Neil K. Garg

UCLA – Department of Chemistry and Biochemistry 607 Charles Young Drive East Los Angeles, CA 90095 office: (310) 825–1536, mobile: (626) 399–4274 <u>neilgarg@chem.ucla.edu</u>

Homepage: http://garg.chem.ucla.edu

Education

California Institute of Technology, Pasadena, CA

- Ph.D. in Organic Chemistry, March 2005
- Graduate Research Assistant, July 2000 to March 2005
- National Defense Science and Engineering Graduate Fellow

New York University, New York, NY

- Bachelor of Science Degree in Chemistry (with honors), May 2000
- Minor Degree in Mathematics, May 2000
- Magna Cum Laude

Professional and Academic Experience

Distinguished Professor & Kenneth N. Trueblood Endowed Chair in Chemistry and Biochemistry: Dept. of Chemistry & Biochemistry, University of California, Los Angeles, CA

- Distinguished Professor: July 2020 to present; Kenneth N. Trueblood Endowed Chair: July 2018 to present; Full Professor: July 2013 to June 2020; Associate Professor: July 2012 to June 2013; Assistant Professor: July 2007 to June 2012
- Discovered methods for generating reactive heterocyclic aryne, alkyne, and allene intermediates, such as indolynes, pyridynes, piperidynes, and azacyclic allenes for use in complex molecule synthesis.
- Developed 'interrupted Fischer indolization' methodology to access the fused indoline ring systems observed in a variety of bioactive molecules.
- Discovered nickel-catalyzed methodologies for cross-coupling phenol derivatives, such as aryl pivalates, carbamates, sulfamates, and carbonates.
- Discovered the first catalytic method to activate amide C–N bonds, which allows for the conversion of amides to esters and ketones using non-precious metal catalysis.
- Completed syntheses of the drugs flurbiprofen (anti-inflammatory) and linezolid (antibacterial), and the heterocyclic natural products lissodendoric acid A, physovenine, phenserine, debromoflustramine B, indolactam V, pendolmycin, teleocidin A-2, lyngbyatoxin A, aspidophylline A, picrinine, akuammiline, pseudo-akuammigine, tubingensin A, tubingensin B, and five elusive welwitindolinone alkaloids, including the MDR inhibitor *N*-methylwelwitindolinone C isothiocyanate.

Department Chair: Dept of Chemistry & Biochemistry, University of California, Los Angeles, CA

• July 2019 to present

Vice Chair for Education: Dept of Chemistry & Biochemistry, University of California, Los Angeles, CA

• July 2012 to September 2016

Co-Founder: ElectraTect, Inc., Phoenix, AZ

- March 2021 to present
- Developing technologies for the detection of Δ^9 -tetrahydrocannabinol (THC)

National Institutes of Health Postdoctoral Fellow: University of California, Irvine, CA

- NIH Pathway to Independence Fellow: December 2006 to June 2007
- NIH Ruth Kirschstein NRSA Postdoctoral Fellow: May 2005 to November 2006
- Completed the first total synthesis of the complex alkaloid (–)-sarain A, under the direction of Professor Larry E. Overman.

Graduate Research Assistant: California Institute of Technology, Pasadena, CA

- July 2000 to March 2005
- National Defense Science & Engineering Graduate Fellow
- Completed the total syntheses of dragmacidin D (protein phosphatase inhibitor) and dragmacidin F (HIV antagonist) as a graduate student in the laboratory of Prof. Brian M. Stoltz.
- Synthesized fluorescently-labeled deoxynucleoside triphosphate derivatives for single-molecule DNA sequencing technology in collaboration with the laboratory of Prof. Stephen R. Quake.

Teaching Assistant: California Institute of Technology, Pasadena, CA

- Graduate level organic synthesis (Fall 2001, Fall 2002)
- Undergraduate organic chemistry (Spring 2001) and general chemistry (Fall 2000, Winter 2001)

Teaching Assistant: New York University, New York, NY

- Undergraduate honors general chemistry (1999–2000)
- Undergraduate general chemistry (1998–1999)

Undergraduate Research Assistant: University of Louis Pasteur, Strasbourg, France

- May 1999 to August 1999
- Performed research in organic synthesis and supramolecular chemistry under the direction of Professor Mir Wais Hosseini (NSF Research Experience for Undergraduates program).

Undergraduate Research Assistant: New York University, New York, NY

- September 1997 to June 2000
- Performed independent undergraduate research in organic and inorganic synthesis under the guidance of Professor Marc Walters.

Honors and Awards

- AAAS Mani L. Bhaumik Award for Public Engagement with Science, 2023
- UCLA Faculty Mentoring Honor Society, 2022
- Fellow of the American Institute of Chemists, 2022
- Mukaiyama Award, 2022
- Royal Society of Chemistry's Horizon Prize (Garg Molecular Educators Team), 2021
- Royal Society of Chemistry's Horizon Prize (Tang/Houk/Garg Pericyclase Team), 2021
- Blavatnik Award for Young Scientists, Finalist, 2020
- UCLA Athletics Uncommon Bruin Honoree, 2020
- Idorsia Chemistry Day Award, 2020
- ACS Edward Leete Award, 2019
- James Flack Norris Award for Outstanding Achievement in the Teaching of Chemistry, 2019
- DARPA's US Defense Science Study Group (class of 2020–2021), 2019
- New York University's Distinguished Alumni Award, 2019
- ASBMB Award for Exemplary Contributions to Education, 2019
- Fellow of the American Association for the Advancement of Science, 2018

- Fellow of the American Chemical Society, 2018
- Blavatnik Award for Young Scientists, Finalist, 2018
- Robert Foster Cherry Award for Great Teaching, Grand Prize Winner, 2018
- Robert Foster Cherry Award for Great Teaching, Finalist, 2017
- HHMI Professors Competition, Finalist, 2017
- Royal Society of Chemistry's Higher Education Award, 2017
- ACS Elias J. Corey Award for Outstanding Original Contribution in Organic Synthesis, 2017
- Mitsui Chemicals Catalysis Science Award of Encouragement, 2016
- Fellow of the Royal Society of Chemistry, 2016
- Royal Society of Chemistry's Merck Award, 2016
- Guggenheim Fellowship, 2016
- Thieme-IUPAC Prize, 2016
- Tetrahedron Young Investigator Award, 2016
- California's US Professor of the Year, Carnegie Foundation for the Advancement of Teaching, 2015
- UCLA Herbert Newby McCoy Award, 2015
- UCLA Gold Shield Faculty Prize, 2015
- Novartis Chemistry Lectureship, 2015-2016
- ACS Arthur C. Cope Scholar Award, 2015
- UCLA Distinguished Teaching Award & Eby Award for the Art of Teaching, 2014
- Mortar Board National Honors Society, UCLA Honorary Faculty Member Award, 2014
- Dr. Robert Stevenson Faculty-in-Residence Award, UCLA Office of Residential Life, 2014
- Bristol-Myers Squibb Unrestricted Grant in Synthetic Organic Chemistry, 2013
- UCLA Bruinwalk's Professor of the Year, 2013
- Camille Dreyfus Teacher-Scholar Award, 2013
- S. T. Li Prize for Achievements in Science and Technology, 2012
- ACS Green Chemistry Institute Pharmaceutical Roundtable Grantee Award, 2012
- A. P. Sloan Research Fellowship, 2012
- Glenn T. Seaborg Award, 2012
- Roche Excellence in Chemistry Award, 2012
- UCLA Hanson–Dow Award for Excellence in Teaching, 2011
- UCLA Herbert Newby McCoy Award, 2011
- AstraZeneca Excellence in Chemistry Award, 2011
- Amgen Young Investigator Award, 2011
- Eli Lilly Grantee Award, 2010
- DuPont Young Professor Award, 2010
- NSF CAREER Award, 2010
- Thieme Chemistry Journal Award, 2010
- UCLA Faculty Research Grant, 2010
- Boehringer Ingelheim New Investigator Award, 2009
- UCLA Faculty Career Development Award, 2008
- UCLA Faculty Research Grant, 2008
- National Institutes of Health Pathway to Independence Award, 2006–2010
- National Institutes of Health Ruth Kirschstein Postdoctoral Fellowship, 2005–2006
- Herbert Newby McCoy Thesis Award at the California Institute of Technology, 2005
- Dow Chemical Company Travel Fellowship, 2002
- National Defense Science & Engineering Graduate Fellowship, 2001–2004
- Phi Beta Kappa, 2000

- George Granger Brown Scholarship Award in Chemistry, 2000
- American Institute of Chemists Prize, 2000
- New York University Outstanding Teaching Assistant Award, 1999
- National Science Foundation Research Experience for Undergraduates Fellowship, 1999

Teaching

Undergraduate Courses

Chemistry 14D: Organic Reactions and Pharmaceuticals

8.83 / 9.00 (2010; 256 students); 8.91 / 9.00 (2011; 354 students); 8.94 / 9.00 (2012; 375 students); 8.87 / 9.00 (2013; 381 students); 8.87 / 9.00 (2014; 374 students); 8.86 / 9.00 (2015; 361 students)

Chemistry 89: Honors Seminar for Chemistry 14D

8.93 / 9.00 (2010; 20 students); 8.95 / 9.00 (2011; 41 students); 8.90 / 9.00 (2012; 40 students);
8.94 / 9.00 (2013; 41 students); 9.00 / 9.00 (2014; 42 students); 9.00 / 9.00 (2015; 40 students)

Chemistry 30BL: Organic Chemistry Laboratory I

• **8.89 / 9.00** (2016; 87 students)

Chemistry 19: Fiat Lux

- Chemicals, Friends or Foes: **4.9 / 5.0** (2011; 19 students); **5.0 / 5.0** (2012; 18 students)
- Breaking Bad: 5.0 / 5.0 (2013; 18 students); 5.0 / 5.0 (2014; 18 students); 4.91 / 5.0 (2015; 20 students)
- Designing and Innovating: 4.9 / 5.0 (2018; 14 students)
- Molecules that Rock: **5.0 / 5.0** (2020; 15 students)
- Chemical Mythbusters: 5.0 / 5.0 (2021; 18 students)

Chemistry 147: Careers in Chemistry & Biochemistry

• 8.83 / 9.00 (2015; 60 students)

Chemistry 192C/D: Undergraduate Assistant Education Practicum for Chem 14D

- 9.00 / 9.00 (Spring 2015; 9 students); 9.00 / 9.00 (Fall 2015; 6 students); 9.00 / 9.00 (Winter 2016; 6 students); 9.00 / 9.00 (Spring 2016; 6 students); 9.00 / 9.00 (Spring 2017; 5 students);
- 9.00 / 9.00 (Fall 2017; 2 students); 9.00 / 9.00 (Winter 2018; 2 students); 9.00 / 9.00 (Spring 2018; 5 students); 8.90 / 9.00 (Winter 2023; 6 students)

Graduate Courses

Chemistry 210: Advanced Topics in Chemical Research

• **8.58 / 9.00** (2016; 30 students)

Chemistry 244A: Organic Synthesis

• 8.75 / 9.00 (2007; 20 students); 8.50 / 9.00 (2008; 20 students); 8.59 / 9.00 (2009; 27 students)

Chemistry 249B: Problems in Advanced Organic Chemistry

• 8.92 / 9.00 (2008; 18 students); 8.83/ 9.00 (2011; 19 students)

Chemistry 241F: Pharmaceutical Chemistry

• 8.63 / 9.00 (2009; 26 students); 8.91 / 9.00 (2011; 49 students)

Doctoral Students Supervised

- Currently mentoring 16 Ph.D. students
- 35 Ph.D. degrees awarded, with 100% candidacy exam pass rate and 100% time-to-degree under five years

Chief Service Responsibilities at UCLA

Department Chair: UCLA Dept of Chemistry & Biochemistry, July 2019 to present

• Currently overseing all activities taking place in the Department. Key areas include undergraduate and graduate education, staff oversight and development (>50), summer session offerings and advertising, faculty recruiting and promotion, budgeting and finance, and aggressive fundraising.

Faculty-in-Residence: UCLA Office of Residential Life, July 2012 to 2021

- Served as Lead Faculty-in-Residence, July 2019 to 2021
- Provide academic inspiration and support to UCLA undergraduate students by living 'on the hill'.
 - Interacted with >1000 undergraduate students per year and many parents through move-in weekend, weekly meetings, programs, dining hall meals, and casual interactions.
 - Attended weekly meetings with student staff and monthly meetings with other Faculty-In-Residence.
 - Collaborated with student staff members to develop programs to improve the student experience at UCLA.
 - Coordinated >20 programs since 2012 including casual study breaks, resumé-writing workshops, science activities, and bringing students off-campus to explore Los Angeles (California Science Center, LACMA, UCLA Aquatic Facility for kayaking, etc.).
 - Organized "Get Intimate with 3 Deans and an FIR" in 2014, which gave a small group of students the chance to dine with Dean Rudnick, Associate Dean Van Valkenburgh, and Dean Duranti at a UCLA Dining Hall. The program received the 2014 Dr. Alan L. Hanson Academic Integration Award, which is the highest honor given for a program at UCLA "on the hill".
 - Received two "Of the Month" Awards from the True Bruin Chapter of the National Residence Hall Honorary for excellence in programming and service as Faculty-in-Residence in 2014.
 - o Received the Dr. Robert Stevenson Faculty-in-Residence Award in 2014.
 - o Received "On the Spot" Award from UCLA Residential Life in 2015.

Vice Chair for Education: UCLA Dept of Chemistry & Biochemistry, July 2012 to September 2016

- Coordinate Departmental teaching schedule for the academic year and summer terms.
- Oversee all aspects of graduate education; key initiatives include the creation of: (a) an internal graduate fellowship program using donor funds, (b) mentoring workshops for graduate students preparing for candidacy exams, (c) a system for tracking and helping students in need, and (d) 'Fourth Year Meetings', where students meet with faculty and develop plans for graduation and their futures.
- Oversee all aspects of undergraduate education; primary responsibilities include handling grade disputes, communicating with concerned parents and students, solving enrollment problems, hiring temporary lecturers, mentoring temporary lecturers, and finding ways to expand course offerings, especially for undergraduate laboratory courses that have space limitations.

