

# UNDERGRADUATE RESEARCH MENTORSHIP

**\*NOTES:**

- 1 = attended graduate or professional school
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- 5 = University Honors College student
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#	Student Name	Research Project	Dates	Notes*
118	Autumn Bryant	Strategies for Infrared Analysis of Blood Stains	Fall 2024	5
117	Kathryn Bering	Analytical Spectroelectrochemistry	Fall 2024	2
116	MHR Hisbullah Shekh	Development of Spectroelectrochemical Assay for Acetaminophen in Serum and Plasma	Fall 2024	
115	Malia Locklear	Fabrication and Characterization of an Inexpensive Device for Spectroelectrochemistry	Spring 2024	5,6
114	Keirah-Lee Garry	Development of Spectroelectrochemical Assay for Acetaminophen in Serum and Plasma	Fall 2023 Spring 2024	5,6
113	Anastasia Zakharova	Microscale Raman Spectroelectrochemistry	Fall 2023 Fall 2024	--
112	Sara Ormsby	Development of a Spectroelectrochemical Assay for Vitamin C	Fall 2023	--
111	Todd Rogitz	Development of a Rapid Mass Spectrometric Assay for Caffeine in Beverages	Spring 2023	6
110	James Locklear	Development of Spectroelectrochemical Assay for Acetaminophen in Serum	Fall 2022 Spring 2023	2
109	Melissa Sutton	Development of Spectroelectrochemical Assay for Acetaminophen	Spring 2022	5
108	Haleigh Grace	Microscale Flow Cell for Spectroelectrochemistry	Fall 2021 Spring 2022	1,4,6
107	Tiffany Bramblett	Electroreduction of Carbon Dioxide in Ionic Liquid Hydrates New Tools for Microscale Spectroelectrochemistry	Fall 2020 Spring 2021	1,2,6,7
106	Samantha Cranford	Rapid GCMS Method for Determination of Trace Water in Organic Solvents	Summer 2020	2,6
105	Jared Hamlin	New Tools for Microscale Spectroelectrochemistry	Fall 2019 Spring 2020 Summer 2020	2,6
104	Kathryn Ryan	Development of a Rapid Mass Spectrometric Assay for Caffeine in Beverages	Spring 2020	5
103	Breanna Sigler	New Tools for Microscale Spectroelectrochemistry	Fall 2019	1,7
102	Nicholas Willard	New Tools for Microscale Spectroelectrochemistry	Fall 2019 Spring 2020	2,6
101	Jackson Bounds	Development of a Spectroelectrochemical Assay for Uric Acid in Urine	Fall 2017 Spring 2018 Fall 2018	1,2,4, 6,7
100	Xin Dong	Development of a Spectroelectrochemical Assay for Vitamin C Development of a Spectroelectrochemical Assay for Uric Acid in Urine	Summer 2017 Fall 2017 Spring 2018 Summer 2018 Fall 2018	1,2,4, 6,7
99	Dana Lamberton	Development of a Spectroelectrochemical Assay for Uric Acid in Urine	Summer 2018	2,5,7
98	Britney Alcira	Microscale Raman Spectroelectrochemistry	Fall 2017 Spring 2018	2,3
97	Tristan Sanborn	Development of a Spectroelectrochemical Assay for Vitamin C	Spring 2018	2
96	Gabrielle Downs	Development of a Spectroelectrochemical Assay for Serum Bilirubin	Summer 2017	2
95	Akpedje Nadohou	Design and Construction of a Microscale Spectroelectrochemical Flow Cell	Summer 2017	2
94	Gabriell Greene	Development of a Spectroelectrochemical Assay for Acetaminophen	Spring 2017 Summer 2017	2,6

