of the American Chemical Society, Journal of Medicinal Chemistry, Journal of Organic Chemistry, Langmuir, Molecular Diversity, Molecules, Nature, Nature Cell Biology, Organic & Biomolecular Chemistry, Pharmaceuticals, Progress in Biophysics and Molecular Biology, Redox Biology, Scientific Reports, Springer Books.

Judge for poster, oral, or scholarship applications:
SACNAS (2013-2018, 2022-2023).
CU Denver Research symposia (2017-2022)

Faculty Advisor:
- SACNAS, CU Denver Chapter (2016-2018)
- COADSS, CU Denver Chapter of ADSE (Alliance for Diversity in Science and Engineering) (2016-2019)

SERVICE TO UNIVERSITY/DEPARTMENT

College/University:

- Hispanic Serving Institution Operational Team (December 2023 – present)
- Reviewer for CU Denver Eureca grants (2023)
- Department liaison for CU Denver Diversity Impact (Fall 2022-present)
- Reviewer for internal grants from CLAS (Dissemination grants, Spring 2022)
- Mentor and instructor, Rocky Mountain Science Research Education Experience (RMSREE, NIH sponsored program to train high school teachers) – 2021-present
- CU Leadership Service Award committee for academic year 2019-2020
- CLAS Graduation Requirements committee Fall 2019-Spring 2020
- Mentor within Faculty Mentoring Program 2019
- CLAS Diversity and Inclusion Council – CU Denver Fall 2017-2020
- Search committee for Associate Dean (Spring 2018)
- CLAS Community Impact Subcommittee 2018-2019
- CLAS Faculty Council – CU Denver 2014-2018

Departmental (Chemistry):

- Faculty evaluation committee (2023 – present)
- Organized and financed registration and attendance to the 2023 Rocky Mountain Regional Meeting (Laramie, WY). Supported 14 students and three department faculty to this conference
- Safety Committee (Fall 2023 – present)
- Primary Unit Criteria – Revision/Edit – Committee (Spring 2022)
- Post-Tenure-Review committee (Spring 2022, 3 cases)
- Departmental Seminar Series Organizer (Fall 2019—Fall) – Organized podcast series (Fall 2020, Spring 2021)
- https://clas.ucdenver.edu/chemistry/seminars-and-events/podcasts
- Website administrator for 'Seminars and events'; and 'Diversity and Inclusion' tabs: https://clas.ucdenver.edu/chemistry/diversity-and-inclusion (2020-present)
- Diversity and Inclusion committee (2020-present)
- Scholarship committee (2016-2022)
- Space committee (2014-present)

- Faculty search committees: Faculty (2015, 2018, and 2019)
- Faculty evaluation committee (2014 and 2015)

STUDENT PRESENTATIONS

2023

• Vi Tho Nguyen – Invited lecture, Colorado College, Colorado Springs, CO – Oral presentation: Structural Studies of Z-Duplexes containing the -GUAC- sequence and Incorporation of 8-Oxoguanine.
• Vincent Conrad Oppenheimer – LatinXChem Poster Conference – Virtual Poster presentation on *X*: Synthesis and photoreactivity of 8-oxo-7,8-dihydroguanosine.
• Emily Grimes – Rocky Mountain Regional Meeting, Laramie, WY – Poster presentation: Improved synthesis of uridine functionalized with benzothiophene at the C2'-O-position.
• Evody Tshianyi – Rocky Mountain Regional Meeting, Laramie, WY – Poster presentation: Separation of oligonucleotides of modified RNA via HPLC.
• Vi Tho Nguyen – Rocky Mountain Regional Meeting, Laramie, WY – Poster presentation: Structural studies on the -GGAG- tetraloop within hairpins of RNA and DNA.
• Tariq Al-Jarah – Rocky Mountain Regional Meeting, Laramie, WY – Poster presentation: Increasing aminoglycoside target selectivity of RNA aptamers with the incorporation of chemically modified purines.
• Alexander Ball – Rocky Mountain Regional Meeting, Laramie, WY – Poster presentation: Functionalization of solid supports to immobilize oligonucleotides of RNA. Structure determination of RNA and DNA modified with 2-Methylebenzothiophene.
• Alexie Cushing – Rocky Mountain Regional Meeting, Laramie, WY – Poster presentation: Functionalization of solid supports to immobilize oligonucleotides of RNA.
• Vincent Conrad Oppenheimer – Rocky Mountain Regional Meeting, Laramie, WY – Poster presentation: Synthesis and photoreactivity of 8-oxo-7,8-dihydroguanosine.
• Haydee Ramirez – Rocky Mountain Regional Meeting, Laramie, WY – Poster presentation: Secondary Structure and Selectivity of RNA Aptamers containing 8-oxoG: Targeting Aminoglycosides.
• Brody Reynolds – Rocky Mountain Regional Meeting, Laramie, WY – Poster presentation: Reactivity of PNPase towards oxidized RNA containing 7,8-dihydro-8oxoguanine.
• Tariq Al-Jarah – Dreyfus Lectureship, Denver CO – Poster presentation: Secondary Structure and Selectivity of RNA Aptamers containing 8-oxoG: Targeting Aminoglycosides
• Vincent Conrad Oppenheimer – Dreyfus Lectureship, Denver CO – Poster presentation: Synthesis and photoreactivity of 8-oxo-7,8-dihydroguanosine
• Emily Grimes – Dreyfus Lectureship, Denver CO – Poster presentation: Synthesis of uridine functionalized with 2-methylthiophene at the C2'-O-position
• Vi Tho Nguyen – Dreyfus Lectureship, Denver CO – Poster presentation: Structural Studies of the GUAC sequence and Formation of Z-Form Duplexes via the Incorporation of 8-Oxoguanosine
• Brody Reynolds – Dreyfus Lectureship, Denver CO – Poster presentation: Reactivity of PNPase towards RNA containing 8-oxo-7,8-dihydroguanosine
• Evody Tshianyi – Dreyfus Lectureship, Denver CO – Poster presentation: Identification, Characterization, and Purification of RNA using HPLC
• Tariq Al-Jarah – Gordon Research Conference (Nucleosides, Nucleotides and Oligonucleotides) – Poster presentation: Secondary Structure and Selectivity of RNA Aptamers containing 8-oxoG: Targeting Aminoglycosides
• Vi Tho Nguyen – Gordon Research Conference (Nucleosides, Nucleotides and Oligonucleotides) – Poster presentation: Structural Studies of the GUAC sequence and Formation of Z-Form Duplexes via the Incorporation of 8-Oxoguanosine
• Vi Tho Nguyen – Gordon Research Seminar (Nucleosides, Nucleotides and Oligonucleotides) – Poster presentation: Structural Studies of the GUAC sequence and Formation of Z-Form Duplexes via the Incorporation of 8-Oxoguanosine
• Tariq Al-Jarah – Gordon Research Seminar (Nucleosides, Nucleotides and Oligonucleotides) – Poster presentation: Secondary Structure and Selectivity of RNA Aptamers containing 8-oxoG: Targeting Aminoglycosides. *Tariq participated as a Discussion Leader in the "Chemical Biology and Engineering of Small Molecules" section*.
• Vi Tho Nguyen – RaCAS Symposium, Denver (CO) – Oral presentation: Exploration on the –GAGG- tetraloop, and impact of 8-oxoG on its structure