Committee Activities and Other UCLA Service Items

University Committees

- Science Education Minor Faculty Advisory Committee, Member, 2022 to present
- Program for Excellence in Education and Research in the Sciences (PEERS) Advisor Board, Member, 2017 to present
- TEDxUCLA Advisory Board, Member, 2015 to 2020
- Education Innovation Task Force, Member, 2017 to 2018
- Academic Committee for the Future Positioning of the Office of Instructional Development, Member, 2015 to 2017
- Faculty Committee on Educational Technology, Member, 2014 to 2017
- Life Sciences Curriculum Committee, Member, 2013 to 2016
- Representative to Legislative Assembly of the Academic Senate (2008–2012)

Departmental Committees

- Faculty Mentoring Committee, Chair, 2018 to 2020
- Teaching Mentoring Committee, Chair, 2018 to 2019
- Elected Staffing Committee, 2015 to 2019
- Undergraduate Laboratory Committee: Co-Chair, 2017 to 2019
- Graduate Advisor for Organic Chemistry, 2012 to 2019
- Administrative Committee, Member as Vice Chair, 2012 to 2016
- Teaching Committee: Oversee as Vice Chair, 2012 to 2016
- Curriculum Committee: Oversee as Vice Chair, 2012 to 2016
- Graduate Studies Committees: Oversee as Vice Chair, 2012 to 2016
- Undergraduate Studies Committees: Oversee as Vice Chair, 2012 to 2016
- Undergraduate Laboratory Committee: Oversee as Vice Chair, 2012 to 2016
- Organic Chemistry Faculty Search Committee, Chair, 2014
- Inorganic Faculty Search Committee, Member, 2013

Other Scholary Activities and Service Items at UCLA

- UCLA Bruin Day Webinar, Faculty Presenter, 2020 and 2021
- UCLA Bruin Family Weekend, Faculty Lecturer, October 2018
- Faculty lecturer for various UCLA donor events, including Chancellor's Society (2015, 2018, 2022), Women & Philanthropy (2017), and Gold Shield (2015, 2016, 2022).
- Marshall for UCLA College of Arts and Science Commencement Ceremony, June 2016
- UCLA/Cross-Disciplinary Scholars in Science and Technology Program (CSST), Faculty Mentor, 2009 to present
- UCLA Amgen Scholars Program, Faculty Mentor, 2008 to present
- UCLA Chemistry-Biology Interface (CBI), an NIH-sponsored training program for UCLA graduate students, Faculty Mentor, 2008 to present
- UCLA Regents Scholars Society, Faculty Mentor, 2013 to present
- UCLA National Society of Collegiate Scholars at UCLA, Faculty Advisor, 2012 to 2018
- UCLA Innoworks, Faculty Advisor, 2012 to 2017
- UCLA Graduate Division's Dissertation Year Fellowship Program, Reviewer, 2010 to present
- UCLA's Academic Senate COR Faculty Research Grant Program, Reviewer, 2012 to present
- UCLA Bruin Day, Faculty Representative and Presenter, 2013–2017, 2020
- UCLA College of Letters and Sciences Commencement Representative for the Department of Chemistry and Biochemistry, June 2013, June 2014, June 2015, and June 2016
- UCLA Transfer Admit Day, Faculty Representative and Presenter, May 2014
- UC Regents Scholars Society Annual Meeting, Faculty Lecturer, May 2013
- UCLA Alumni Scholars Club State Finals Competition, Faculty Participant, April 2011, 2013, 2015
- UCLA Admissions Counselor Day, Faculty Lecturer, 2012, 2016, 2018
- Organized tours of Amgen's Medicinal & Process Chemistry Facilities (Thousand Oaks) for UCLA graduate students, June 2009 and March 2011
- UC EDGE Graduate Recruitment Day for minority students, Roundtable Discussion Facilitator, February 2009
- Amgen Scholars Program National Symposium at UCLA, Roundtable Discussion Facilitator, July 2008 & 2015

Service Beyond the UCLA Community and Outreach Activities

Membership and Service to the Scientific Community Beyond UCLA

- NIGMS Advisory Council, Ad hoc member, 2023
- Consultant, Federal Public Defender (New York), 2022
- Bill & Melinda Gates Foundation, Courseware Development Expert Panel, 2022–2023

- NIH, Grant Reviewer, 2022
- Chan Zuckerberg Foundation, Grant Reviewer, 2022
- Green Chemistry Challenge Awards, Grant Reviewer, 2022
- DARPA's Defense Science Study Group, Member, 2022–2024
- Advisory Board Member, Institute for Neurodegenerative Diseases, 2021 to present
- Consultant, Federal Public Defender (Georgia), 2021 to present
- Co-Organizer, Southern California Merck Symposium, July 19, 2021
- Co-Organizer, Pacifichem Symposium on Strong Bond Activation, December 18, 2021
- Consultant, Federal Public Defender (Illinois), 2020 to 2021
- American Chemical Society's Division of Organic Chemistry, Alternate Councilor, 2019 to 2021
- Consultant, Federal Public Defender (California), 2019 to 2020
- Consultant, Federal Public Defender (Indiana), 2019 to 2020
- OrgSyn, PUI Grant Reviewer, 2018-present
- Tetrahedron and Tetrahedron Letters, Editorial Advisory Board Member, 2017 to present
- International Society of Heterocyclic Chemistry, Member of Advisory Committee as Publicity Chairperson, 2018 to 2020
- Medicinal & Bioorganic Chemistry Foundation, Board of Directors, 2017 to 2019
- UC Cancer Research Coordinating Committee, Member and Grant Reviewer, 2014 to present
- American Association for the Advancement of Science, Member from 2013 to present and Fellow from 2018 to present
- National Science Foundation, Grant Reviewer, 2011 to present
- American Chemical Society Petroleum Research Fund, Grant Reviewer, 2012 to present
- Manuscript Reviewer for over >300 manuscripts and >20 scientific journals: 2007 to present
- ACS Catalysis, Editorial Advisory Board Member, 2014 to 2019
- Organic Letters, Editorial Advisory Board Member, 2014 to present
- Organic Syntheses, Board of Editors, 2015 to present
- National Science Foundation Graduate Fellowships Program, Fellowship Panelist: 2011, 2012, 2014, and 2015
- American Chemical Society, Member from 1998 to present and Fellow from 2018 to present

Scientific Outreach Activities

- Created #MentorFirst (<u>mentorfirst.org</u>), an initiative to improve mentoring in academic labs and impact the next generation of researchers, 2022.
- Launched <u>ChemMatch.net</u>, a free online resource to help students, children, and the general public appreciate chemistry through a matching game, 2022.
- Developed <u>Virtual Reality educational tools</u> to increase student engagement in organic chemistry, 2021.
- <u>The Adult Organic Coloring Book</u>, designed to help adults in the general population appreciate the impact of organic molecules on society, 2021.
- Published <u>The Organic Coloring Book: Cheesy Goes to the Doctor</u>, a book designed to help children appreciate the impact of organic molecules on human health, 2020.
- Developed <u>The O-Chem (Re)Activity Book</u>, a free downloadable chemistry activity book for children, with 2 undergraduate and 3 graduate students, 2020.
- Participated in various invited podcasts, including <u>KCET Studios</u>, <u>Parsing Science</u>, <u>ABC Science</u> <u>Show</u>, and <u>Lab Out Loud</u>), 2017 – present
- Developed <u>RS Chemistry</u>, an interactive educational tool for assigning stereocenters in organic molecules, with 3 undergraduate and 3 graduate students, 2018 – present
- Developed <u>QR Chem</u>, an visualization aid for the 3D structures of molecules, with five undergraduate students, 2018 – present
- Taught organic chemistry to high school students from Valencia High School and gave tours of UCLA research laboratories, May 2018.
- Taught organic chemistry to middle and high school students at the UCLA Geffen Academy, April 2018.

- Created <u>Backside Attack</u>, a free smartphone application that teaches key concepts of organic chemistry, with six undergraduate students, 2018.
- Published <u>The Organic Coloring Book</u>, a book designed to help children appreciate the impact of organic molecules in their everyday lives, 2017. Released a <u>version in Spanish</u> to improve worldwide access in 2021.
- Appeared on the *Discovery Science* Channel TV Show <u>The Quick and the Curious</u> (Season 1, Episode 2) to explain the chemistry of electrolytes, January, 2016.
- Presented at <u>TED[×]UCLA</u> and discussed educational initiatives to overcome the common negative perception of organic chemistry, May, 2015.
- Developed <u>BACON</u> (Biology And Chemistry Online Notes And Tutorials), a series of online tutorials that connect organic chemistry with topics in health, the real world, and pop culture, 2014 present
- Performed chemistry demonstrations for children at Warner Elementary School, October 2012, October 2013, November 2014, October 2015, April 2016, May 2017, December 2017, May 2018, October 2018, and October 2019.
- Performed chemistry demonstrations for children at UCLA Daycare (Krieger), October 2011, October 2014, October 2015, and May 2017
- Hosted Los Angeles middle-school children for UCLA Innoworks Workshop, July 2012, July 2013, and June 2014
- Performed chemistry demonstrations for children of faculty and staff who live on campus for the Halloween celebration held in the UCLA dormitories, October 2013
- Served as a judge for the Los Angeles County Science Fair, March 2012
- Lectured and performed chemistry demonstrations for UCLA March to College Day, May 2012
- Performed chemistry demonstrations for children at UCLA Alumni Day, May 2011 & 2012
- Enabled students to pursue unconventional projects, leading to the creation of organic chemistry rockumentaries, ringtones, and widely viewed <u>music videos</u>, 2010 present.

Publications

Independent Career

- 139. <u>Elucidating the Molecular Programming of a Nonlinear Nonribosomal Peptide Synthetase</u> <u>Responsible for Fungal Siderophore Biosynthesis</u>. Matthew Jenner, Yang Hai, Hong H. Nguyen, Munro Passmore, Will Skyrud, Junyong Kim, Neil K. Garg, Wenjun Zhang, Rachel R. Ogorzalek Loo and Yi Tang. *Nature Communications* **2023**, *in press.*
- **138.** Catalyst-Controlled Annulations of Strained Cyclic Allenes with π -Allylpalladium Complexes. Dominick C. Witkowski, Matthew S. McVeigh, Georgia M. Schererer, Sarah M. Anthony, and Neil K. Garg. *J. Am. Chem. Soc.* **2023**, *145*, in press.
- **137.** Strained-Promoted Reactions of 1,2,3-Cyclohexatriene and its Derivatives. Andrew V. Kelleghan, Ana S. Bulger, Dominick C. Witkowski, and Neil K. Garg. *Nature* **2023**, *in press.*
- **136.** <u>Total Synthesis of Lissodendoric Acid A via Stereospecific Trapping of a Strained Cyclic Allene</u>. Francesca M. Ippoliti, Nathan J. Adamson, Laura G. Wonilowicz, Daniel J. Nasrallah, Evan R. Darzi, Joyann S. Donaldson, and Neil K. Garg. *Science* **2023**, *379*, 261–265.
- 135. <u>A Cannabinoid Fuel Cell Capable of Producing Current by Oxidizing Δ9-</u> <u>Tetrahydrocannabinol</u>. Di Huang, Christina R. Forbes, Neil K. Garg, Evan R. Darzi. Org. Lett. 2022, 24, 6705–6710.
- **134.** <u>A Symmetry-Driven Approach Toward the Total Synthesis of Dodecahedrane</u>. Jason V. Chari, Luca McDermott, Jacob E. Dander, and Bryan J. Symmons. *Tetrahedron* **2022**, *126*, 133041 (*special issue in honor of Professor John Wood*).
- **133.** π -Extension of Heterocycles via a Pd-Catalyzed Heterocyclic Aryne Annulation: π -Extended Donors for TADF Emitters. Katie A. Spence, Jason V. Chari, Mattia Di Niro, Robert

B. Susick, Narcisse Ukwitegetse, Peter I. Djurovich, Marke E. Thompson, and Neil K. Garg. *Chem. Sci.* **2022**, *13*, 5884–5892.

- **132.** <u>Interception of 1,2-Cyclohexadiene with TEMPO Radical</u>. Matthew S. McVeigh and Neil K. Garg. *Tetrahedron* **2021**, *87*, 153539–153543 (*special issue in honor of Professor Stephen Martin*).
- **131.** <u>A Convenient Method for the Removal of Tetrabutylammonium Salts from Desilylation</u> <u>Reactions.</u> Luca McDermott Catena, Dominic C. Witkowski, and Neil K Garg. *Org. Synth.* **2022**, 99, 53–67.
- **130.** Synthesis of Phenanthridinones via the Palladium-Catalyzed Annulation of Benzyne. Dominic C. Witkowski, Luca McDermott Catena, and Neil K Garg. *Org. Synth.* **2022**, *99*, 159–173.
- **129.** Synthesis of Triphenylene via the Palladium-catalyzed Annulation of Benzyne. Katie A. Spence, Milauni M. Mehta, and Neil K. Garg. *Org. Synth.* **2022**, *99*, 174–189.
- **128.** Synthesis of Carboxylic Acids from Benzamide Precursors Using Nickel Catalysis. Ana S. Bulger, Dominick C. Witkowski, and Neil K Garg. *Org. Synth.* Manuscript submitted.
- 127. <u>Cell-Free Total Biosynthesis of Plant Terpene Natural Products Using an Orthogonal Cofactor Regeneration System</u>. Undramaa Bat-Erdene, John M. Billingsley, William C. Turner, Benjamin R. Lichman, Francesca M. Ippoliti, Neil K. Garg, Sarah E. O'Connor, and Yi Tang. ACS Catalysis 2021, 11, 9898–9903.
- **126.** <u>A Platform for On-the-Complex Annulation Reactions with Transient Aryne Intermediates</u>. Jason V. Chari, Katie A. Spence, Robert B. Susick, and Neil K. Garg. *Nat. Commun.* **2021**, *12*, 3706.
- **125.** Palladium-Catalyzed Annulations of Strained Cyclic Allenes. Andrew V. Kelleghan, Dominick C. Witkowski, Matthew S. McVeigh, and Neil K. Garg. *J. Am. Chem. Soc.* **2021**, *143*, 9338–9342.
- 124. <u>Cycloaddition Cascades of Strained Alkynes and Oxadiazinones</u>. Melissa Ramirez, Evan R. Darzi, Joyann S. Donaldson, K. N. Houk, and Neil K. Garg. *Angew. Chem., Int. Ed.* 2021, 60, 18201–18208.
- 123. Total Synthesis of (-)-Strictosidine and Interception of Aryne Natural Product Derivatives <u>"Strictosidyne" and "Strictosamidyne"</u>. Sarah M. Anthony, Veronica Tona, Yike Zou, Lucas A. Morrill, John M. Billingsley, Megan Lim, Yi Tang, K. N. Houk, and Neil K. Garg. J. Am. Chem. Soc. 2021, 143, 7471–7479.
- **122.** Origins of Endo Selectivity in Diels–Alder Reactions of Cyclic Allene Dienophiles. Melissa Ramirez, Dennis Svatunek, Fang Liu, Neil K. Garg, and K. N. Houk. Angew. Chem., Int. Ed. 2021, 60, 14989–14997.
- 121. <u>Taming Radical Pairs in the Crystalline Solid State: Discovery and Total Synthesis of</u> <u>Psychotriadine</u>. Jordan J. Dotson, Ieva Liepuoniute, J. Logan Bachman, Vince M. Hipwell, Saeed I. Khan, K. N. Houk, Neil K. Garg, and Miguel A. Garcia-Garibay. *J. Am. Chem. Soc.* 2021, 143, 4043–4054.
- 120. <u>Reductive Arylation of Amides via a Nickel-Catalyzed Suzuki–Miyaura-Coupling and</u> <u>Transfer-Hydrogenation Cascade</u>. Timothy B. Boit, Milauni M. Mehta, Junyong Kim, Emma L. Baker, and Neil K. Garg. *Angew. Chem. Int. Ed.* **2021**, *60*, 2472–2477.
- **119.** Palladium-Catalyzed Acetylation of Arylbromides. Milauni M. Mehta, Andrew V. Kelleghan, and Neil K Garg. *Org. Synth.* **2021**, *98*, 68–83.
- 118. The Adult Organic Coloring Book. Jacob E. Dander, Evan R. Darzi, and Neil K. Garg.