93	Kaitlin Smith	Development of a Spectroelectrochemical Assay for Acetaminophen	Fall 2016 Spring 2017 Summer 2017	2,6,7
92	Dayten Hodge	Design and Construction of a Microscale Spectroelectrochemical Flow Cell	Summer 2016 Fall 2016 Spring 2017	2,6
91	Nwabata Nnani	Development of a Spectroelectrochemical Assay for Acetaminophen	Summer 2016	--
90	Wei Wang	Design and Construction of a Microscale Spectroelectrochemical Flow Cell	Spring 2016 Summer 2016 Fall 2016 Spring 2017	1,2,4, 6,7
89	Olivia Hinson	Development of a Spectroelectrochemical Assay for Uric Acid	Spring 2016	2
88	Erin Barnhardt	Infrared Spectral Studies of Carbon Dioxide Solubility in Ionic Liquid Hydrates	Spring 2015	2
87	Ereny Gerges	Development of a Spectroelectrochemical Assay for Acetaminophen	Spring 2015 Fall 2015 Spring 2016	2,6
86	Natasha Wells	In Vitro Spectral and Imaging Studies of Microiontophoresis  Development of a Spectroelectrochemical Assay for Uric Acid	Spring 2015 Fall 2015 Spring 2016 Summer 2016 Fall 2016	1,2,6,7
85	Sonvia Brown	Electrochemical Properties of Carbon Dioxide Dissolved in Ionic Liquid Hydrates  In Vitro Spectral and Imaging Studies of Microiontophoresis	Fall 2014 Spring 2015 Fall 2015 Spring 2016	1,2,6,7
84	Sean Downes	Raman Spectroelectrochemistry using Nafion-Coated Screen-Printed Electrode Assemblies	Fall 2014 Spring 2015 Fall 2015	1,2,6
83	Will Robinson	Infrared Spectral Studies of Carbon Dioxide Solubility in Ionic Liquid Hydrates	Fall 2014	2
82	Samantha Suggs	Design and Fabrication of an Apparatus for Remote Observation and Micromanipulation of Optical Probes	Fall 2014 Spring 2015	5
81	Matt MacDougall	Development of a Spectroelectrochemical Assay for Uric Acid	Summer 2014	2
80	Samuel Marshall	Development of a Spectroelectrochemical Assay for Uric Acid	Summer 2014	2
79	David Pshock	New Tools for Microscale Spectroelectrochemistry	Spring 2014	--
78	Katelyn Stanford	Development of a Spectroelectrochemical Assay for Uric Acid	Spring 2014	--
77	Marsalis Smith	In Vitro Spectral and Imaging Studies of Microiontophoresis	Fall 2013 Spring 2014	1,2,6
76	Angel Williams	In Vitro Spectral and Imaging Studies of Microiontophoresis	Fall 2013 Spring 2014	--
75	Bethany Winecoff	New Tools for Microscale Spectroelectrochemistry	Fall 2013 Spring 2014	--
74	Mac Davis	In Vitro Spectral and Imaging Studies of Microiontophoresis	Spring 2013	2
73	Jessica Stancil	In Vitro Spectral and Imaging Studies of Microiontophoresis  New Tools for Microscale Spectroelectrochemistry	Spring 2013  Fall 2013	2
72	Joshua Ellerbe	New Tools for Microscale Spectroelectrochemistry	Fall 2010 Spring 2011 Summer 2012	2,7
71	David Blake	New Tools for Microscale Spectroelectrochemistry	Spring 2012 Summer 2012	1,2,4,6
70	Michelle Kerestes	Ionic Liquid Hydrates for Carbon Dioxide Capture	Fall 2011	2,3
69	Sierra Edwards	Development of an Infrared Microspectroelectrochemical Cell	Fall 2011	5
68	Megan Alexander	Development of a Spectroelectrochemical Assay for Serum Bilirubin	Fall 2009 Spring 2010	6

