

Richard Albert Squitieri

Ph.D. Chemistry

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Education

Ph.D., Chemistry, University of California, Davis, 2018

B.S., Biochemistry, Eckerd College, St. Petersburg, FL, 2012 (*minors Biology & Mathematics*)

Research Training

Northwestern University, Evanston, IL

Postdoctoral Research with Professor Karl A. Scheidt, 2018 – 2019

University of California, Davis, CA

Graduate Research with Professor Jared T. Shaw, 2013 – 2018

Eckerd College, St. Petersburg, FL

Undergraduate Research with Professor David Grove, 2011

Tampa Bay Research Institution

Undergraduate Research with Dr. Guy Bradley, 2011

Publications

- 1) "Enantioselective Intramolecular C–H Insertion Reactions of "Donor–Donor" *Metal Carbenoids*." Christian Soldi, Kellan N. Lamb, **Richard A. Squitieri**, Marcos Gonzalez Lapez, Michael J. Di Maso, Jared T. Shaw, *J. Am. Chem. Soc.*, **2014**, 15142.
- 2) "Synthesis of Esters by the *in situ* Formation and Trapping of Diazoalkanes." **Richard A. Squitieri**, Galen P. Shearn-Nance, Jason E. Hein Jared T. Shaw. *J. Org. Chem.* **2016**, 5278.
- 3) "Synthesis of Benzodihydrofurans by Asymmetric C-H Insertion Reactions of Donor/Donor Rhodium Carbenes." Kellan N. Lamb[‡], **Richard A. Squitieri**[‡], Srinivasa R. Chintala, Ada J. Kwong, Edward I. Balmond, Christian Soldi, Olga Dmitrenko, Marta Castiñeira Reis, Ryan Chung, J. Bennett Addison, James C. Fettinger, Jason E. Hein, Dean J. Tantillo, Joseph M. Fox, Jared T. Shaw. *Chem. Euro. J.* **2017**, 11843.
[‡]Authors contributed equally to the work and share co-first authorship.
- 4) "Enantioselective Synthesis of Indolines, Indanes and Benzodihydrothiophenes by C–H Insertion of Donor/Donor Carbenes." Lucas W. Souza[‡], **Richard A. Squitieri**[‡], Christine A. Dimirjian, Blanka M. Hodur, Leslie A. Nickerson, Corrine N. Penrod, Jesus Cordova, Michael J. Di Maso, James C. Fettinger, Jared T. Shaw. *Angew. Chem. Int. Ed.* **2018**, 15213.
[‡]Authors contributed equally to the work and share co-first authorship.
- 5) "Synthesis and Evaluation of Azolium-Based Halogen-Bond Donors" **Richard A. Squitieri**, Keegan J. Fitzpatrick, Ashley A. Jaworski, Karl A. Scheidt. *Chem. Euro. J.* **2019**, 10069.
- 6) "One-Pot Synthesis of Sterically Hindered Esters from Hydrazones in the Presence of Manganese Dioxide." **Richard A. Squitieri**, Kristen V. Mckendall, Jesus Cordova, Jared T. Shaw. *Manuscript in preparation*.

Academic Training

University of California, Davis

Graduate Courses: Physical Organic Chemistry, Chemical Biology, Organic Spectroscopy,
Advanced Synthesis I & II, Nuclear Magnetic Resonance Spectroscopy

Teaching Assistant: Chemistry 2A, 2B, 118A, 118B, 118C, 135, 219

Associate Instructor: Chemistry 219, 135

Head Teaching Assistant: Chemistry 8B, 118A, 118B, 118C

Tutoring: Algebra (2012-2013)

Eckerd College, St. Petersburg, FL

Teaching Assistant: Organic Chemistry

Tutoring: Organic Chemistry (2011-2012)

Curriculum Development

- CHE 118(Organic Chemistry) – Modernized a series of laboratories and discussion worksheets to better target established learning objectives.
- CHE 219(Organic Spectroscopy) – Rewrote lab manual for 10 week course including experiment design, quiz and final evaluation development. (2014-2016)
- CHE 135(Advanced Bio-Organic Laboratory Techniques) – Revisions of lab course including experiment optimization and integration of practical research methods into the curriculum. Design of professional lab report writing protocols. (2015-2016)
- CHE 2/3(General Chemistry) – Involvement in the curriculum committee at UCD and the process of developing/transitioning the general chemistry scaffold for life science majors. (2015-2016)

Instrumentation Experience

- GCMS/HPLC (Shaw group) – Maintenance of instruments, new user training, and method development (2012-2017)
- NMR spectroscopy (Graduate student course instructor) – Trained 2 years of incoming graduate students how to use the instrument, design experiments, and interpret data. (2014-2016)

Professional Experience

- CVS Pharmacy: Pharmacy Technician (2009)

Honors and Awards

- Boy Scouts of America Eagle Scout (2007)
- Eckerd Presidential Scholarship (2008)
- Sigma Xi Best Student Presentation Award (2012)
- UC Davis Chemistry Department Travel Award (2015)
- UC Davis Chemistry Department Travel Award (2016)

Presentations/Posters

- “Synthesis and Evaluation of Curcumin Derivatives as STAT3 Inhibitors” **Richard A. Squitieri**, Amanda Teets, Johannah Ramer, Polina Maciejczyk, Guy Bradley, David Grove, Eckerd College Student Research Symposium, March 14, 2012.
- “*In Situ* Formation and Reactions of Benzylic Diazo Compounds” **Richard A. Squitieri**, Western Regional ACS Meeting, November 6, 2015.
- “*In Situ* Formation and Reactions of Benzylic Diazo Compounds” **Richard A. Squitieri**, Eckerd College Seminar Series, November 2, 2016.
- “Asymmetric Synthesis of 2,3-dihydrobenzofurans via C–H Insertion of Diaryl Rhodium(II) Carbenoids” **Richard A. Squitieri**, Kellan N. Lamb, Galen P. Shearn-Nance, Christian Soldi, Jared Shaw*. Miller Symposium, 2013-2015.
- “Synthesis of Indolines by Enantioselective C–H Insertion Reactions of Donor-Donor Metal Carbenoids.” **Richard A. Squitieri**, ACS San Francisco, April 2, 2017.
- “Construction of Carbon-Carbon Bonds by Enantioselective C-H Insertion Reactions of Donor-Donor Metal Carbenoids” **Richard A. Squitieri**, UC Davis Chemical Biology Innovation Group Meeting, April 12, 2017.

Professional Activities

- Boy Scouts of America (12 Years)
- US Coast Guard Auxiliary (10 Years)
- Miller symposium planning committee (2015-2016)
- UC Davis Chemistry Curriculum committee (2015-2016)