- 117. Intercepting Fleeting Cyclic Allenes with Asymmetric Nickel Catalysis. Michael M. Yamano, Andrew V. Kelleghan, Qianzhen Shao, Maude Giroud, Bryan J. Simmons, Bo Li, Shuming Chen, K. N. Houk, and Neil K. Garg. Nature 2020, 586, 242–247.
- 116. <u>An Enzymatic Alder-Ene Reaction</u>. Masao Ohashi, Cooper S. Jamieson, Yujuan Cai, Dan Tan, Daiki Kanayama, Man-cheng Tang, Sarah M. Anthony, Jason V. Chari, Joyann S. Barber, Elias Picazo, Thomas B. Kakule, Shugeng Cao, Neil K. Garg, Jiahai Zhou, K. N. Houk, and Yi Tang. Nature 2020, 586, 64–69.
- **115.** <u>Cyanoamidine Cyclization Approach to Remdesivir's Nucleobase</u>. Rachel R. Knapp, Veronica Tona, Taku Okada, Richmond Sarpong, and Neil K. Garg. *Org. Lett.* **2020**, *22*, 8430–8435.
- 114. <u>Reductive Arylation of Amides via a Nickel-Catalyzed Suzuki–Miyaura Coupling and</u> <u>Transfer Hydrogenation Cascade</u>. Timothy B. Boit, Milauni M. Mehta, Junyong Kim, Emma L. Baker, and Neil K. Garg. *Angew. Chem. Int. Ed.* **2020**, *60*, 2472–2477.
- **113.** <u>The Organic Coloring Book: Cheesy Goes to the Doctor</u>. Kaylie Garg, Elaina Garg, and Neil K. Garg.
- 112. <u>Discovery and Total Synthesis of a Bis(Cyclotryptamine) Alkaloid Bearing the Elusive</u> <u>Piperidinoindoline Scaffold</u>. Jordan J. Dotson, J. Logan Bachman, Miguel A. Garcia-Garibay, and Neil K. Garg. *J. Am. Chem. Soc.* **2020**, *142*, 11685–11690.
- 111. <u>Silyl Tosylate Precursors to Cyclohexyne, 1,2-Cyclohexadiene, and 1,2-Cycloheptadiene</u>. Matthew S. McVeigh, Andrew V. Kelleghan, Michael M. Yamano, Rachel R. Knapp, and Neil K. Garg. *Org. Lett.* **2020**, *22*, 4500–4504.
- 110. Dual Neutral Sphingomyelinase 2/Acetylcholinesterase Inhibitors for the Treatment of <u>Alzheimer's Disease</u>. Tina Bilousova, Bryan J. Simmons, Rachel R. Knapp, Chris J. Elias, Jesus Campagna, Mikhail Melnik, Sujyoti Chandra, Samantha Focht, Chunni Zhu, Kanagasabai Vadivel, Barbara Jagodzinska, Whitaker Cohn, Patricia Spilman, Karen H. Gylys, Neil K. Garg, and Varghese John. ACS Chem. Bio. 2020, 15, 1671–1684.
- **109.** Electrochemical Oxidation of Δ⁹-Tetrahydrocannabinol: A Simple Strategy for Marijuana Detection. Evan R. Darzi and Neil K Garg. *Org. Lett.* **2020**, *22*, 3951–3955.
- 108. <u>Evaluation of the Photodecarbonylation of Crystalline Ketones for the Installation of</u> <u>Reverse Prenyl Groups on the Pyrrolidinoindoline Scaffold</u>. Jordan J. Dotson, Neil K. Garg, and Miguel Garcia-Garibay. *Tetrahedron* 2020, *76*, 131181.
- **107.** <u>Nickel-Catalyzed Conversion of Amides to Carboxylic Acids</u>. Rachel R. Knapp, Ana S. Bulger, and Neil K Garg. *Org. Lett.* **2020**, *22*, 2833–2837.
- 106. <u>Safety Assessment of Benzyne Generation from a Silyl Triflate Precursor</u>. Andrew V. Kelleghan, Carl A. Busacca, Max Sarvestani, Ivan Volchkov, Jose M. Medina, and Neil K Garg. Org. Lett. 2020, 22, 1665–1669.
- **105.** <u>Ni-Catalyzed Suzuki–Miyaura Cross-Coupling of Aliphatic Amides on the Benchtop.</u> Milauni M. Mehta, Timothy B. Boit, Jacob E. Dander, and Neil K. Garg. *Org. Lett.* **2020**, *22*, 1–5. (*Featured on the Org. Lett.* <u>Cover</u>).
- **104.** Synthesis of 2,5-Diaryloxadiazinones. Andrew V. Kelleghan, Katie A. Spence, and Neil K Garg. Org. Synth. **2020**, *97*, 189–206.
- **103.** <u>Total Synthesis as a Vehicle for Collaboration</u>. Lucas A. Morrill, Robert B. Susick, Jason V. Chari, and Neil K. Garg. *J. Am. Chem. Soc.* **2019**, *141*, 12423–12443.

- **102.** <u>Base-Mediated Meerwein–Ponndorf–Verley Reduction of Aromatic and Heterocyclic Ketones</u>. Timothy B. Boit, Milauni M. Mehta, and Neil K. Garg. *Org. Lett.* **2019**, *21*, 6447–6451.
- **101.** <u>Chemoenzymatic Conversion of Amides to Enantioenriched Alcohols in Aqueous Medium</u>. Jacob E. Dander, Maude Giroud, Sophie Racine, Oscar Alvizo, David Entwistle, and Neil K. Garg. *Communications Chemistry*, **2019**, *2*, 82.
- 100. <u>Cyclic Alkyne Approach to Heteroatom-Containing Polycyclic Aromatic Hydrocarbon</u> <u>Scaffolds.</u> Evan R. Darzi, Joyann S. Barber, and Neil K. Garg. *Angew. Chem. Int. Ed.* 2019, 58, 9419–9424.
- **99.** <u>Thioesterase-Catalyzed Aminoacylation and Thiolation of Polyketides in Fungi</u>. Man-Cheng Tang, Curt R. Fischer, Jason V. Chari, Dan Tan, Sundari Suresh, Angela Chu, Molly Miranda, Justin Smith, Zhuan Zhang, Neil K. Garg, Robert P. St. Onge, and Yi Tang. *J. Am. Chem. Soc.* **2019**, *141*, 8198–8206.
- 98. Facile Reduction of Amides Using Nickel Catalysis: Reduction of 12-Aminododecanolactam. Bryan J. Simmons, Melissa Ramirez, and Neil K Garg. Org. Synth. 2019, 96, 436–454.
- 97. <u>Synthesis of 8-Hydroxygeraniol</u>. Francesca M. Ippoliti, Joyann S. Barber, Yi Tang, and Neil K. Garg. *Org. Synth.* **2019**, *96*, 586–598.
- 96. <u>Cycloadditions of Oxacyclic Allenes and a Catalytic Asymmetric Entryway to</u> <u>Enantioenriched Cyclic Allenes</u>. Michael M. Yamano, Rachel R. Knapp, Aurapat Ngamnithiporn, Melissa Ramirez, K. N. Houk, Brian M. Stoltz, and Neil K. Garg. *Angew. Chem. Int. Ed.* **2019**, *58*, 5653–5657.
- 95. <u>Concise Approach to Cyclohexyne and 1,2-Cyclohexadiene Precursors</u>. Jason Chari, Francesca Ippoliti, and Neil K. Garg. *J. Org. Chem.* **2019**, *84*, 3652–3655.
- Breaking Amide C–N Bonds in an Undergraduate Organic Chemistry Laboratory. Jacob E. Dander, Lucas A. Morrill, Melinda M. Nguyen, Shuming Chen, and Neil K. Garg. J. Chem. Ed. 2019, 96, 776–780.
- **93.** <u>Synthesis of Fused Indolines by Interrupted Fischer Indolization in a Microfluidic Reactor</u>. Alexander Tuan-Huy Duong, Bryan J. Simmons, Mohammad Parvez Alam, Jesus Campagna, Neil K. Garg, and Varghese John. *Tetrahedron Lett.* **2019**, *60*, 322–326.
- Canvass: A Crowd-Sourced, Natural Product Screening Library for Exploring Biological 92. Space. Sara E. Kearney, Gergely Zahoránszky-Kőhalmi, Kyle R. Brimacombe, Mark J. Henderson, Caitlin Lynch, Tongan Zhao, Kanny K. Wan, Zina Itkin, Christopher Dillon, Min Shen, Dorian M. Cheff, Tobie D. Lee, Danielle Bougie, Ken Cheng, Nathan P. Coussens, Dorjbal Dorjsuren, Richard T. Eastman, Ruili Huang, Michael J. Iannotti, Surendra Karavadhi, Carleen Klumpp-Thomas, Jacob S. Roth, Srilatha Sakamuru, Wei Sun, Steven A. Titus, Adam Yasgar, Ya-Qin Zhang, Jinghua Zhao, Rodrigo B. Andrade, M. Kevin Brown, Noah Z. Burns, Jin K. Cha, Emily E. Mevers, Jon Clardy, Jason A. Clement, Peter A. Crooks, Gregory D. Cuny, Jake Ganor, Jesus Moreno, Lucas A. Morrill, Elias Picazo, Robert B. Susick, Neil K. Garg, Brian C. Goess, Robert B. Grossman, Chambers C. Hughes, Jeffrey N. Johnston, Madeleine M. Joullié, A. Douglas Kinghorn, David G.I. Kingston, Michael J. Krische, Ohyun Kwon, Thomas J. Maimone, Susruta Majumdar, Katherine N. Maloney, Enas Mohamed, Brian T. Murphy, Pavel Nagorny, David E. Olson, Larry E. Overman, Lauren E. Brown, John K. Snyder, John A. Porco, Jr., Fatima Rivas, Samir A. Ross, Richmond Sarpong, Indrajeet Sharma, Jared T. Shaw, Zhengren Xu, Ben Shen, Wei Shi, Corey Stephenson, Alyssa L. Verano, Derek S. Tan, Yi Tang, Richard E. Taylor, Regan J. Thomson, David A. Vosburg, Jimmy Wu, William M. Wuest, Armen Zakarian, Yufeng Zhang, Tianjing Ren, Zhong Zuo, James Inglese, Sam Michael, Anton Simeonov, Wei Zheng, Paul Shinn, Ajit Jadhav, Matthew B. Boxer, Matthew D. Hall, Menghang Xia, Rajarshi Guha, and Jason M. Rohde. ACS Central Science 2018, 4, 1727–1741.
- 91. Computationally Assisted Mechanistic Investigation and Development of Pd-Catalyzed Asymmetric Suzuki-Miyaura and Negishi Cross-Coupling Reactions for Tetra-ortho-Substituted Biaryl Synthesis. Nitinchandra D. Patel, Joshua D. Sieber, Sergei Tcyrulnikov, Bryan J. Simmons, Daniel Rivalti, Krishnaja Duvvuri, Yongda Zhang, Donghong A. Gao, Keith R. Fandrick, Nizar Haddad, Kendricks S. Lao, Hari P. R. Mangunuru, Soumik Biswas, Bo Qu, Nelu

Grinberg, Scott Pennino, Heewon Lee, Jinhua J. Song, B. Frank Gupton, Neil K. Garg, Marisa C. Kozlowski, and Chris H. Senanayake. *ACS Catal.* **2018**, *8*, 10190–20109.

- **90.** <u>Diels–Alder Cycloadditions of Strained Azacyclic Allenes</u>. Joyann S. Barber, Michael M. Yamano, Melissa Ramirez, Evan R. Darzi, Rachel R. Knapp, Fang Liu, K. N. Houk, and Neil K. Garg. *Nature Chemistry* **2018** *10*, 953–960.
- **89.** <u>Synthesis of 8-Hydroxygeraniol</u>. Francesca M. Ippoliti, Joyann S. Barber, Yi Tang, and Neil K. Garg. *J. Org. Chem.* **2018**, *83*, 11323–11326.
- 88. <u>Arynes and Cyclic Alkynes as Synthetic Building Blocks for Stereodefined Quaternary Centers.</u> Elias Picazo, Sarah M. Anthony, Maude Giroud, Adam Simon, Margeaux A. Miller, K. N. Houk, and Neil K. Garg. *J. Am. Chem. Soc.* **2018**, *140*, 7605–7610.
- 87. Enantioselective Total Syntheses of Methanoquinolizidine-Containing Akuammiline Alkaloids and Related Studies. Elias Picazo, Lucas A. Morrill, Robert B. Susick, Jesus Moreno, Joel Smith, and Neil K. Garg. J. Am. Chem. Soc. 2018, 140, 6483–6492.
- Nickel-Catalyzed Suzuki–Miyaura Coupling of Aliphatic Amides. Timothy B. Boit, Nicholas A. Weires, Junyong Kim, and Neil K. Garg. ACS Catal. 2018, 8, 1003–1008.
- 85. <u>Engineering the Biocatalytic Selectivity of Iridoid Production in Saccharomyces</u> <u>cerevisiae</u>. John M. Billingsley, Anthony B. DeNicola, Joyann S. Barber, Man-Cheng Tang, Joe Horecka, Angela Chu, Neil K. Garg, and Yi Tang. *Metab. Eng.* **2017**, *44*, 117–125.
- **84.** <u>Understanding and Interrupting the Fischer Azaindolization Reaction</u>. Bryan J. Simmons, Marie Hoffmann, Pier A. Champagne, Elias Picazo, Katsuya Yamakawa, Lucas A. Morrill, K. N. Houk, and Neil K. Garg. *J. Am. Chem. Soc.* **2017**, *139*, 14833–14836.
- 83. <u>Spectroscopy 101: A Practical Introduction to Spectroscopy and Analysis for</u> <u>Undergraduate Organic Chemistry Laboratories</u>. Lucas A. Morrill, Jacquelin K. Kammeyer, and Neil K. Garg. J. Chem. Ed. 2017, 94, 1584–1586.
- Nickel-Catalyzed Transamidation of Aliphatic Amide Derivatives. Jacob E. Dander, Emma L. Baker, and Neil K. Garg. Chem. Sci. 2017, 8, 6433–6438.
- <u>Conjugated Trimeric Scaffolds Accessible From Indolyne Cyclotrimerizations: Synthesis,</u> <u>Structures, and Electronic Properties</u>. Janice B. Lin, Tejas K. Shah, Adam E. Goetz, Neil K. Garg, and K. N. Houk. *J. Am. Chem. Soc.* **2017**, *139*, 10447–10455.
- **80.** <u>Total Synthesis of (–)-Tubingensin B Enabled by the Strategic Use of an Aryne Cyclization</u>. Michael A. Corsello, Junyong Kim, and Neil K. Garg. *Nature Chemistry* **2017**, *9*, 944–949.
- 79. <u>The Organic Coloring Book</u>. Elaina Garg, Kaylie Garg, and Neil K. Garg.
- 78. Enantioselective Nickel-Catalyzed Mizoroki–Heck Cyclization to Generate Quaternary Stereocenters. Jean-Nicolas Desrosiers, Jialin Wen, Sergei Tcyrulnikov, Soumik Biswas, Bo Qu, Liana Hie, Dmitry Kurouski, Ling Wu, Nelu Grinberg, Nizar Haddad, Carl A. Busacca, Nathan K. Yee, Jinhua J. Song, Neil K. Garg, Xumu Zhang, Marisa C. Kozlowski, and Chris H. Senanayake. Org. Lett. 2017, 19, 3338–3341.
- 77. <u>Kinetic Modeling of the Nickel-Catalyzed Esterification of Amides</u>. Nicholas A. Weires, Daniel D. Caspi, and Neil K. Garg. *ACS Catal.* **2017**, *7*, 4381–4385.
- 76. <u>Heck Cyclizations of Amide Derivatives for the Introduction of Quaternary Centers</u>. Jose M. Medina, Jesus Moreno, Sophie Racine, and Neil K. Garg. *Angew. Chem. Int. Ed.* **2017**, *56*, 6567–6571.
- 75. Collaborative Biosynthesis of Maleimide- and Succinimide-Containing Natural Products by Fungal Polyketide Megasynthases. Michio Sato, Jacob E. Dander, Chizuru Sato, Yiu-sun Hung, Shu-Shan Gao, Man-Cheng Tang, Leibniz Hang, Jaclyn M. Winter, Neil K. Garg, Kenji Watanabe, and Yi Tang. *J. Am. Chem. Soc.* **2017**, *13*9, 5317–5320.
- 74. <u>Nickel-Catalyzed Reduction of Secondary and Tertiary Amides</u>. Bryan J. Simmons, Marie Hoffmann, Jaeyeon Hwang, Moritz K. Jackl, and Neil K. Garg. *Org. Lett.* **2017**, *19*, 1910–1913.
- **73.** <u>Enzyme-Catalyzed Stereoselective Intramolecular Hydroalkoxylation.</u> Shu-Shan Gao, Marc Garcia-Borràs, Joyann S. Barber, Yang Hai, Abing Duan, Neil K. Garg, K. N. Houk, and Yi Tang. *J. Am. Chem. Soc.* **2017**, *139*, 3639–3642.