67	Cilia Iluku	Spectroelectrochemical Determination of Analytes in Microliter Samples -- and -- Ionic Liquid Hydrates for Carbon Dioxide Capture	Spring 2009 Fall 2010	5,2
66	Jordan Strickland	Spectroelectrochemical Determination of Analytes in Microliter Samples	Spring 2009	2,4
65	Josie Torrence	Assembly and Characterization of a Microspectrophotometer	Spring 2008	2
64	Sarah Subaran	Development of a Sensitive Gas Chromatographic Methods for Atmospheric Carbon Dioxide	Spring 2008	1,2,6,7
63	Joshua Locklear	Development of a Sensitive Gas Chromatographic Methods for Atmospheric Carbon Dioxide	Summer 2007	1,2,6
62	Shane Gutierrez	Development of Voltammetric Sensors for Atmospheric Carbon Dioxide	Summer 2007	2,6
61	Emily Howden	Spectroelectrochemical Assay for Serum Bilirubin -- and-- Development of a Mass Spectrometric Method for Atmospheric Carbon Dioxide	Spring/Summer 2007	1,2,6
60	Jamie Hardee	GC/FTIR/methanizer/FID Method for Atmospheric Gases	Spring 2007	1,6
59	Adrienne Locklear	Development of a Spectroelectrochemical Assay for Bilirubin in Human Serum	Fall 2006	--
58	James Smith	Characterization and Applications of Commercially Available Screen-Printed Carbon Electrodes	Summer/Fall 2006 Spring 2007	2
57	John Murray	Hollow Fiber Membrane Extraction of Aqueous Organics	Summer 2005 Spring 2006	--
56	Marquita Lilly	Development of a Fiber Optic Spectroelectrochemical Absorbance Sensor	Summer 2005	2,6
55	Kristen Arnett	Development of a Fiber Optic Spectroelectrochemical Fluorescence Sensor	Summer/Fall 2005 Summer/Fall 2006	2,4,6
54	Indee Smith	Development of a Fiber Optic Spectroelectrochemical Absorbance Sensor	Spring 2005	--
53	Ryan Rodriguez	Development of a Fiber Optic Spectroelectrochemical Fluorescence Sensor	Spring 2005	1,7
52	Beth Butler	Development of a Fiber Optic Spectroelectrochemical Absorbance Sensor	Spring/Summer/Fall 2005	1,2,5,7
51	Chico Locklear	Preparation and Characterization of Platinum-Coated Tubular Nafion Membranes	Fall 2004	--
50	Megan Grimsley	Infrared Study of Carbon Dioxide Absorption by Modified Nafion Films	Summer 2004	2,6,7
49	April Garner	Hollow Fiber Membrane Extraction of Aqueous Organics	Summer 2004	2,6
48	James Evans	Development of Fiber Optic Spectroelectrochemical Sensors	Summer 2004	2,6
47	Tamim Alsaedi	Development of Nafion-Based Sensor for Water in Organic Liquids	Spring 2004	--
46	Jeremy Emanuel	Development of Fiber Optic Spectroelectrochemical Sensors	Spring 2004	2
45	Bruce Pier	Development of Fiber Optic Spectroelectrochemical Sensors	Spring 2003 Spring 2004	1,2,5,6
44	Bineyam Kassahun	Development of a Spectroelectrochemical Assay for Bilirubin in Human Serum	Summer 2003	1,2
43	Jennifer Coleman	Development of Methodology for Anodic Stripping Spectroelectrochemistry	Summer 2003	2
42	Jason Townsend	Infrared Study of Carbon Dioxide Absorption by Modified Nafion Films	Summer 2003	2
41	Florence Migele	Development of Methodology for Anodic Stripping Spectroelectrochemistry	Spring 2003	2
40	Jamie Locklear	Permeation Membrane Sampling of Aqueous Media with a Commercial Nafion Dryer	Fall 2002	2
39	Angela Smith	Development of Methodology for Anodic Stripping Spectroelectrochemistry	Summer 2002	2
38	Olga Tarkington	Development of Apparatus for Anodic Stripping Spectroelectrochemistry	Summer/Fall 2002	1,2,6,7
37	Stephanie White	Anodic Stripping Spectroelectrochemistry	Spring 2002	1,2
36	Leanne Stanley	Spectroelectrochemical Assays for Clinically Significant Analytes	Spring/Fall 2002 Spring 2003 Spring 2004	1,2,3,6,7