2022

• Vashita Jain – RNA Society meeting, Boulder (CO) – Poster presentation: Nucleotide derivatives as efficient inhibitors of PNPase
• Haydee Ramirez – RNA Society meeting, Boulder (CO) – Poster presentation: Secondary Structure and Selectivity of RNA Aptamers containing 8-oxoG: Targeting Aminoglycosides
• Haydee Ramirez – SACNAS meeting, San Juan (Puerto Rico) – Poster presentation: Secondary Structure and Selectivity of RNA Aptamers containing 8-oxoG: Targeting Aminoglycosides

• Vashita Jain – Reaction Mechanisms Conference, Boulder (CO) – Poster presentation: Synthesis of nucleotide phosphates as efficient inhibitors of PNPase
• Peter Le - Reaction Mechanisms Conference, Boulder (CO) – Poster presentation: Transition-Metal-Free Synthesis of C3-Chlorinated Benzothiophene Derivatives using NaOCl · 5H2O

2021

• Shawn Schowe – RaCAS Symposium, Denver (CO) – Poster presentation: Increasing Target selectivity in the promiscuous neomycin B aptamer via sequence modification with 8-Oxo-7,8-dihydroguanine (8-OxoG)
• Cheyenne N. Phillips – RaCAS Symposium, Denver (CO) – Poster presentation: Efficiency and Selectivity of RNAse A Cleaving RNA Containing 8-oxo-7, 8-dihydroguanosine
• Shawn Schowe – IS3NA virtual symposium – Poster presentation: Synthesis of oligoribonucleotides containing 8-oxoG, m1G, m2,6A, or 8-bromoG and their reactivity with the exoribonuclease, Xrn1

2020

• Cheyenne N. Phillips – ACS RMRM local meeting, Loveland (CO) – Poster presentation: Efficiency and Selectivity of RNAse A Cleaving RNA Containing 8-oxo-7, 8-dihydroguanosine
• Kazuki Hincks – RaCAS Symposium, Denver (CO) – Poster presentation: Base pairing of modified nucleobases, Modeling and experimental insights
• Isabelle Castro – RaCAS Symposium, Denver (CO) – Poster presentation: Organic Synthesis: Functionalization of Benzothiophene Methanol

2019

• Maddie Glennon – NNO Gordon Research Conference, Newport (RI) – Poster presentation: Determining the Impact of Guanosine, Inosine, and 8-oxo-7,8-dihydropurines (8-oxo-G and 8-oxo-I) on the Thermal Stabilities of RNA Duplexes, and on Reverse Transcription
• Namoos Siddique – RaCAS Symposium, Denver (CO) – Poster presentation: Interactions between transition and alkali metals with 8-oxo-7,8-dihydroxyguanosine or guanosine. The case for: Pd(II), Fe(III), Ag(I), Cs (II), Na, K.