- 72. Expanding the ROMP Toolbox: Synthesis of Air-Stable Benzonorbornadiene Polymers by Aryne Chemistry. Jose M. Medina, Jeong Hoon Ko, Heather D. Maynard, and Neil K. Garg. Macromolecules 2017, 50, 580–586.
- 71. <u>Nickel-Catalyzed Esterification of Aliphatic Amides</u>. Liana Hie, Emma L. Baker, Sarah M. Anthony, Jean-Nicolas Desrosiers, Chris H. Senanayake, and Neil K. Garg. *Angew. Chem. Int. Ed.* **2016**, *55*, 15129–15132.
- 70. <u>Nickel-Catalyzed Suzuki–Miyaura Coupling in t-Amyl Alcohol for the Preparation of 5-</u> (Furan-3-yl)pyrimidine. Liana Hie and Neil K. Garg. *Org. Synth.* **2016**, *93*, 306–318.
- **69.** Quantification of the Electrophilicity of Benzyne and Related Intermediates. Noah F. Fine Nathel, Lucas A. Morrill, Herbert Mayr, and Neil K. Garg. *J. Am. Chem. Soc.* **2016**, *138*, 10402–10405.
- 68. <u>Construction of Quaternary Stereocenters via Nickel-Catalyzed Heck Cyclizations.</u> Jean-Nicolas Desrosiers, Liana Hie, Soumik Biswas, Olga V. Zatolochnaya, Sonia Rodriguez, Heewon Lee, Nelu Grinberg, Nizar Haddad, Nathan K. Yee, Neil K. Garg, and Chris H. Senanayake. *Angew. Chem. Int. Ed.* **2016**, *55*, 11921–11924.
- 67. <u>Benchtop Delivery of Ni(cod)₂ using Paraffin Capsules</u>. Jacob E. Dander, Nicholas A. Weires, and Neil K. Garg. *Org. Lett.* 2016, *18*, 3934–3936.
- 66. <u>A Two-Step Approach to Achieve Secondary Amide Transamidation Enabled by Nickel</u> <u>Catalysis</u>. Emma L. Baker, Michael M. Yamano, Yujing Zhou, Sarah M. Anthony, and Neil K. Garg. *Nat. Commun.* **2016**, *7*, (doi:10.1038/ncomms11554).
- **65.** <u>Nickel-Catalyzed Alkylation of Amide Derivatives</u>. Bryan J. Simmons, Nicholas A. Weires, Jacob E. Dander, and Neil K. Garg. *ACS Catal.* **2016**, *6*, 3176–3179.
- 64. Expanding the Strained Alkyne Toolbox: Generation and Utility of Oxygen-Containing Strained Alkynes. Tejas K. Shah, Jose M. Medina, and Neil K. Garg. J. Am. Chem. Soc. 2016, 138, 4948–4954.
- 63. <u>P450-Mediated Coupling of Indole Fragments to Forge Communesin and Unnatural</u> <u>Isomers</u>. Hsiao-Ching Lin, Travis C. McMahon, Ashay Patel, Michael Corsello, Adam Simon, Wei Xu, Muxun Zhao, K. N. Houk, Neil K. Garg, and Yi Tang. *J. Am. Chem. Soc.* **2016**, *138*, 4002– 4005.
- 62. <u>Synthetic Studies Pertaining to the 2,3-Pyridyne and 4,5-Pyrimidyne</u>. Jose M. Medina, Mortiz K. Jackl, Robert B. Susick, and Neil K. Garg. *Tetrahedron* 2016, 72, 3629–3634 (*special issue for the Tetrahedron Young Investigator Award*).
- 61. <u>Nitrone Cycloadditions of 1,2-Cyclohexadiene</u>. Joyann S. Barber, Evan D. Styduhar, Hung V. Pham, Travis C. McMahon, K. N. Houk, and Neil K. Garg. *J. Am. Chem. Soc.* **2016**, *138*, 2512–2515.
- 60. <u>Enantioselective Total Syntheses of Akuammiline Alkaloids (+)-Strictamine, (-)-2(S)-Cathafoline, and (-)-Aspidophylline A</u>. Jesus Moreno, Elias Picazo, Lucas A. Morrill, Joel M. Smith, and Neil K. Garg. *J. Am. Chem. Soc.* **2016**, *138*, 1162–1165.
- **59.** <u>Nickel-Catalysed Suzuki–Miyaura Coupling of Amides</u>. Nicholas A. Weires, Emma L. Baker, and Neil K. Garg. *Nature Chemistry* **2016**, *8*, 75–79.
- 58. <u>Discovery of Unclustered Fungal Indole Diterpene Biosynthetic Pathways Through</u> <u>Combinatorial Pathway Reassembly in Engineered Yeast</u>. Man-Cheng Tang, Hsiao-Ching Lin, Dehai Li, Yi Zou, Jian Li, Wei Xu, Ralph A. Cacho, Maureen E. Hillenmeyer, Neil K. Garg, and Yi Tang. *J. Am. Chem. Soc.* **2015**, *137*, 13724–13727.
- 57. <u>Conversion of Amides to Esters by the Nickel-Catalysed Activation of Amide C–N Bonds</u>. Liana Hie, Noah F. Fine Nathel, Tejas K. Shah, Emma L. Baker, Xin Hong, Yun-Fang Yang, Peng Liu, K. N. Houk, and Neil K. Garg. *Nature* **2015**, *524*, 79–83.
- 56. Fischer Indolizations as a Strategic Platform for the Total Synthesis of Picrinine. Joel M. Smith, Jesus Moreno, Ben W. Boal, and Neil K. Garg. J. Org. Chem. 2015, 80, 8954–8967. (Feature Article and Cover).

- 55. <u>Generation and Regioselective Trapping of a 3,4-Piperidyne for the Synthesis of</u> <u>Functionalized Heterocycles</u>. Travis C. McMahon, Jose M. Medina, Yun-Fang Yang, Bryan J. Simmons, K. N. Houk, and Neil K. Garg. *J. Am. Chem. Soc.* **2015**, *137*, 4082–4085.
- **54.** <u>Elucidation of the Concise Biosynthetic Pathway of the Communesin Indole Alkaloids</u>. Hsiao-Ching Lin, Grace Chiou, Yit-Heng Chooi, Travis C. McMahon, Wei Xu, Neil K. Garg, and Yi Tang. *Angew. Chem. Int. Ed.* **2015**, *54*, 3004–3007.
- 53. <u>Computational Predictions of Substituted Benzyne and Indolyne Regioselectivities</u>. Elias Picazo, K. N. Houk, and Neil K. Garg. *Tetrahedron Lett.* **2015**, *56*, 3511–3514. (special issue in memory of Professor Harry Wasserman).
- The Role of Aryne Distortions, Steric Effects, and Charges in Regioselectivities of Aryne Reactions. Jose M. Medina, Joel L. Mackey, Neil K. Garg, and K. N. Houk. J. Am. Chem. Soc. 2014, 136, 15798–15805.
- 51. <u>Total Synthesis of (-)-*N*-Methylwelwitindolinone B Isothiocyanate via a Chlorinative Oxabicycle Ring-Opening Strategy</u>. Nicholas A. Weires, Evan D. Styduhar, Emma L. Baker, and Neil K. Garg. *J. Am. Chem. Soc.* **2014**, *136*, 14710–14713.
- <u>Cycloadditions of Cyclohexynes and Cyclopentyne</u>. Jose M. Medina, Travis C. McMahon, Gonzalo Jiménez-Osés, K. N. Houk, and Neil K. Garg. J. Am. Chem. Soc. 2014, 136, 14706– 14709.
- **49.** <u>Nickel-Catalyzed Amination of Aryl Chlorides and Sulfamates in 2-Methyl-THF</u>. Noah F. Fine Nathel, Junyong Kim, Liana Hie, Xingyu Jiang, and Neil K. Garg. *ACS Catalysis* **2014**, *4*, 3289–3293.
- **48.** <u>Nickel-Catalyzed Suzuki–Miyaura Cross-Coupling in a Green Alcohol Solvent for an</u> <u>Undergraduate Organic Chemistry Laboratory</u>. Liana Hie, Jonah J. Chang, and Neil K. Garg. *J. Chem. Ed.* **2015**, *92*, 571–574.
- **47.** Total Synthesis of the Akuammiline Alkaloid Picrinine. Joel M. Smith, Jesus Moreno, Ben W. Boal, and Neil K. Garg. *J. Am. Chem. Soc.* **2014**, *136*, 4504–4507.
- **46.** <u>Concise Enantiospecific Total Synthesis of Tubingensin A</u>. Adam E. Goetz, Amanda L. Silberstein, Michael A. Corsello, and Neil K. Garg. *J. Am. Chem. Soc.* **2014**, *136*, 3036–3039.
- 45. Total Syntheses of Indolactam Alkaloids (–)-Indolactam V, (–)-Pendolmycin, (–)-Lyngbyatoxin A, and (–)-Teleocidin A-2. Noah F. Fine Nathel, Tejas K. Shah, Sarah M. Bronner, and Neil K. Garg. Chem. Sci. 2014, 5, 2184–2190.
- 44. <u>Palladium-Catalyzed Acetylation of Arenes</u>. Stephen D. Ramgren and Neil K. Garg. *Org. Lett.* **2014**, *16*, 824–827.
- **43.** Enantiospecific Total Synthesis of *N*-Methylwelwitindolinone D Isonitrile. Evan D. Styduhar, Alexander D. Huters, Nicholas A. Weires, and Neil K. Garg. *Angew. Chem. Int. Ed.* **2013**, *52*, 12422–12425.
- **42.** <u>Nickel-Catalyzed Suzuki–Miyaura Couplings in Green Solvents</u>. Stephen D. Ramgren, Liana Hie, Yuxuan Ye, and Neil K. Garg. *Org. Lett.* **2013**, *15*, 3950–3953.
- 41. <u>Expanding the Structural Diversity of Polyketides by Exploring the Cofactor Tolerance of an In-Line Methyltransferase Domain</u>. Jaclyn M. Winter, Grace Chiou, Ian R. Bothwell, Wei Xu, Neil K. Garg, Minkui Luo, and Yi Tang. *Org. Lett.* **2013**, *15*, 3774–3777.
- **40.** EcdGHK are Three Tailoring Iron Oxygenases for Amino Acid Building Blocks of the Echinocandin Scaffold. Wei Jiang, Ralph A. Cacho, Grace Chiou, Neil K. Garg, Yi Tang, and Christopher T. Walsh. *J. Am. Chem. Soc.* **2013**, *135*, 4457–4466.
- Synthesis of Diphenylhexatriene by the Palladium-Catalyzed Dimerization of Cinnamyl Acetate. Tehetena Mesganaw, G-Yoon J. Im, and Neil K. Garg. J. Org. Chem. 2013, 78, 3391– 3393.
- **38.** <u>Regioselective Reactions of 3,4-Pyridynes Enabled by the Aryne Distortion Model</u>. Adam E. Goetz and Neil K. Garg. *Nature Chemistry* **2013**, *5*, 54–60.
- 37. <u>Identification and Characterization of the Chaetoviridin and Chaetomugilin Gene Cluster</u> in *Chaetomium globosum* Reveal Dual Functions of an Iterative Highly Reducing

Polyketide Synthase. Jaclyn M. Winter, Michio Sato, Satoru Sugimoto, Grace Chiou, Neil K. Garg, Yi Tang, and Kenji Watanabe. *J. Am. Chem. Soc.* **2012**, *134*, 17900–17903.

- **36.** Interrupted Fischer Indolization Approach toward the Communesin Alkaloids and Perophoramidine. Alex W. Schammel, Grace Chiou, and Neil K. Garg. *Org. Lett.* **2012**, *14*, 4556–4559.
- 35. <u>Steric Effects Compete with Aryne Distortion to Control Regioselectivities of Nucleophilic</u> <u>Additions to 3-Silylarynes</u>. Sarah M. Bronner, Joel L. Mackey, K. N. Houk, and Neil K. Garg. *J. Am. Chem. Soc.* **2012**, *134*, 13966–13969.
- Nickel-Catalyzed Aminations of Aryl Sulfamates and Carbamates Using an Air-Stable Precatalyst. Liana Hie, Stephen D. Ramgren, Tehetena Mesganaw, and Neil K. Garg. Org. Lett. 2012, 14, 4182–4185.
- **33.** <u>Iron-Catalyzed Alkylations of Aryl Sulfamates and Carbamates</u>. Amanda L. Silberstein, Stephen D. Ramgren, and Neil K. Garg. *Org. Lett.* **2012**, *14*, 3796–3799.
- **32.** <u>Cine Substitution of Arenes Using the Aryl Carbamate as a Removable Directing Group</u>. Tehetena Mesganaw, Noah F. Fine Nathel, and Neil K. Garg. *Org. Lett.* **2012**, *14*, 2918–2921.
- An Efficient Computational Model to Predict the Synthetic Utility of Heterocyclic Arynes. Adam E. Goetz, Sarah M. Bronner, Jordan D. Cisneros, Joshua M. Melamed, Robert S. Paton, K. N. Houk, and Neil K. Garg. Angew. Chem. Int. Ed. 2012, 51, 2758–2762.
- Total Synthesis of Oxidized Welwitindolinones and (-)-N-Methylwelwitindolinone C Isonitrile. Kyle W. Quasdorf, Alexander D. Huters, Michael W. Lodewyk, Dean J. Tantillo, and Neil K. Garg. J. Am. Chem. Soc. 2012, 134, 1396–1399.
- 29. <u>Synthesis of (+)-Phenserine using an Interrupted Fischer Indolization Reaction</u>. Alex W. Schammel, Grace Chiou, and Neil K. Garg. *J. Org. Chem.* 2012, 77, 725–728.
- Total Synthesis of (-)-N-Methylwelwitindolinone C Isothiocyanate. Alexander D. Huters, Kyle W. Quasdorf, Evan D. Styduhar, and Neil K. Garg. J. Am. Chem. Soc. 2011, 133, 15797–15799 (featured on the cover of JACS).
- Nickel-Catalyzed Amination of Aryl Carbamates and Sequential Site-Selective Cross-Couplings. Tehetena Mesganaw, Amanda L. Silberstein, Stephen D. Ramgren, Noah Fine Nathel, Xin Hong, Peng Liu, and Neil K. Garg. Chem. Sci. 2011, 2, 1766–1771.
- 26. <u>Total Synthesis of (±)-Aspidophylline A</u>. Liansuo Zu, Ben W. Boal, and Neil K. Garg. *J. Am. Chem. Soc.* 2011, 133, 8877–8879.
- 25. <u>Suzuki–Miyaura Cross-Coupling of Aryl Carbamates and Sulfamates: Experimental and Computational Studies</u>. Kyle W. Quasdorf, Aurora Antoft-Finch, Peng Liu, Amanda L. Silberstein, Anna Komaromi, Tom Blackburn, Stephen D. Ramgren, K. N. Houk, Victor Snieckus, and Neil K. Garg. *J. Am. Chem. Soc.* **2011**, *133*, 6352–6363.
- 24. <u>Why Do Some Fischer Indolizations Fail?</u> Nihan Çelebi-Ölçüm, Ben W. Boal, Alexander D. Huters, Neil K. Garg, and K. N. Houk. *J. Am. Chem. Soc.* **2011**, *133*, 5752–5755.
- 23. <u>Overturning Indolyne Regioselectivities and Synthesis of Indolactam V</u>. Sarah M. Bronner, Adam E. Goetz, and Neil K. Garg. *J. Am. Chem. Soc.* 2011, *133*, 3832–3835.
- 22. <u>A Fungal Nonribosomal Peptide Synthetase Module that can Synthesize Thiopyrazines</u>. Kangjian Qiao, Hui Zhou, Wei Xu, Wenjun Zhang, Neil K. Garg, and Yi Tang. *Org. Lett.* 2011, *13*, 1758–1761.
- 21. <u>Nickel-Catalyzed Amination of Aryl Sulfamates</u>. Stephen D. Ramgren, Amanda L. Silberstein, Yang Yang, and Neil K. Garg. *Angew. Chem. Int. Ed.* **2011**, *50*, 2171–2173.
- 20. Indolyne Experimental and Computational Studies: Synthetic Applications and Origins of Selectivities of Nucleophilic Additions. G-Yoon J. Im, Sarah M. Bronner, Adam E. Goetz, Robert S. Paton, Paul H.-Y. Cheong, K. N. Houk, and Neil K. Garg. J. Am. Chem. Soc. 2010, 132, 17933–17944.
- **19.** Exploration of the Interrupted Fischer Indolization Reaction. Alex W. Schammel, Ben W. Boal, Liansuo Zu, Tehetena Mesganaw, and Neil K. Garg. *Tetrahedron* **2010**, *66*, 4687–4695 (special issue for Professor Brian Stoltz's receipt of the Tetrahedron Young Investigator Award).