35	Tammy Schwab	Molten Alkylammonium Salt Hydrates for Carbon Dioxide Absorption	Fall 2001, Spring/Summer 2002	2,6
34	Kim Bullock	Permeation Membrane Sampling of Aqueous Media with a Commercial Nafion Dryer	Spring/Summer/Fall 2002 Spring 2003	1,2,4,6 ,7
33	Michael Locklear	Photometric Study of Solute Permeation Rates for Tubular Nafion Membranes	Fall 2001	2
32	Don Owens	Development of a Fiber Optic Spectroelectrochemical Sensor	Fall 2000 Spring/Fall 2001	2,3,4,6
31	Josh Steelman	Development of a Fiber Optic Spectroelectrochemical Sensor	Summer 2001	2
30	Anne Schulz	Analytical Spectroelectrochemistry of Ascorbate, Bilirubin, and Urate	Summer 2001	--
29	Shanna May	Electrochemical Behavior of Nafion and Ion-exchanged Derivatives	Spring/Summer 2001	1,2,7
28	Nicholas Dimery	Voltammetric and Spectroscopic Studies of Bilirubin Ditaurate	Spring 2001	2,3
27	Margaret Maynor	Development of Flow-Injection Spectroelectrochemical Apparatus	Fall 1999 Spring 2000	1,4,6,7
26	Roger Thornhill	Voltammetric and Spectroscopic Studies in Molten Alkylammonium Salt Hydrates	Summer 1999 Spring 2000	2,6
25	Joe Schlee	Voltammetric and Spectroscopic Studies in Molten Alkylammonium Salt Hydrates	Summer 1999	2
24	Matt Nelson	Voltammetric Studies in Molten Fluoride Hydrates	Spring 1999	--
23	Calvin Locklear	Voltammetric Studies in Molten Fluoride Hydrates	Summer 1998	1,2,3
22	Melissa Jones	Voltammetric Studies in Molten Fluoride Hydrates	Summer 1998	2
21	Felecia Treadwell	Voltammetric Studies in Molten Tetramethylammonium Fluoride Tetrahydrate	Fall 1997	--
20	Mark Brown	Voltammetric and Spectroscopic Studies of Molten Tetrapentylammonium Bromide Electrolysis	Spring 1996 Fall 1997	1,6
19	Mell Bishop	Voltammetric Measurement of pH in Water / Supercritical Carbon Dioxide Mixtures	Spring/Fall 1996	--
18	Brandon Davis	Development of Apparatus and Methodology for Analytical Spectroelectrochemistry	Fall 1995 Spring/Fall 1996 Spring 1997	1,6,7
17	Chad Brennehan	Development of a Fiber Optic Sensors for Spectroelectrochemical Measurements	Summer/Fall 1995 Spring/Fall 1996 Spring 1997	2,3,5,6
16	Amy Chavis	Headspace Spectroscopic and Gas Chromatographic Studies of Molten Tetrapentylammonium Bromide Electrolysis	Summer 1995	2
15	Ramone Jacobs	Spectroscopic and Voltammetric Study of the Acid/Base Chemistry of Bilirubin Ditaurate	Summer 1995	1,2,7
14	Kelly Miller	Infrared Spectroelectrochemistry of H <sub>2</sub> O and CO <sub>2</sub> in Molten Tetrapentylammonium Bromide	Fall 1994	6
13	Tara Woods	Voltammetric and Spectroscopic Studies of Bilirubin Ditaurate	Summer 1994	2,6
12	Sherry Callender	Analytical Spectroelectrochemistry of Selected Analytes	Summer/Fall 1994 Spring/Summer 1995	1,2,4,6
11	Connie Polston	Voltammetric Studies of H <sub>2</sub> O and CO <sub>2</sub> in Molten Tetrapentylammonium Bromide	Spring/Summer 1994	2
10	Leslie Lowry	Optically Reflective Electrodes for Infrared Spectroelectrochemistry	Fall 1993 Spring 1994	1,3,5,6 ,7
9	Anessa Lewis	Voltammetric and Spectroscopic Studies of Bilirubin Ditaurate	Fall 1993 Spring 1994	1,5,7
8	Brian Scott	Analytical Aspects of Uric Acid Spectroelectrochemistry	Fall 1992 Spring 1993	1,2
7	Hildelisa Woods	Spectroelectrochemical Studies of Uric Acid	Spring/Fall 1992 Spring 1993	1,3,6
6	Charles Allen	Cryoscopic Studies of Molten Alkylammonium Bromides	Spring/Summer 1992	1,2,7
5	Edwin Jackson	Differential Thermal Analyzer for Cryoscopic Studies	Summer/Fall 1991	1,2,6
4	Gilley Boaz	Cryoscopic Studies of Molten Alkylammonium Bromides	Summer/Fall 1991	1,2,4,6
3	Rob Gardner	Voltammetric Studies in Human Urine, Serum and Plasma	Spring/Fall 1991	1

2	Gary Nealy	Cylindrical Thin-Layer Cell for Spectroelectrochemistry	Spring1990	1,4,7
1	Amanda Hood	Ionization Suppression in Flame Photometry	Fall 1989	1,7

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