2018

• Courtney Kiggins – Aptamers in Boulder Conference, Boulder (CO) – Poster presentation: Determining 8-oxo-7,8 dihydroguanine's Effect on Aptamer Structure and Binding Affinity
• Austin Skinner – RaCAS Symposium, Denver (CO) – Poster presentation: Assessment of Transition Metal Reactivity with 8-oxo-7,8-dihydroguanosine

2017

• Jessica Jaquez – ABRCMS conference, Phoenix (AZ) – Poster presentation: Synthesis of 8-oxo '7, 8-Dihydroguanosine and its Incorporation into Oligonucleotides of RNA
• Austin Skinner – ACS RMRM local meeting, Loveland (CO) – Poster presentation: Reactivity between cisplatin and 8-oxo-7,8-dihydroguanosine – The missing link between oxidative stress on RNA and chemotherapeutic agents.
• Lamont Sharp – ACS RMRM local meeting, Loveland (CO) – Poster presentation: Synthesis of oligonucleotides of RNA containing thiophenyl C2'-O-modifications. "Won best poster award"
• Cassandra Herbert – ACS RMRM local meeting, Loveland (CO) – Poster presentation: Reactivity RNA containing 8-oxo-7,8-dihydroguanosine with ribonucleases A, T1, and H.
• Cassandra Herbert – SACNAS meeting, Salt Lake City (UT) – Poster presentation: Reactivity RNA containing 8-oxo-7,8-dihydroguanosine with ribonucleases A, T1, and H.
• Cassandra Herbert – Society of Toxicology (SOT) meeting, Baltimore (MD) – Poster presentation: Determining the enzymatic degradation of RNA containing 8-oxo-7,8 dihydroguanine
• Marc Morris – Society of Toxicology (SOT) meeting, Baltimore (MD) – Poster presentation: Synthesis of 8-oxo-7,8 dihydroguanosine and its interactions with cis-platin.
• Andrew S. Francis – American Chemical Society (ACS) conference, San Franciso (CA) – Poster presentation: Synthesis of Functionalized Oligonucleotides of RNA using 2-methylbenzothiophenyl groups at the C2'-position. Using Photoactive Benzothiophene Groups.

2016

• Krysztof S. Gibala – American Chemical Society (ACS) conference, San Diego (CA) – Poster presentation: The Effect of 8-oxo-7,8-dihydroguanosine on the Structure and Function of RNA Hairpins and Aptamers

2015

• Yu Jung Choi – American Chemical Society (ACS) conference, Denver (CO) – Poster presentation: Structural Studies of RNA Oligonucleotides of RNA Containing 7,8-Dihydro-8-hydroxyadenosine
• Ana Chauca Diaz – American Chemical Society (ACS) conference, Denver (CO) – Poster presentation: Synthesis of RNA containing 8-Oxo-7,8-dihydroadenosine
• Joseph Nguyen and Justin Townsend – RaCAS Symposium, Denver (CO) – Poster presentation: Synthesis of C2'-O-modified RNA contatining 2-methylthiophene groups
• Stephanie Chang – ADSE Symposium, Denver (CO) – Poster presentation: Synthesis of oligonucleotides of RNA containing 8-oxoA
• Tewoderos Ayele – ADSE Symposium, Denver (CO) – Poster presentation: Synthesis of oxidized purines, and their incorporation into oligonucleotides of RNA

2014

• Ana Chauca Diaz – SACNAS meeting, Los Angeles (CA) – Poster presentation: Synthesis of RNA containing 8-Oxo-7,8-dihydroadenosine
• Tewoderos Ayele – SACNAS meeting, Los Angeles (CA) – Poster presentation: Synthesis of oxidized purines, and their incorporation into oligonucleotides of RNA. "Won Best Poster Award"
• Beatrice A Guillermo – ABRCMS meeting, San Antonio (TX) – Poster presentation: Synthesis of RNA containing oxidized uridine at the C5-position

STUDENT AWARDS

Haydee Ramirez – 2023 ACS Organic Division Undergraduate Award
Emily Grimes – 2023 Dreyfus Summer Fellowship
Haydee Ramirez – 2023 Outstanding graduating Biochemistry BS student
Shawn Schowe – 2022 ACS Organic Division Undergraduate Award
Cheyenne Phillips – 2019 Damrauer Fellowship
Courtney Kiggins – 2019 Outstanding Graduate Student
Austin Skinner – 2019 ACS Organic Division Undergraduate Award
Austin Skinner – 2019 Mike Milash Teaching Award
Chase Barker – 2019 Marti Barrett Scholarship
Maddie Glennon – 2019 Travel support to attend the NNO-GRC
Anthony Urban – 2018 ACS Organic Division Undergraduate Award
Cassandra Herbert – 2017 Damrauer Fellowship
Krysztof S. Gibala – 2016 Travel Award, American Chemical Society (ACS) conference
Christina Bueter – 2015 Marti Barrett Scholarship

OTHER PRESENTATIONS – COLLABORATORS

Alyssa Winter – 2023 ASMS Conference on Mass Spectrometry and Allied Topics