- Indolyne and Aryne Distortions and Nucleophilic Regioselectivities. Paul H.-Y. Cheong, Robert S. Paton, Sarah M. Bronner, G-Yoon J. Im, Neil K. Garg, and K. N. Houk. J. Am. Chem. Soc. 2010, 132, 1267–1269.
- **17.** <u>Suzuki–Miyaura Coupling of Aryl Carbamates, Carbonates, and Sulfamates</u>. Kyle W. Quasdorf, Michelle Riener, Krastina V. Petrova, and Neil K. Garg. *J. Am. Chem. Soc.* **2009**, *131*, 17748–17749.
- Efficient Synthesis of 2-(Trimethylsilyl)phenyl Trifluoromethanesulfonate: A Versatile Precursor to o-Benzyne. Sarah M. Bronner and Neil K. Garg. J. Org. Chem. 2009, 74, 8842– 8843.
- 15. <u>An Interrupted Fischer Indolization Approach Toward Fused Indoline-Containing Natural</u> <u>Products</u>. Ben W. Boal, Alex W. Schammel, and Neil K. Garg. *Org. Lett.* **2009**, *11*, 3458–3461.
- 14. <u>Concise Synthesis of the Bicyclic Scaffold of *N*-Methylwelwitindolinone C Isothiocyanate via an Indolyne Cyclization. Xia Tian, Alexander D. Huters, Colin J. Douglas, and Neil K. Garg. *Org. Lett.* **2009**, *11*, 2349–2351.</u>
- **13.** <u>Indolynes as Electrophilic Indole Surrogates: Fundamental Reactivity and Synthetic Applications</u>. Sarah M. Bronner, Kevin B. Bahnck, and Neil K. Garg. *Org. Lett.* **2009**, *11*, 1007–1010.
- 12. <u>Cross-Coupling Reactions of Aryl Pivalates with Boronic Acids</u>. Kyle W. Quasdorf, Xia Tian, and Neil K. Garg. *J. Am. Chem. Soc.* **2008**, *130*, 14422–14423.

Prior to Independent Career

- 11. <u>Total Synthesis of (–)-Sarain A</u>. Michael H. Becker, Peter Chua, Robert Downham, Christopher J. Douglas, Neil K. Garg, Sheldon Hiebert, Stefan Jaroch, Richard T. Matsuoka, Joy A. Middleton, Fay W. Ng, and Larry E. Overman. *J. Am. Chem. Soc.* **2007**, *129*, 11987.
- **10.** <u>Total Synthesis of (–)-Sarain A</u>. Neil K. Garg, Sheldon Hiebert, and Larry E. Overman. *Angew. Chem. Int. Ed.* **2006**, *45*, 2912.
- 9. The Utility of the Classical and Oxidative Heck Reactions in Natural Product Synthesis: <u>Studies Toward the Total Synthesis of Dragmacidin F</u>. Neil K. Garg, Daniel D. Caspi, and Brian M. Stoltz. Synlett (Special Issue) 2006, 3081.
- 8. <u>Effects of a Modified Dye-Labeled Nucleotide Spacer Arm on Incorporation by</u> <u>Thermophilic DNA Polymerases</u>. Christopher J. Lacenere, Neil K. Garg, Brian M. Stoltz, and Stephen R. Quake. *Nucleosides, Nucleotides & Nucleic Acids* **2006**, *25*, 9.
- 7. <u>A Ligand-Free Solid-Supported System for Sonogashira Couplings: Applications in Nucleoside Chemistry</u>. Neil K. Garg, Carolyn C. Woodroofe, Christopher J. Lacenere, Stephen R. Quake, and Brian M. Stoltz. *Chem. Commun.* 2005, 4551.
- 6. <u>Heterogeneous Reductive Isomerization Reaction Using Catalytic Pd/C and H2</u>. Daniel D. Caspi, Neil K. Garg, and Brian M. Stoltz. *Org. Lett.* **2005**, *7*, 2513.
- The Development of an Enantiodivergent Strategy for the Total Synthesis of (+)- and (-)-Dragmacidin F from a Single Enantiomer of Quinic Acid. Neil K. Garg, Daniel D. Caspi, and Brian M. Stoltz. J. Am. Chem. Soc. 2005, 127, 5970.
- 4. <u>The Formal Total Synthesis of Dragmacidin B, trans-Dragmacidin C, and cis- and trans-</u> <u>Dihydrohamacanthins A</u>. Neil K. Garg and Brian M. Stoltz. *Tetrahedron Lett.* **2005**, *46*, 2423.
- **3.** <u>Synthesis of Bis(indole)-1,2,4-Triazinones</u>. Neil K. Garg and Brian M. Stoltz. *Tetrahedron Lett.* **2005**, *46*, 1997.
- 2. <u>The Total Synthesis of (+)-Dragmacidin F</u>. Neil K. Garg, Daniel D. Caspi, and Brian M. Stoltz. *J. Am. Chem. Soc.* 2004, *126*, 9552.
- 1. <u>The First Total Synthesis of Dragmacidin D</u>. Neil K. Garg, Richmond Sarpong, and Brian M. Stoltz. *J. Am. Chem. Soc.* **2002**, *124*, 13179.

Publications (Reviews, Book Chapters, Accounts, etc.)

Independent Career

- **34.** <u>Mentoring is More Important than Ever</u>. Jennifer M. Heemstra and Neil K. Garg. *Nature Reviews Chemistry* **2022**, *6*, 757–758.
- **33.** <u>Merging Metals and Strained Intermediates</u>. Katie A. Spence, Arismel Tena Meza, and Neil K. Garg. *Chem Catalysis* **2022**, *2*, 1870–1879.
- **32.** <u>Education Surges When Students Learn Together</u>. Neil K. Garg and Kevin D. Dougherty. *Inside Higher Ed* **2022**, published online May 25, 2022.
- **31.** <u>Gaming Stereochemistry</u>. Francesca M. Ippoliti, Melinda M. Nguyen, Amber J. Reilly, and Neil K. Garg. *Nature Reviews Chemistry* **2022**, *6*, 373–374.
- **30.** <u>Advancing Global Chemical Education Through Interactive Teaching Tools</u>. Francesca M. Ippoliti, Jason V. Chari, and Neil K. Garg. *Chem. Sci.* **2022**, *13*, 5790–5796.
- 29. <u>Catalysis in Modern Drug Discovery: Insights from a Graduate Student-Taught</u> <u>Undergraduate Course</u>. Jason V. Chari, Rachel R. Knapp, Timothy B. Boit, and Neil K. Garg. *J. Chem. Ed.* 2022, *99*, 1296–1303.
- 28. <u>Leveraging Fleeting Strained Intermediates to Access Complex Scaffolds</u>. Sarah M. Anthony, Laura G. Wonilowicz, Matthew S. McVeigh, and Neil K. Garg. *JACS Au* 2021, 1, 897–912.
- 27. <u>Activation of C–O and C–N Bonds Using Non-Precious Metal Catalysis</u>. Timothy B. Boit, Ana S. Bulger, Jacob E. Dander, and Neil K. Garg. *ACS Catal.* **2020**, *10*, 12109–12126.
- **26.** <u>Putting Mentoring First</u>. Jen Heemstra and Neil Garg. *Chemical & Engineering News* **2020**, *98*, (https://cen.acs.org/careers/employment/Putting-mentoring-first/98/i35).
- 25. <u>Treating a Global Health Crisis with a Dose of Synthetic Chemistry</u>. Melissa A. Hardy, Brandon A. Wright, J. Logan Bachman, Timothy B. Boit, Hannah M. S. Haley, Rachel R. Knapp, Robert F. Lusi, Taku Okada, Veronica Tona, Neil K. Garg, Richmond Sarpong. ACS Central Sci. 2020, 6, 1017–1030.
- 24. From Glovebox to Benchtop. Timothy B. Boit, Katie A. Spence, and Neil K. Garg. *Nature Catalysis* 2020, *3*, 2–3.
- **23.** <u>Teaching the Large Lecture</u>. An Essay in "The Academics Handbook". Genevieve Carpio and Neil K. Garg. **2020**, *Duke University Press.*
- **22.** <u>From Heavy Water to Heavy Aldehydes</u>. Sarah M. Anthony, Andrew V. Kelleghan, Milauni M. Mehta, and Neil K. Garg. *Nature Catalysis* **2019**, *2*, 1058–1059.
- 21. <u>How Organic Chemistry Became One of UCLA's Most Popular Classes</u>. Neil K. Garg. *J. Biol. Chem.* 2019, 294, 17678–17683.
- 20. <u>Empowering Students to Innovate: Engagement in Organic Chemistry Teaching</u>. Neil K. Garg. *Angew. Chem. Int. Ed.* 2018, *57*, 15612–15613.
- Smart Access to 3D Structures. Johnny Dang, Brian Lin, Julia Yuan, Shawn T. Schwartz, Rishabh M. Shah, and Neil K. Garg. *Nature Reviews Chemistry* 2018, doi: 10.1038/s41570-018-0021-y.
- **18.** <u>Shining a Light on Amine Synthesis</u>. Joyann S. Barber, Francesca M. Ippoliti, and Neil K. Garg. *Nature Catalysis* **2018**, *1*, 97–98.
- 17. Indole Diterpenoid Natural Products as the Inspiration for New Synthetic Methods and Strategies. Michael A. Corsello, Junyong Kim, and Neil K. Garg. *Chem. Sci.* 2017, *8*, 5836–5844.
- 16. Organic Chemistry Can Sizzle. Tejas K. Shah and Neil K. Garg. *Nature Reviews Chemistry* 2017, doi:10.1038/s41570-017-0020.
- **15.** <u>Breaking Amides Using Nickel Catalysis.</u> Jacob E. Dander and Neil K. Garg. *ACS Catalysis* **2017**, *7*, 1413–1423.

- Pardon the Interruption: A Modification of Fischer's Venerable Reaction for the Synthesis of Heterocycles and Natural Products. Robert Susick, Lucas A. Morrill, Elias Picazo, and Neil K. Garg Synlett 2017, 28, 1–11 (special issue for the Thieme-IUPAC Prize).
- **13.** <u>Synthetic Chemistry Fuels Interdisciplinary Approaches to the Production of Artemisinin</u>.</u> Michael A. Corsello and Neil K. Garg. *Nat. Prod. Rep.* **2015**, *3*2, 359–366.
- 12. <u>Pyridynes and Indolynes as Building Blocks for Functionalized Heterocycles and Natural</u> <u>Products</u>. Adam E. Goetz, Tejas K. Shah, and Neil K. Garg. *Chem. Commun.* **2015**, *51*, 34–45.
- 11. <u>Cascade Reactions: A Driving Force in Akuammiline Alkaloid Total Synthesis</u>. Joel M. Smith, Jesus Moreno, Ben W. Boal, and Neil K. Garg. *Angew. Chem. Int. Ed.* **2014**, *54*, 400–412.
- **10.** Enabling the Use of Heterocyclic Arynes in Chemical Synthesis. Adam E. Goetz and Neil K. Garg. *J. Org. Chem.* **2014**, *79*, 846–851.
- 9. <u>Ni- and Fe-Catalyzed Cross-Coupling Reactions of Phenol Derivatives</u>. Tehetena Mesganaw and Neil K. Garg. *Org. Process Res. Dev.* **2013**, *17*, 29–39.
- 8. <u>Total Syntheses of the Elusive Welwitindolinones with Bicyclo[4.3.1] Cores</u>. Alexander D. Huters, Evan D. Styduhar, and Neil K. Garg. *Angew. Chem. Int. Ed.* **2012**, *51*, 3758–3765.
- 7. <u>Understanding and Modulating Indolyne Regioselectivities</u>. Sarah M. Bronner, Adam E. Goetz, and Neil K. Garg. *Synlett* **2011**, 2599–2604 (*invited SYNPACTS contribution*).
- 6. <u>Nickel-Catalyzed Cross-Couplings Involving Carbon–Oxygen Bonds</u>. Brad Rosen, Kyle W. Quasdorf, Daniella A. Wilson, Na Zhang, Ana-Maria Resmerita, Neil K. Garg, and Virgil Percec. *Chem. Rev.* **2011**, *111*, 1346–1416 (*invited contribution*).
- Indoles and Indolizidines in Heterocycles in Natural Product Synthesis. Sarah M. Bronner, G-Yoon J. Im, and Neil K. Garg; K. C. Majumdar and S. K. Chattopadhyay, Eds.; Wiley–VCH, 2011.
- 4. <u>Synthetic Studies Inspired by Vinigrol</u>. Alexander D. Huters and Neil K. Garg. *Chem. Eur. J.* **2010**, *16*, 8586–8595.
- **3.** <u>**Bis(tricyclohexylphosphine)dichloronickel</u></u>. Kyle W. Quasdorf and Neil K. Garg.** *Encyclopedia* **of Reagents for Organic Synthesis, 2010 (***invited contribution***).</u>**

Prior to Independent Career

- <u>A Unified Synthetic Approach to the Pyrazinone Dragmacidins</u>. Neil K. Garg and Brian M. Stoltz. Chem. Commun. (Feature Article) 2006, 3769.
- 1. <u>The Total Synthesis of Dragmacidins D and F</u>. Neil K. Garg, Ph.D. Thesis, California Institute of Technology, March 2005.

Patents

Independent Career

- 6. Systems and Methods for the Detection of Phenolic Cannabinoids. Neil K. Garg and Evan R. Darzi. Patent Cooperation Treaty No. PCT/US20/58535, US Patent Application No. 17/755,309; European Patent Application No. 20882717.0; Canadian Patent Application No. 3,155,790; Australian Patent Application No. 2020373122.
- 5. Methods for the Synthesis of Heteroatom Containing Polycyclic Aromatic Hydrocarbons. Neil K. Garg, Evan R. Darzi, Joyann S. Barber, Robert B. Susick, Jason V. Chari, and Katie A. Spence. US Patent Application No. US2021/0323987.
- 4. Compositions and Methods for the Treatment of Neurodegenerative Diseases. Varghese John, Tina Bilousova, Bryan Simmons, Neil Garg, Jesus Campagna, and Barbara Jagodzinska. International Patent Application No. WO2021/142221.
- **3.** Aminations of Aryl Alcohols with Amines. Neil K. Garg, Stephen D. Ramgren, Amanda L. Silberstein, and Kyle W. Quasdorf. US Patent US9567307.

2. Cross-Coupling of Phenolic Derivatives. Neil K. Garg, Kyle W. Quasdorf, and Xia Tian. US Patent US8546607.

Prior to Independent Career

1. Fluorescently Labeled Nucleoside Triphosphates and Analogs for Multiplex Sequencing of Nucleic Acids. Neil K. Garg, Christopher J. Lacenere, Brian M. Stoltz, Stephen R. Quake, and Philip R. Buzby. US 2005170367.

