
Address: School of Molecular Sciences
Arizona State University
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Education: **Arizona State University**, Tempe, AZ (2020 – present)

Ph.D. Biochemistry

Research Advisor: Gary F. Moore

University of Redlands, Redlands, CA (2007 – 2011)

Bachelor of Science in Chemistry and Biology

Research Advisor: David Schrum

Employment: **Futures Academy (Formerly Halstrom Academy)**, Brentwood, CA

Teacher (Maths and Sciences) and Lab Manager (2014 – 2019)

Lead Teacher (2017 – 2018)

Private Tutor, Santa Monica, CA

Tutor (2015 – 2020)

Australian Lab Services, Phoenix, AZ

Technician, Director of Quality Control and Safety (2012 – 2013)

Internships: **University of Redlands Summer Science Internship**, Redlands, CA
(Summer 2010)

Thunderbird School of Global Management, Glendale AZ

(Winter 2009)

Fellowships, Awards, and Honors:

Achievement Rewards for College Scientists (ARCS) Award (2024 – 25)

Achievement Rewards for College Scientists (ARCS) Award (2023 – 24)

Outstanding Graduate Research Assistant Award (Arizona State University, 2021)

Graduate Summer Research Fellowship (Arizona State University, 2019)

Teacher of the Month (Futures Academy, multiple 2013 – 2019)

Departmental Honors (University of Redlands, 2011)

Dean's List (Fall, 2010)

Dean's List (Fall, 2008)

Journal Articles

- Nishiori, D., Hensleigh, L. K., Nguyen, N. P., Moore, G. F. **Shedding More Light on Solar Photochemistry and Wavelength-Resolving How Fluxes of Chemical Substrates, Electrons, and Photons Establish Photoelectrosynthetic Turnover Frequencies**. 2024 (In review).
- Nguyen, N. P., Hensleigh, L. K., Nishiori, D., Reyes Cruz, E. A., Moore, G. F. **Degrade-Repair Cycle of a Fuel-forming Photoelectrode**. *ACS Appl. Energy Mat.* **2022**, 5, 13128-13133.
- Reyes Cruz, E. A., Nishiori, D., Wadsworth, B. L., Nguyen, N. P., Hensleigh, L. K., Khusnutdinova, D., Beiler, A. M., Moore, G. F. **Molecular-Modified Photocathodes for Applications in Artificial Photosynthesis and Solar-to-Fuel Technologies**. *Chem. Rev.* **2022**, 122, 16051-16109. (Cover Article)
- Nishiori, D., Wadsworth, B. L., Reyes Cruz, E. A., Hensleigh, L. K., Karcher, T., Moore, G. F. **Photoelectrochemistry of Metalloporphyrin-Modified GaP Semiconductors**. *Photosynth. Res.* **2022**, 151, 1-10 (Special issue co-edited by Elizabeth Young and Gary F. Moore on "Photochemistry and Electrochemistry of Natural and Artificial Photosynthesis")

Presentations

- Making Fuels From Air*, Advisor: Gary F. Moore. **Phoenix Chapter Achievement Rewards for College Scientists Poster Session and Awards Ceremony**. Camby Hotel. April 19th, 2024.
- Enhancing Electrocatalytic Carbon Dioxide Reduction Using Encapsulating Polymeric Microenvironments*. Advisor: Gary F. Moore **Renewable Energy: Solar Fuels Gordon Research Seminar**, February 4th, 2024 (Talk).
- Enhancing Electrocatalytic Carbon Dioxide Reduction Using Encapsulating Polymeric Microenvironments*. Advisor: Gary F. Moore. **Renewable Energy: Solar Fuels Gordon Research Seminar**, February 6th-7th, 2024 (Poster).
- Making Fuels From Air*, Advisor: Gary F. Moore. **Phoenix Chapter Achievement Rewards for College Scientists Poster Session and Awards Ceremony**. Phoenix Country Club. April, 21st, 2023.
- Characterization of Soil from Joshua Tree National Park*. L. Hensleigh, Advisor: David Schrum. **Southern California Conference for Undergraduate Research**. Pepperdine University. November 2010.
- Characterization of Soil from Joshua Tree National Park*. L. Hensleigh, Advisor: David Schrum. **The Pittsburg Conference on Analytical Chemistry and Applied Spectroscopy**. Atlanta, GA. March 2011 (presented by David Schrum).

Outreach / Mentoring Workshops and Presentations

As Graduate Student at Arizona State University:

- ASU–Berkeley Lab STEM Pathways (ABSP) Program**. Mentor to four ASU undergraduate students (June-August 2023)
- Running on Sun Internship**. Mentor to one interning high school student (June-August 2022)
- Running on Sun Internship**. Mentor to two interning high school students (June-August 2022)

2021)

As Futures Academy Faculty:

Monthly Instructor Training Workshops. Presented by L. Hensleigh (2014-2019)

Grading and Assessment-Professional Development. Presented by L. Hensleigh. Futures Academy Annual Training (August 2016)

Teaching Experience

Courses Taught at Futures Academy:

Science (6th grade)

Science (7th grade)

Science (8th grade)

Math (6th grade)

Math (7th grade)

Pre-Algebra

Algebra 1

Algebra 2

Geometry

Pre-Calculus

Honors Pre-Calculus

Statistics and Probability

AP Statistics and Probability

Biology

AP Biology

Honors Biology

Chemistry

AP Chemistry

Health

Photography

Completed Courses and Training on Teaching and Mentoring:

Futures Academy Annual Training (Futures Academy, Summer 2014, 2015, 2016, 2017, 2018)

Conferences/Webinars Attended

Renewable Energy: Solar Fuels Gordon Research Conference, February 2024
2nd Season, 3rd Workshop on Artificial Photosynthesis. February 2023
30th Western Photosynthesis Conference. January 2nd and 9th, 2021
2020 Solar Fuels Science Meeting. Joint Center for Artificial Photosynthesis. August 5th
and 7th, 2020
NSF/DOE Virtual Mini-Symposium. July 15th, 2022

Media Coverage

ASU News: Fuel for thought: Advancing solar-to-fuel technology
<https://news.asu.edu/20221115-fuel-thought-advancing-solartofuel-technology>

Other Involvements

Director of Communications. ASU School of Molecular Science Graduate Student Council.
2022-2023.

Visitation Weekend Volunteer. ASU School of Molecular Science. March 2nd-4th, 2023

Biodesign Open Doors Volunteer. ASU School of Molecular Science. February 25th, 2023

Lead Judge (Elementary Chemistry section) Arizona Science and Engineering Fair, March
22nd, 24th, 2022

Biodesign Biome Homecoming Volunteer. ASU School of Molecular Science. November
30th, 2022