Presentations

- **280. TBD**. *Trinity University, Dreyfus Lectureship*, San Antonio, TX, June 25, 2024.
- **279. TBD**. *Trinity University, Dreyfus Lectureship*, San Antonio, TX, June 24, 2024.
- **278.** Strained Intermediates and Chemical Education as Vehicles for Innovation. *Janssen,* Spring House, PA (Virtual presentation), July 27, 2023.
- **277. Popularizing Organic Chemistry**. *Westwood Women's Bruin Club, UCLA*, Los Angeles, CA, May 17, 2023.
- **276.** Marijuana Breathalyzer Technology. 2023 California Cannabis Research Briefing, Davis, CA, April 28, 2023.
- **275.** Strained Intermediates and Chemical Education as Vehicles for Innovation. *Bristol-Myers Squibb,* La Jolla, CA, February 27, 2023.
- 274. Transforming Organic Chemistry Education Through Community and Innovation. Harvard University Derek Bok Center for Teaching and Learning, Herschbach Lectureship, Cambridge, MA, November 4, 2022.
- 273. Strained Intermediates and Chemical Education as Vehicles for Innovation. Harvard University Department of Chemistry & Chemical Biology, Herschbach Lectureship, Cambridge, MA, November 3, 2022.
- **272.** Strained Intermediates and Chemical Education. *Mukaiyama Award Lecture 38th Seminar* on Synthetic Organic Chemistry, Kyushu, Japan, September 28, 2022.
- 271. Strained Intermediates and Chemical Education. The Kitasato Institute and Kitasato University, Kitakyushu, Japan, September 27, 2022.
- **270.** Strained Intermediates and Chemical Education as Vehicles for Innovation. ACS National Meeting, Chicago, IL, August, 2022.
- **269.** Our Collaborative Story of Strained Intermediates: Synthesis and Theory. *Keynote Lecture Merck Global Chemistry Summit,* Skytop, PA, June 1, 2022.
- **268.** Organic Chemistry 101. Keynote Lecture UCLA Chancellor's Society Bruin Woods Weekend, UCLA Lake Arrowhead Conference Center, Lake Arrowhead, CA, April 30, 2022.
- **267.** Amides and Chemical Education as Vehicles for Innovation. *Pacifichem* (Virtual presentation), December 18, 2021.
- 266. From Fishkill, NY to Academia & Nickel Catalysis. UCLA Chem 101 Lecture, University of California, Los Angeles, CA (Virtual presentation), July 7, 2021.
- 265. How Organic Chemistry Became One of UCLA's Most Popular Classes. Cal Poly Pomona, Goldstein Distinguished Lecture, Pomona, CA (Virtual presentation), April 30, 2021.
- 264. Strained Intermediates and Chemical Education as Vehicles for Innovation. University of *Pennsylvania, Philadelphia, PA (Virtual presentation), April 26, 2021.*
- **263.** From Fishkill, NY to UCLA. Student Affiliates of the American Chemical Society Lecture, University of California, Los Angeles, CA (Virtual presentation), April 21, 2021.
- **262.** Meet the Professors Nextdoor. UCLA Bruin Day Webinar, University of California, Los Angeles, CA (Virtual presentation), April 13, 2021.
- 261. Amides, Marijuana, VR...and Computations. UCLA Chem 145/245 Lecture, University of California, Los Angeles, CA (Virtual presentation), March 8, 2021.
- **260.** Let's Talk O-Chem: What is Humor? UCLA Arts: 10 Questions (Virtual presentation), November 16, 2020.
- 259. A Simple Strategy for THC Detection Using Electrochemistry & Recent Initiatives in Chemical Education. *IKA Webinar* (Virtual presentation), November 5, 2020.
- **258.** Strained Intermediates and Chemical Education as Vehicles for Innovation. *Gettysburg College, Skeptical Chymists Lecture,* Gettysburg, PA (Virtual presentation), November 2, 2020.

- **257.** Strained Intermediates and Chemical Education as Vehicles for Innovation. *Williams College, 1960's Scholars Lecture, Williamstown, MA (Virtual presentation), October 30, 2020.*
- **256.** Strained Intermediates and Chemical Education as Vehicles for Innovation. ACS Division of Organic Chemistry Virtual Symposium, October 21, 2020.
- **255.** Strained Intermediates and Chemical Education as Vehicles for Innovation. *University of St. Thomas*, St. Paul, MN (Virtual presentation), October 16, 2020.
- **254.** Chemical Education as Vehicles for Innovation. *Course Hero Education Summit,* Redwood City, CA (Virtual presentation), July 29, 2020.
- **253.** From Fishkill, NY to Academia & Nickel Catalysis. UCLA Chem 101 Lecture, University of California, Los Angeles, CA (Virtual presentation), July 17, 2020.
- **252.** Meet the Professors Nextdoor. UCLA Bruin Day Webinar, University of California, Los Angeles, CA, April 10, 2020.
- **251.** Strained Intermediates and Chemical Education as Vehicles for Innovation. *Massachusetts Institute of Technology, Organic Syntheses Lectureship*, Cambridge, MA, February 20, 2020.
- **250.** Strained Intermediates and Chemical Education as Vehicles for Innovation. *Pharmacyclics* (*AbbVie*), Sunnyvale, CA, February 6, 2020.
- 249. Recent Forays in Methods Development and Complex Molecule Synthesis. *Northeastern University*, Boston, MA, November 21, 2019.
- 248. How Organic Chemistry Became One of UCLA's Most Popular Classes. James Flack Norris Teaching Prize Lecture – Northeastern University, Boston, MA, November 20, 2019.
- 247. Research, Mentorship, Teaching, and Family Life: Realities and Joys of a Professorial Path. Keynote Lecture for the Caltech Project for Effective Teaching California Institute of Technology, Pasadena, CA, October 13, 2019.
- 246. How Organic Chemistry Became One of UCLA's Most Popular Classes. Caltech Project for Effective Teaching Lectureship – California Institute of Technology, Pasadena, CA, October 13, 2019.
- 245. Strained Intermediates and Chemical Education as Vehicles for Innovation. Keynote Alumnus Awardee Lecture Amgen Young Investigator Award Symposium, Amgen, Thousand Oaks, CA, October 3, 2019.
- 244. Recent Forays in Methods Development and Complex Molecule Synthesis. *Reilly Lecture University of Notre Dame,* Notre Dame, IN, September 12, 2019.
- 243. How Organic Chemistry Became One of UCLA's Most Popular Classes. *Reilly Lecture University of Notre Dame*, Notre Dame, IN, September 11, 2019.
- **242.** Strained Intermediates and Chemical Education as Vehicles for Innovation. *Michigan State University*, East Lansing, MI, September 10, 2019.
- 241. Amides and Chemical Education as Vehicles for Innovation. Plenary Lecture EFMC International Symposium on Advances in Synthetic and Medicinal Chemistry, Athens, Greece, September 4, 2019.
- 240. Strained Intermediates, Amides, and Chemical Education as Vehicles for Innovation. *Vertex,* Cambridge, MA, May 7, 2019.
- **239.** Strained Intermediates, Amides, and Chemical Education as Vehicles for Innovation. *Biogen,* Cambridge, MA, May 6, 2019.
- **238.** From Selling Knives and Blockbuster Video to Academia. Alpha Epsilon Delta Student Prehealth Organization, Faculty Lecturer Baylor University, Waco, TX, April 24, 2019.
- **237.** Optimizing the Student Experience. Robert Foster Cherry Educational Summit Keynote Lecture Baylor University, Waco, TX, April 24, 2019.
- **236.** How Organic Chemstry Became One of UCLA's Most Popular Classes. NYU Distinguished Alumni Award Address, NYU Distinguished Alumni Award Reception, New York, NY, April 5, 2019.
- 235. How Organic Chemstry Became One of UCLA's Most Popular Classes. ASBMB Award for Exemplary Contributions to Education Lecture, ASBMB Annual Meeting, Orlando, FL, April 7, 2019.
- **234.** Strained Intermediates, Amides, and Chemical Education as Vehicles for Innovation. *Texas A&M University*, College Station, TX, February 13, 2019.
- **233.** How Organic Chemistry Became One of UCLA's Most Popular Classes. Honors College Lectureship University of Mary Hardin–Baylor, Belton, TX, February 6, 2019.
- **232.** Empowering Students to Innovate. *Robert Foster Cherry Award Lecture Baylor University,* Waco, TX, February 1, 2019.

- 231. How Organic Chemistry Became One of UCLA's Most Popular Classes. L. Carroll King Memorial Lecture – Northwestern University, Evanston, IL, November 13, 2018.
- 230. Recent Forays in Methods Development and Complex Molecule Synthesis. L. Carroll King Memorial Lecture – Northwestern University, Evanston, IL, November 12, 2018.
- **229.** Amides and Chemical Education as Vehicles for Innovation. *Boston College,* Boston, MA, November 6, 2018.
- 228. Organic Chemistry: Why UCLA Students Can't Wait to Take It. Faculty Lecturer UCLA Bruin Family Weekend UCLA, Los Angeles, CA, October 26, 2018.
- 227. How Organic Chemistry Became One of UCLA's Most Popular Classes. Burkett Lecture DePauw University, Greencastle, IN, October 24, 2018.
- **226.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Burkett Lecture DePauw University,* Greencastle, IN, October 24, 2018.
- **225.** Recent Forays in Methods Development and Complex Molecule Synthesis. R.C. Fuson Lecture University of Illinois, Urbana-Champaign, IL, October 23, 2018.
- **224.** How Organic Chemistry Became One of UCLA's Most Popular Classes. *R.C. Fuson Lecture University of Illinois,* Urbana-Champaign, IL, October 22, 2018.
- **223.** A Faculty Perspective. The UCLA Experience Admission Counselor Day, University of California, Los Angeles, CA, October 19, 2018.
- **222.** From Breaking Bad to Building Bonds. Faculty Lecturer UCLA West Los Angeles Chancellor's Society Reception, Los Angeles, CA, September 30, 2018.
- **221.** Amides and Chemical Education as Vehicles for Innovation. RSC Higher Education Award Lecture Sir Derek Barton Centenary Symposium, Imperial College, London, UK, September 7, 2018.
- **220.** Amides and Chemical Education as Vehicles for Innovation. *RSC Higher Education Award Lecture, Queen Mary, University of London*, London, UK, September 6, 2018.
- **219.** Amides and Chemical Education as Vehicles for Innovation. *RSC Higher Education Award Lecture, University of Kent*, Canterbury, UK, September 4, 2018.
- **218.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Merck,* West Point, PA, August 17, 2018.
- **217.** Recent Forays in Methods Development and Complex Molecule Synthesis. *GlaxoSmithKline,* Upper Providence, PA, August 16, 2018.
- **216.** Amides and Chemical Education as Vehicles for Innovation. *University of California,* Santa Cruz, CA, May 14, 2018.
- **215.** Amides and Chemical Education as Vehicles for Innovation. *Emory University,* Atlanta, GA, May 10, 2018.
- **214.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Eli Lilly,* Indianapolis, IN, May 1, 2018.
- **213.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Dow AgroSciences,* Indianapolis, IN, April 30, 2018.
- **212.** Organic Chemistry 101. Faculty Lecturer Geffen Academy at UCLA, Los Angeles, CA, April 7, 2018.
- **211.** Breaking Amides and Recent Initiatives in Chemical Education. *Portland State University*, Portland, OR, April 20, 2018.
- **210.** Breaking Amides and Recent Initiatives in Chemical Education. *University of Utah*, Salt Lake City, UT, April 19, 2018.
- **209.** Breaking Amides Using Nickel Catalysis. Keynote Lecture Organic Reactions Catalysis Society Conference, San Diego, CA, April 11, 2018.
- **208.** Nickel-Catalyzed Reactions of Amide Derivatives. Homogeneous Catalysis for Applied Organic Synthesis Symposium ACS National Meeting, New Orleans, LA, March 20, 2017.
- **207.** Breaking Amides and Recent Initiatives in Chemical Education. Distinguished Organic Seminar Speaker – Modern Chemistry Series – University of British Columbia, Vancouver, Canada, March 13, 2018.
- **206.** How Organic Chemistry Became One of UCLA's Most Popular Classes. Emerson Lecture– Georgia Institute of Technology, Atlanta, GA, March 9, 2018.
- **205.** Recent Forays in Methods Development and Complex Molecule Synthesis. Emerson Lecture– Georgia Institute of Technology, Atlanta, GA, March 8, 2018.

- **204.** How Organic Chemistry Became One of UCLA's Most Popular Classes. Dow Foundation Distinguished Lecture University of California, Santa Barbara, CA, November 3, 2017.
- **203.** Recent Forays in Methods Development and Complex Molecule Synthesis. Dow Foundation Distinguished Lecture University of California, Santa Barbara, CA, November 2, 2017.
- **202.** How Organic Chemistry Became One of UCLA's Most Popular Classes. Robert Foster Cherry Finalist Lecture Baylor University, Waco, TX, October 17, 2017.
- **201.** How Organic Chemistry Became One of UCLA's Most Popular Classes. Robert Foster Cherry Finalist Lecture UCLA, Los Angeles, CA, October 6, 2017.
- **200.** A Faculty Perspective. The UCLA Experience Admission Counselor Day, University of California, Los Angeles, CA, September 29, 2017.
- **199.** How Organic Chemistry Became One of UCLA's Most Popular Classes. *Tomlinson Teaching Lecturership McGill University,* Montreal, Canada, September 20, 2017.
- **198.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Tomlinson Teaching Lecturership McGill University,* Montreal, Canada, September 19, 2017.
- **197.** Breaking Amides Using Nickel Catalysis. *Modern Chemistry of the Amide Bond Symposium ACS National Meeting*, Washington, DC, August 21, 2017.
- **196.** Organic Chemistry Music Videos. Faculty Lecturer Bruin Woods, UCLA Lake Arrowhead Conference Center, Lake Arrowhead, CA, June 27, 2017.
- **195.** The Forefront of Education and Discovery. Faculty Lecturer Bruin Woods, UCLA Lake Arrowhead Conference Center, Lake Arrowhead, CA, June 26, 2017.
- **194.** Organic Chemistry 101. Faculty Lecturer Bruin Woods, UCLA Lake Arrowhead Conference Center, Lake Arrowhead, CA, June 25, 2017.
- **193.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Katritzky Lecturer University of Florida*, Gainesville, FL, May 30, 2017.
- **192.** Can Learning Organic Chemistry Actually Be Fun? *Faculty Lecturer Women & Philanthropy, University of California*, Los Angeles, CA, May 24, 2017.
- **191.** Recent Forays in Methods Development and Complex Molecule Synthesis. *GlaxoSmithKline,* Stevenage, England, UK, May 12, 2017.
- **190.** Recent Forays in Methods Development and Complex Molecule Synthesis. *RSC Merck Award Lecture University of Cambridge,* Cambridge, England, UK, May 11, 2017.
- **189.** Recent Forays in Methods Development and Complex Molecule Synthesis. *RSC Merck Award Lecture University of Glasgow, Glasgow, Scotland, UK, May 9, 2017.*
- **188.** Recent Forays in Methods Development and Complex Molecule Synthesis. *RSC Merck Award Lecture 23rd Lakeland Symposium on Heterocyclic Chemistry,* Grasmere, Ambleside, UK, May 7, 2017.
- **187.** Breaking Amides and Recent Initiatives in Chemical Education. Student Invited Seminar Series University of California, San Diego, CA, May 3, 2017.
- **186.** Inspire Me. UC Regents Scholars Society Lecture, University of California, Los Angeles, CA, April 29, 2017.
- **185.** Breaking Bad at UCLA. UCLA Bruin Day, University of California, Los Angeles, CA, April 15, 2017.
- **184.** A Faculty Perspective. UCLA Bruin Day Overnight Experience, University of California, Los Angeles, CA, April 14, 2017.
- **183.** Recent Forays in Methods Development and Complex Molecule Synthesis. University of Southern California, Los Angeles, CA, April 12, 2017.
- **182.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Revolution Medicines*, Foster City, CA, April 5, 2017.
- **181.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Elias J. Corey Award Symposium ACS National Meeting*, San Francisco, CA, April 3, 2017.
- **180.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Thieme–IUPAC Prize Award Lecture – 13th Winter Conference on Medicinal & Bioorganic Chemistry,* Steamboat Springs, CO, January 24, 2017.
- **179.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Amgen,* Thousand Oaks, CA, August 3, 2016.
- **178.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Merck,* Rahway, NJ, July 27, 2016.

- **177.** Harnessing Strained Alkynes and Allenes as Synthetic Building Blocks. *Heron7*, Heron Island, Queensland, Australia, July 2016.
- **176.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Tetrahedron Young Investigator Award Lecture – Tetrahedron Symposium*, Sitges, Spain, June 30, 2016.
- **175. Recent Forays in Methods Development and Complex Molecule Synthesis**. *Cope Scholar Award Symposium Northwestern Regional ACS Meeting,* Anchorage, Alaska, June 27, 2016.
- **174.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Heterocyclic Compounds Gordon Research Conference*, Newport, RI, June 20, 2016.
- **173.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Aldrich Lecture University of Illinois,* Chicago, IL, May 17, 2017.
- **172. Recent Studies in Methods Development and Complex Molecule Synthesis**. *Genentech Lecture University of Montreal*, Montreal, Canada, May 11, 2016.
- **171.** Breaking Bad at UCLA. UCLA Bruin Day, University of California, Los Angeles, CA, April 16, 2016.
- **170.** A Faculty Perspective. UCLA Bruin Day Overnight Experience, University of California, Los Angeles, CA, April 15, 2016.
- **169.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Genentech, South San Francisco*, CA, April 12, 2016.
- **168.** Breaking Amides and Recent Initiatives in Chemical Education. *Michael Geis Distinguished Lecture Loyola Marymount University*, Los Angeles, CA, April 8, 2016.
- **167.** Recent Forays in Methods Development and Complex Molecule Synthesis. Organic Syntheses Lecture Wayne State University, Ann Arbor, MI, April 6, 2016.
- **166.** Recent Forays in Methods Development and Complex Molecule Synthesis. University of Michigan, Ann Arbor, MI, April 5, 2016.
- **165.** Complex Molecule Synthesis as a Fuel for Discovery. Keynote Lecture UC Symposium for the Chemical Sciences, Lake Arrowhead, CA, March 24, 2016.
- **164.** Launching Chemical Education Initiatives in a Research Intensive Environment. *Keynote Lecture UC Symposium for the Chemical Sciences*, Lake Arrowhead, CA, March 21, 2016.
- **163.** Recent Advances in Non-Precious Metal Catalysis. Green Chemistry: Enhancing Organic Chemistry in Pharma Symposium ACS National Meeting, San Diego, CA, March 14, 2016.
- **162.** Recent Forays in Methods Development and Complex Molecule Synthesis. New Jersey Biotechnology Chemistry Consortium, Hamilton, NJ, February 26, 2016.
- **161.** Complex Molecule Synthesis as a Fuel for Discovery. *Paul Dowd Lecture University of Pittsburgh*, Pittsburgh, PA, February 25, 2016.
- **160.** Launching Chemical Education Initiatives in a Research Intensive Environment. *Paul Dowd Lecture University of Pittsburgh,* Pittsburgh, PA, February 24, 2016.
- **159.** From Breaking Bad to Building Bonds. *Gold Shield Faculty Prize Award Lecture*, Tarzana, CA, February 6, 2016.
- **158.** Cycloadditions of Strained Alkynes and Allenes. *Pacifichem*, Honolulu, HI, December 16, 2015.
- **157.** From Graduate School at Caltech to Juggling Research and Teaching at UCLA. Caltech Project for Effective Teaching Lecture, California Institute of Technology, Pasadena, CA, November 30, 2015.
- **156.** Complex Molecule Synthesis as a Fuel for Discovery. *Keynote Lecture Tetrahedron Symposium Asia Edition*, Shanghai, China, November 13, 2015.
- **155.** Complex Molecule Synthesis as a Fuel for Discovery. *Tsinghua University*, Beijing, China, November 10, 2015.
- **154.** Complex Molecule Synthesis as a Fuel for Discovery. *Peking University*, Beijing, China, November 9, 2015.
- **153.** Recent Forays in Methods Development and Complex Molecule Synthesis. *Baylor University*, Waco, TX, October 9, 2015.
- **152.** From Breaking Bad to Building Bonds. *Faculty Lecturer UCLA South Bay Chancellor's Society Reception*, Redondo Beach, CA, October 1, 2015.
- **151. Recent Forays in Methods Development and Natural Product Synthesis**. *EPFL*, Lausanne, Switzerland, September 18, 2015.
- **150.** Recent Forays in Methods Development and Natural Product Synthesis. Novartis Chemistry Lectureship Novartis, Basel, Switzerland, September 16, 2015.

- **149.** From Breaking Bad to Building Bonds. Faculty Lecturer Orange County Bruins Alumni Scholarship Brunch, Tustin, CA, September 13, 2015.
- **148.** Total Synthesis of Indole Alkaloids. Keynote Lecture Agrochemicals: Innovations in Discovery and Process Chemistry Symposium ACS National Meeting, Boston, MA, August 19, 2015.
- **147.** Recent Forays in Methods Development and Complex Molecule Synthesis. Arthur C. Cope Scholar Award Symposium ACS National Meeting, Boston, MA, August 18, 2015
- **146.** Recent Forays in Methods Development and Natural Product Synthesis. Novartis Chemistry Lectureship Novartis GNF, San Diego, CA, August 6, 2015.
- **145.** Recent Forays in Methods Development and Natural Product Synthesis. Novartis Chemistry Lectureship Novartis, Emeryville, CA, August 4, 2015.
- **144. Recent Advances in Non-Precious Metal Catalysis**. Organic Reactions & Processes Gordon Research Conference, Lewiston, ME, July 20, 2015.
- **143.** Recent Advances in Nickel-Catalyzed Cross-Couplings. Green Chemistry and Engineering Conference, North Bethesda, MD, July 13, 2015.
- **142.** Complex Molecule Synthesis as a Fuel for Discovery. *Keynote Lecture Tetrahedron Symposium*, Berlin, Germany, June 19, 2015.
- **141.** Challenge Your Perceptions. *TED[×]UCLA*, *University of California*, Los Angeles, CA, May 30, 2015.
- **140.** Breaking Bad at UCLA. UCLA Bruin Day, University of California, Los Angeles, CA, April 11, 2015.
- **139.** A Faculty Perspective. UCLA Bruin Day Overnight Experience, University of California, Los Angeles, CA, April 10, 2015.
- **138.** Nickel-Catalyzed Suzuki–Miyaura Cross-Coupling in a Green Alcohol Solvent for an Undergraduate Organic Chemistry Laboratory. ACS National Meeting–Green Chemistry: Theory and Practice Symposium, Denver, CO, March, 25 2015.
- **137.** Complex Molecule Synthesis as a Fuel for Discovery. *Plenary Lecture Meeting of the Organic Chemistry Division of the French Chemical Society*, Paris, France, March 17, 2015.
- **136.** Total Synthesis of Indole Alkaloids. *Philadelphia Organic Chemistry Club*, Philadelphia, PA, February 26, 2015.
- **135.** Complex Molecule Synthesis as a Fuel for Discovery. *University of Delaware*, Newark, DE, February 25, 2015.
- **134.** Complex Molecule Synthesis as a Fuel for Discovery. *DuPont*, Newark, DE, February 24, 2015.
- **133.** Recent Forays in Methods Development and Natural Product Synthesis. University of California, Merced, CA, February 13, 2015.
- **132.** From Breaking Bad to Building Bonds. UCLA PEERS Research Lecture, University of California, Los Angeles, CA, February 10, 2015.
- **131.** Recent Forays in Methods Development and Natural Product Synthesis. Fagnou Lecture University of Ottawa, Ottawa, Canada, February 4, 2015.
- **130.** From Undergraduate Studies to Academia and Other Careers in Chemistry. Student Affiliates of the American Chemical Society Lecture, University of California, Los Angeles, CA, January 2015.
- **129.** Complex Molecule Synthesis as a Fuel for Discovery. Novartis Chemistry Lectureship Novartis, Cambridge, MA, January 2015.
- **128.** Complex Molecule Synthesis as a Fuel for Discovery. *University of Kansas*, Lawrence, KS, December 2014.
- **127.** Complex Molecule Synthesis as a Fuel for Discovery. *The Claremont Colleges*, Claremont, CA, December 2014.
- **126.** Total Synthesis of Indole Alkaloids. *Aldrich Lecture The Ohio State University,* Columbus, OH, October 2014.
- **125.** Recent Forays in Methods Development and Total Synthesis. Dreyfus Teacher–Scholars Symposium, New York, NY, October 2014 (poster).
- **124.** Total Synthesis of Indole Alkaloids. *Padwa Lecture Emory University*, Atlanta, GA, September 2014.
- **123. Recent Forays in Methods Development and Natural Product Synthesis**. *GlaxoSmithKline,* Research Triangle Park, NC, August 2014.

- **122.** Total Synthesis of Indole Alkaloids. ACS National Meeting–Total Synthesis as a Driver of Synthetic Innovation Symposium, San Francisco, CA, August 2014.
- **121.** From Breaking Bad to Building Bonds. Chemistry and Biochemistry Staff Research Lecture, University of California, Los Angeles, CA, June 2014.
- **120.** Recent Forays in Methods Development and Natural Product Synthesis. Boehringer Ingelheim Pharmaceuticals, Ridgefield, CT, June 2014.
- **119.** Organic Chemistry Can Save the Day. UC Regents Scholars Society Lecture, University of California, Los Angeles, CA, May 2014.
- **118.** Breaking Bad at UCLA. UCLA Bruin Day for Transfer Admits, University of California, Los Angeles, CA, May 2014.
- **117.** Complex Molecule Synthesis as a Fuel for Discovery. *Bristol-Myers Squibb Unrestricted Grant in Synthetic Organic Chemistry Award Symposium,* Lawrenceville, NJ, May 2014.
- 116. Breaking Bad at UCLA. UCLA Bruin Day, University of California, Los Angeles, CA, April 2014.
- **115.** Complex Molecule Synthesis as a Fuel for Discovery. *Aldrich Lecture University of Texas*, Austin, TX, March 2014.
- **114.** Development of Greener Nickel-Catalyzed Cross-Couplings. ACS National Meeting MEDI Lunch & Learn, Dallas, TX, March 2014.
- **113.** Greener Nickel-Catalyzed Cross-Couplings to Forge C–C and C–N Bonds. ACS National Meeting Transition Metal Catalysis in Green Chemistry Symposium, Dallas, TX, March 2014.
- **112.** Complex Molecule Synthesis as a Fuel for Discovery. *Eli Lilly Grantee Award Symposium*, Indianapolis, IN, March 2014.
- **111.** Complex Molecule Synthesis as a Fuel for Discovery. *Carleton College*, Northfield, MN, March 2014.
- **110.** Heterocyclic Arynes and Total Synthesis of Welwitindolinones. *Eighth International Symposium on Integrated Synthesis (ISIS-8),* Nara, Japan, November 2013.
- **109.** Complex Molecule Synthesis as a Fuel for Discovery. *Kyoto University,* Kyoto, Japan, November 2013.
- **108.** Complex Molecule Synthesis as a Fuel for Discovery. Banff Symposium on Organic Chemistry, Alberta, Canada, November 2013.
- **107.** Complex Molecule Synthesis as a Fuel for Discovery. *Sanofi-Aventis*, Frankfurt, Germany, October 2013.
- **106.** Complex Molecule Synthesis as a Fuel for Discovery. *University of Munich*, Munich, Germany, October 2013.
- **105.** Complex Molecule Synthesis as a Fuel for Discovery. *University of Louis Pasteur*, Strasbourg, France, October 2013.
- **104.** Complex Molecule Synthesis as a Fuel for Discovery. *Texas A&M University*, College Station, TX, September 2013.
- **103.** Complex Molecule Synthesis as a Fuel for Discovery. *CSU Fullerton*, Fullerton, CA, September 2013.
- **102.** Nickel-Catalyzed Cross-Couplings in Green Solvents. ACS National Meeting–Green Chemistry and Sustainability in the Pharmaceutical Industry Symposium, Indianapolis, IN, September 2013.
- **101. Development of Nickel-Catalyzed Cross-Couplings**. ACS National Meeting–Non-Precious Metal Catalysis Symposium, Indianapolis, IN, September 2013.
- **100.** Complex Molecule Synthesis as a Fuel for Discovery. North Carolina State University, Raleigh, NC, August 2013.
- **99.** Complex Molecule Synthesis as a Fuel for Discovery. University of North Carolina, Chapel Hill, NC, August 2013.
- **98.** Nickel- and Iron-Catalyzed Cross-Couplings of Phenolic Derivatives. Sixteenth International Symposium on Relations between Homogeneous and Heterogeneous Catalysis, Hokkaido University, Sapporo, Japan, August 2013.
- **97.** Complex Molecule Synthesis as a Fuel for Discovery. *Theravance Inc.*, South San Francisco, CA, July 2013.
- **96.** Recent Studies in Alkaloid Total Synthesis. Overman's 70th Birthday Symposium, University of California, Irvine, CA, July 2013.
- **95. Understanding and Exploiting Heterocyclic Arynes**. *Heron6*, Heron Island, Queensland, Australia, July 2013.

- **94. Retrosynthetic Analysis**. *UC Regents Scholars Society Lecture, University of California*, Los Angeles, CA, May 2013.
- **93.** Are Chemicals Friends or Foes? UCLA Bruin Day, University of California, Los Angeles, CA, April 2013.
- **92.** Complex Molecule Synthesis as a Fuel for Discovery. University of North Carolina, Wilmington, NC, March 2013.
- **91.** Complex Molecule Synthesis as a Fuel for Discovery. University of California, Riverside, CA, March 2013.
- **90.** Complex Molecule Synthesis as a Fuel for Discovery. *Indiana University*, Bloomington, IN, February 2013.
- **89.** Complex Molecule Synthesis as a Fuel for Discovery. *University of Colorado,* Boulder, CO, February 2013.
- **88.** Complex Molecule Synthesis as a Fuel for Discovery. *Gilead Sciences,* Seattle, WA, December 2012.
- 87. Complex Molecule Synthesis as a Fuel for Discovery. *Rutgers University,* Piscataway, NJ, November 2012.
- **86.** Complex Molecule Synthesis as a Fuel for Discovery. *Merck,* Rahway, NJ, November 2012.
- **85.** Complex Molecule Synthesis as a Fuel for Discovery. *Trinity College*, Dublin, Ireland, October 2012.
- **84.** Complex Molecule Synthesis as a Fuel for Discovery. *Natural Product Chemistry Institute (ICSN) CNRS*, Paris, France, October 2012.
- 83. Complex Molecule Synthesis as a Fuel for Discovery. *CalState Long Beach*, Long Beach, CA, September 2012.
- 82. Complex Molecule Synthesis as a Fuel for Discovery. *University of Minnesota*, Duluth, MN, September 2012.
- 81. Complex Molecule Synthesis as a Fuel for Discovery. *University of Minnesota*, Minneapolis, MN, September 2012.
- **80.** Complex Molecule Synthesis as a Fuel for Discovery. *Cornell University*, Ithaca, NY, September 2012.
- 79. Complex Molecule Synthesis as a Fuel for Discovery. *Pfizer,* Groton, CT, August 2012.
- **78.** Total Synthesis of Heterocyclic Natural Products. Natural Products Gordon Research Conference, Andover, NH, July 2012.
- 77. Complex Molecule Synthesis as a Fuel for Discovery. *Sunovian,* Marlborough, MA, July 2012.
- 76. Complex Molecule Synthesis as a Fuel for Discovery. *Merck,* Boston, MA, July 2012.
- 75. Modern Twists on Classical Chemistry: Enabling the Synthesis of Complex Molecules. *New York University*, New York, NY, June 2012.
- 74. Complex Molecule Synthesis as a Fuel for Discovery. Roche Excellence in Chemistry Symposium, Nutley, NJ, May 2012.
- **73.** Complex Molecule Synthesis as a Fuel for Discovery. *New York University*, New York, NY, March 2012.
- 72. Complex Molecule Synthesis as a Fuel for Discovery. Johnson & Johnson, La Jolla, CA, March 2012.
- 71. Complex Molecule Synthesis as a Fuel for Discovery. University of California, San Diego, CA, March 2012.
- **70.** Complex Molecule Synthesis as a Fuel for Discovery. UT Southwestern Medical Center, Dallas, TX, December 2011.
- **69.** Complex Molecule Synthesis as a Fuel for Discovery. *University of California,* Santa Barbara, CA, December 2011.
- **68.** Complex Molecule Synthesis as a Fuel for Discovery. *AstraZeneca Excellence in Chemistry Award Symposium,* Waltham, MA, December 2011.
- 67. Complex Molecule Synthesis as a Fuel for Discovery. *Abbott Laboratories,* North Chicago, IL, November 2011.
- 66. Complex Molecule Synthesis as a Fuel for Discovery. *Memorial Sloan-Kettering,* New York, NY, November 2011.
- **65.** Complex Molecule Synthesis as a Fuel for Discovery. *Columbia University,* New York, NY, November 2011.

- 64. Total Synthesis of Welwitindolinones. Western Regional ACS Meeting, Pasadena, CA, November 2011.
- **63.** Complex Molecule Synthesis as a Fuel for Discovery. *GlaxoSmithKline*, Upper Merion, PA, November 2011.
- 62. Complex Molecule Synthesis as a Fuel for Discovery. *GlaxoSmithKline*, Upper Providence, PA, November 2011.
- 61. Cross-Coupling Reactions of Unconventional Electrophiles. Seaborg Symposium UCLA, Los Angeles, CA, November 2011.
- **60.** Complex Molecule Synthesis as a Fuel for Discovery. *Genentech, South San Francisco*, CA, October 2011.
- **59.** Complex Molecule Synthesis as a Fuel for Discovery. University of Wisconsin, School of *Pharmacy*, Madison, WI, October 2011.
- **58.** Complex Molecule Synthesis as a Fuel for Discovery. University of Wisconsin, Department of Chemistry, Madison, WI, October 2011.
- **57.** Complex Molecule Synthesis as a Fuel for Discovery. *University of California,* Davis, CA, October 2011.
- 56. Studies in Complex Molecule Synthesis: Indoles, Indolines, and Indolynes. University of California, Los Angeles, CA, October 2011.
- **55.** Complex Molecule Synthesis as a Fuel for Discovery. University of California, Irvine, CA, October 2011.
- **54.** Complex Molecule Synthesis as a Fuel for Discovery. *Amgen Young Investigator Award Symposium*, Amgen, Thousand Oaks, CA, October 2011.
- **53.** Complex Molecule Synthesis as a Fuel for Discovery. *Stanford University,* Stanford, CA, September 2011.
- **52.** Complex Molecule Synthesis as a Fuel for Discovery. *University of California,* Berkeley, CA, September 2011.
- **51.** Complex Molecule Synthesis as a Fuel for Discovery. *Brigham Young University,* Provo, UT, September 2011.
- **50.** Complex Molecule Synthesis as a Fuel for Discovery. *Boston University,* Boston, MA, September 2011.
- **49.** Complex Molecule Synthesis as a Fuel for Discovery. *Massachusetts Institute of Technology,* Cambridge, MA, September 2011.
- **48.** Complex Molecule Synthesis as a Fuel for Discovery. *Princeton University,* Princeton, NJ, September 2011.
- **47.** Complex Molecule Synthesis as a Fuel for Discovery. ACS National Meeting–Young Academic Investigators Symposium, Denver, CO, August 2011.
- **46.** Complex Molecule Synthesis as a Fuel for Discovery. University of Illinois, Urbana-Champaign, IL, August 2011.
- **45.** Complex Molecule Synthesis as a Fuel for Discovery. *Colorado State University,* Fort Collins, CO, August 2011.
- 44. Studies Toward the Synthesis of Heterocyclic Natural Products. *Heterocyclic Compounds Gordon Research Conference*, Newport, RI, June 2011.
- **43.** Complex Molecule Synthesis as a Fuel for Discovery. *The Scripps Research Institute,* La Jolla, CA, June 2011.
- **42.** Total Synthesis of *N*-Methylwelwitindolinone C Isothiocyanate. *SynCon*, Irvine, CA, May 2011.
- **41.** Complex Molecule Synthesis as a Fuel for Discovery. *Bristol–Myers Squibb,* Wallingford, CT, June 2011.
- **40.** Complex Molecule Synthesis as a Fuel for Discovery. Vertex Pharmaceuticals, San Diego, CA, April 2011.
- **39.** Complex Molecule Synthesis as a Fuel for Discovery. *Gilead Sciences,* Foster City, CA, March 2011.
- 38. Complex Molecule Synthesis as a Fuel for Discovery. *Pfizer*, La Jolla, CA, March 2011.
- **37.** Complex Molecule Synthesis as a Fuel for Discovery. *California Institute of Technology,* Pasadena, CA, March 2011.
- **36.** Complex Molecule Synthesis as a Fuel for Discovery. *Bristol–Myers Squibb,* New Brunswick, NJ, February 2011.

- **35.** Complex Molecule Synthesis as a Fuel for Discovery. *Bristol–Myers Squibb,* Hopewell and Lawrenceville, NJ, January 2011.
- **34.** Complex Molecule Synthesis as a Fuel for Discovery. University of Pennsylvania, Philadelphia, PA, January 2011.
- **33.** Studies in Complex Molecule Synthesis: Indoles, Indolines, and Indolynes. *Pacifichem*, Honolulu, HI, December 2010.
- **32.** Complex Molecule Synthesis as a Fuel for Discovery. *Dartmouth College,* Hanover, NH, November 2010.
- **31.** Complex Molecule Synthesis as a Fuel for Discovery. *University of Vermont,* Burlington, VT, November 2010.
- **30.** Complex Molecule Synthesis as a Fuel for Discovery. *University of California,* Los Angeles, CA, October 2010.
- **29.** Complex Molecule Synthesis as a Fuel for Discovery. *University of Rochester,* Rochester, NY, October 2010.
- **28.** Complex Molecule Synthesis as a Fuel for Discovery. *Amgen,* Cambridge, MA, September 2010.
- 27. Complex Molecule Synthesis as a Fuel for Discovery. *Boehringer Ingelheim Pharmaceuticals,* Ridgefield, CT, September 2010.
- 26. Complex Molecule Synthesis as a Fuel for Discovery. *DuPont*, Newark, DE, September 2010.
- 25. Complex Molecule Synthesis as a Fuel for Discovery. *Eli Lilly*, Indianapolis, IN, August 2010.
- 24. Studies Toward the Total Synthesis of Heterocyclic Natural Products. *Natural Products*. *Gordon Research Conference*, Tilton, NH, July 2010 (poster and short talk).
- **23. Progress Toward the Total Synthesis of N-Methylwelwitindolinone C Isothiocyanate**. *NSF Synthesis Workshop*, Holderness, NH, July 2010.
- 22. Studies Toward the Total Synthesis of Heterocyclic Natural Products. Organic Reactions & Processes Gordon Research Conference, Smithfield, RI, July 2010 (poster and short talk).
- 21. Progress Toward the Total Synthesis of *N*-Methylwelwitindolinone C Isothiocyanate. *SynCon*, Pasadena, CA, May 2010.
- 20. Cross-Coupling Reactions of Unconventional Electrophiles & Studies Toward the Total Synthesis of Heterocyclic Natural Products. *Biogen Idec,* Cambridge, MA, March 2010.
- **19.** Cross-Coupling Reactions of Unconventional Electrophiles & Studies Toward the Total Synthesis of Heterocyclic Natural Products. *Pfizer,* La Jolla, CA, March 2010.
- **18.** Cross-Coupling Reactions of Unconventional Electrophiles & Studies Toward the Total Synthesis of Heterocyclic Natural Products. *Abbott Laboratories,* Abbott Park, IL, March 2010.
- 17. Studies in Complex Molecule Synthesis: Indoles, Indolines, and Indolynes. *Florida International University,* Miami, FL, January 2010.
- **16.** Studies in Complex Molecule Synthesis: Indoles, Indolines, and Indolynes. University of Southern California, Los Angeles, CA, November 2009.
- **15.** Studies in Heterocycle Synthesis: Indoles, Indolines, and Indolynes. *Heterocyclic Compounds Gordon Research Conference*, Newport, RI, July 2009.
- 14. New Directions in C–O Bond Activation / Indolynes: Fundamental Reactivity & Synthetic Applications. Heterocyclic Compounds Gordon Research Conference, Newport, RI, July 2009 (poster).
- **13.** An Interrupted Fischer Approach to Indoline-Containing Natural Products. *SynCon*, Los Angeles, CA, May 2009.
- **12.** Indolynes: Fundamental Reactivity and Synthetic Applications. ACS ProSpectives: Organic Reactions and Syntheses, Philadelphia, PA, October 2008 (poster).
- **11.** Indolynes: Fundamental Reactivity and Synthetic Applications. Stereochemistry Gordon Research Conference, Newport, RI, July 2008 (poster).
- **10.** Indolynes: Reactivity and Synthetic Applications. *SynCon*, Los Angeles, CA, May 2008.
- **9. Reflections on the REU Experience**. *The National Science Foundation*, Arlington, VA, April 2008.
- 8. Studies in Natural Product Synthesis: Total Synthesis of Sarain A. *The Claremont Colleges*, Claremont, CA, December 2007.

- 7. Total Synthesis of Dragmacidin F and Sarain A. *Bristol-Myers Squibb*, Lawrenceville, NJ, July 2007.
- 6. The Total Synthesis of (–)-Sarain A. 232nd ACS National Meeting, San Francisco, CA, September 2006.
- 5. The Total Synthesis of (–)-Sarain A. Natural Products Gordon Research Conference, Tilton, NH, July 2006 (poster).
- **4.** The Total Synthesis of Dragmacidins D and F. *McCoy Thesis Award Symposium,* California Institute of Technology, Pasadena, CA, June 2005.
- 3. The First Total Synthesis of Dragmacidin D and Prospects for the Preparation of Other Dragmacidin Alkaloids. 38th National Organic Symposium, Bloomington, IN, June 2003 (poster).
- 2. Progress Toward the Total Synthesis of Dragmacidin D. Lexicon Pharmaceuticals, Princeton, NJ, April 2002.
- **1. Progress Toward the Total Synthesis of Dragmacidin D**. *RW Johnson Pharmaceutical Research Institute*, Raritan, NJ, April 2002.

Media Coverage

<u>Research</u>

"Benzene's Forgotten Isomer Takes Centre Stage in Organic Synthesis", Chemistry World, 2023.

"<u>Total Synthesis of Lissodendoric Acid A Comes via Highly Reactive Cyclic Allenes</u>", Chemical and Engineering News, 2023.

"<u>UCLA Chemists are First to Synthesize Ocean-based Molecule that Could Fight Parkinson's</u>", UCLA Newsroom, 2023.

"Scientists Say a Marijuana Breathalyzer is in the Works", NBC News, 2022.

"Driving High? Chemists Make Strides toward a Marijuana Breath Analyzer", UCLA Newsroom, 2022.

"Snagging the Power of Cyclic Allene Intermediates", Chemical and Engineering News, 2020.

"<u>UCLA Chemists Develop the Chemistry to Create an Electronic Marijuana Breathalyzer</u>", UCLA Newsroom, 2020.

"Azacyclic Allenes Harnessed", Chemical and Engineering News, 2018.

"Modeling Reduces Nickel Needed in Catalytic Reactions", Chemical and Engineering News, 2017.

<u>"John Simon Guggenheim Memorial Foundation 2016 Fellows"</u>, NY Times Newspaper Announcement, 2016.

"Top Research of 2015: Nickel Shines as a Catalyst", Chemical and Engineering News, 2015.

"<u>Amides Succumb to Suzuki–Miyaura Coupling, Thanks to Nickel Catalyst"</u>, Chemical and Engineering News, 2015.

"<u>Chemists Find A Simple Approach to Activating Amide C–N Bonds"</u>, Chemical and Engineering News, 2015.

<u>"Arthur C. Cope Scholar Awards"</u>, Chemical and Engineering News, 2015.

<u>"Piperidynes Take a New Number"</u>, Chemical and Engineering News, 2015.

<u>"Chemists Spruce Up Nickel Aminations"</u>, Chemical and Engineering News, 2014.

"Simple Method for Aryl Methyl Ketones", Chemical and Engineering News, 2014.

"Pyridynes Provide Access to Drug-Like Compounds", UCLA Chemistry and Biochemistry, 2013.

"UCLA Ranks Second in Nation in Number of 2012 Alfred P. Sloan Fellows", UCLA Newsroom, 2012.

"Alfred P. Sloan Research Fellowships 2012", NY Times Newspaper Announcement, 2012.

"Changeup Yields Indole Alkaloid", Chemical and Engineering News, 2011.

<u>"Professor Wins 2011 AstraZeneca Excellence in Chemistry Award"</u>, UCLA Newsroom, 2011.

"What Does the Eli Lilly Grant Provide to Academic Researchers", Chemical and Engineering News, 2011.

"Chemistry Professor Receives Young Faculty Awards", UCLA Newsroom, 2010.

<u>"The Next Generation of Scientific Leadership"</u>, Chemical and Engineering News, 2009.

Education

<u>"Neil Garg Receives AAAS Bhaumik Award for Public Engagement with Science"</u> UCLA Newsroom, 2023. <u>"An Effort to Improve Mentoring"</u> Science Magazine Editor's Blog, 2022.

"UCLA Researchers Seek to Inspire Love for Chemistry with Educational Website" Daily Bruin, 2022.

<u>"Neil Garg, UCLA students, his Daughters Win Royal Society of Chemistry Horizon Prize"</u> UCLA Newsroom, 2021.

<u>"UCLA Lab Creates Virtual Reality App to Help Students with Organic Chemistry"</u> Daily Bruin, 2021.

<u>"UCLA Faculty-in-Residence Find Ways to Connect Despite Pandemic Limitations"</u> Daily Bruin, 2021.

<u>"How Did Organic Chemistry Become so Beloved at UCLA? Professor Neil Garg is Glad you Asked"</u> UCLA Newsroom, 2020.

<u>"New Organic Chemistry Website Hopes to Be Engaging, Interactive Student Resource</u>" Daily Bruin, 2019.

"Student-Developed Tool Brings 3D Molecular Models to Smartphone Screen" Daily Bruin, 2018.

"Inspired Teaching Rewarded", NY Times Newspaper Announcement, 2018.

<u>"Neil Garg Wins Robert Foster Cherry Award for Great Teaching"</u>, Chemical and Engineering News, 2018. <u>"UCLA's Neil Garg Wins Country's Leading Teaching Award and its \$250,000 Prize"</u> UCLA Newsroom, 2018.

"Organic Chemistry App Game: Science Does Not Have to Be Scary" ChemistryViews, 2018.

<u>"This Standing-Room-Only Class Features Music Videos, a Gaming App and...Breathalyzers"</u> EdSurge, 2018.

<u>"Professor and Former Students Develop Organic Chemistry Game App"</u> Daily Bruin, 2017.

"Chemistry Professor Nominated for Award Honoring Teaching Ability" Daily Bruin, 2017.

"Chemistry Professor Neil Garg to Deliver Free, Public Lecture" UCLA Newsroom, 2017.

"Color Your Own Chemistry", Chemical and Engineering News, 2017.

"Professor Neil Garg Publishes Kid-Friendly Organic Chemistry Book" Daily Bruin, 2017.

"Garg Wins 2017 Royal Society of Chemistry Teaching Award" UCLA Newsroom, 2017.

"Organic Chemistry Sizzles for BACON Students Around the World" UCLA Newsroom, 2016.

"Bringing Home the Bacon", Chemistry World Magazine, 2016.

<u>"Neil Garg named 2015 Carnegie Foundation for the Advancement of Teaching California Professor of the Year".</u> UCLA Newsroom, 2015.

<u>"UCLA's Neil Garg Reveals His Award-Winning Teaching Techniques in TEDx Talk"</u> UCLA Newsroom, 2015.

<u>"Chemistry Education for the YouTube Generation"</u>, Chemical and Engineering News, 2015.

<u>"Chemistry Professor Neil Garg Honored with Gold Shield Faculty Prize"</u> UCLA Newsroom, 2015.

"Professor's BACON Fuses Chemistry, Biology Education with Pop Culture" Daily Bruin, 2015.

"Has Organic Chemistry Become UCLA Most Beloved Class?" UCLA Newsroom, 2014.

"The 8 Coolest Classes to Take at UCLA" Buzzfeed, 2014

"A Magical Reaction: Mix Chemistry, YouTube, and a Special Teacher" UCLA Magazine, 2014.

<u>"UCLA Professor Develops Class Lab From ACS GCI Pharmaceutical Roundtable Grant"</u> American Chemical Society Green Chemistry Institute's Nexus News, 2014.

"Sweet Dreams (Are Made of Chemistry)" UCLA Newsroom, 2013.

<u>"Best Classes in L.A.: Organic Chemistry at UCLA"</u> LA Weekly, 2012.

<u>"Student Video Competitions Continue to Heat Up"</u> Chemical & Engineering News, 2012.

"Chemistry You Can Dance To" UCLA Newsroom, 2012.

<u>"Life on the Hill is New Territory for These Faculty"</u> UCLA Newsroom, 2012.

"Chemistry Never Sounded This Good" UCLA Newsroom, 2011.

<u>"Organic Chemistry Music Videos Building Momentum</u>" Chemical & Engineering News, 2011.

<u>"Video Thunderdome"</u> Chemical & Engineering News, 2010. <u>"Students Rap to Chemistry"</u> UCLA Newsroom, 2010. <u>"Organic Chemistry for the YouTube Generation"</u> Nature Chemistry, 2010.