Jeffrey M. Lipshultz, Ph.D.

Stony Brook University
Department of Chemistry
100 Nicolls Road
Stony Brook, NY 11794

707 Chemistry
(631)-632-7940
jeffrey.lipshultz@stonybrook.edu
lipshultz.group

Professional Experience

Stony Brook University, Department of Chemistry
Assistant Professor — 2022-present
Member, Institute of Chemical Biology & Drug Discovery — 2023-present

Massachusetts Institute of Technology, Department of Chemistry
Postdoctoral Associate — 2020-2022
Camille and Henry Dreyfus Environmental Chemistry Fellow — 2018-2020
▸ *Advisor*: Professor Alexander T. Radosevich

Education

Princeton University, Department of Chemistry
Ph.D., Chemistry — 2018
M.A., Chemistry — 2015
▸ *Advisor*: Professor David W. C. MacMillan
▸ *Thesis*: Application of Novel Catalytic Platforms to C-C Bond Forming Reactions in Methodology Development and Natural Product Total Synthesis

Harvard University, Department of Chemistry and Chemical Biology
A.B., *Cum Laude*, Chemistry, with High Honors — 2013
▸ *Advisor*: Professor Andrew G. Myers

Awards and Honors

Individual Development Award, SUNY — 2024
Doctoral New Investigator Award, ACS Petroleum Research Fund — 2023
Mentorship Spotlight Award, MIT Department of Chemistry — 2021
Postdoctoral Fellowship in Environmental Chemistry, Camille & Henry Dreyfus Foundation — 2018-2020
Hugh Stott Taylor Prize, Princeton University — 2013-2015
Stanley A. Lefkowitz *70 Fellowship, Princeton University — 2014
Graduate Research Fellowship Program Honorable Mention, National Science Foundation — 2014
Herchel Smith Summer Undergraduate Research Fellowship, Harvard University — 2011

Peer Reviewed Publications

Mentored Publications

7. Deoxyfluorination of 1°, 2°, and 3°Alcohols by Nonbasic O–H Activation and Lewis Acid-Catalyzed Fluoride Shuttling. H. W. Moon, M. N. Lavagnino, S. Lim, M. D. Palkowitz, M. D. Mandler, G. L. Beutner, M. J. Drance, **J. M. Lipshultz**, P. M. Scola, and A. T. Radosevich. *J. Am. Chem. Soc.* **2023**, *145*, 22735–22744.

6. Uniting Amide Synthesis and Activation by P^{III}/P^{V}-Catalyzed Serial Condensation: Three-Component Assembly of 2-Amidopyridines. **J. M. Lipshultz**, A. T. Radosevich. *J. Am. Chem. Soc.* **2021**, *143*, 14487–14494.

5. Main Group Redox Catalysis of Organopnictogens: Vertical Periodic Trends and Emerging Opportunities in Group 15. **J. M. Lipshultz**,‡ G. Li,‡ A. T. Radosevich. *J. Am. Chem. Soc.* **2021**, *143*, 1699–1721. ‡Equal contribution.

4. Organophosphorus-Catalyzed Relay Oxidation of H–Bpin: Electrophilic C–H Borylation of Heteroarenes. **J. M. Lipshultz**, Y. Fu, P. Liu, A. T. Radosevich. *Chem. Sci.* **2021**, *12*, 1031–1037.

3. Driving Recursive Dehydration by P^{III}/P^{V} Catalysis: Annulation of Amines and Carboxylic Acids by Sequential C–N and C–C Bond Formation. M. Lecomte,‡ **J. M. Lipshultz**,‡ S.-H. Kim-Lee, G. Li, A. T. Radosevich. *J. Am. Chem. Soc.* **2019**, *141*, 12507–12512. ‡Equal contribution.

2. Catalyst-Controlled Oligomerization for the Collective Synthesis of Polypyrroloindoline Natural Products. C. R. Jamison, J. J. Badillo, **J. M. Lipshultz**, R. J. Comito, D. W. C. MacMillan. *Nat. Chem.* **2017**, *9*, 1165–1169.

1. Merging Photoredox and Nickel Catalysis: The Direct Synthesis of Ketones via the Decarboxylative Arylation of α-Oxo Acids. L. Chu, **J. M. Lipshultz**, D. W. C. MacMillan. *Angew. Chem. Int. Ed.* **2015**, *54*, 7929–7933.

Research Support

***Ansa*-Titanocene Photocatalysis for *O*-Centered Radical-Mediated Upgrading of Light Hydrocarbons**
Doctoral New Investigator Grant. American Chemical Society, Petroleum Research Fund.
Role: PI. Amount: $110,000. September 2023 – August 2025.

Aminomutase-Inspired Green Radical Amination
Ignition Grant. American Chemical Society, Green Chemistry Institute Pharmaceutical Roundtable.
Role: PI. Amount: $40,000. October 2023 – April 2024.

Upgrading of Simple and Macromolecular Alcohols via Catalytic Alkoxyl Radical β-Scission
Seed Grant. Stony Brook University, Office of the Vice President for Research.
Role: PI, with Barney Grubbs (co-PI). Amount: $50,000. April 2023 – July 2024.

Seminars and Lectures

Heterocyclic Compounds GRC, Poster Preview Talk, Salve Regina University, Newport, RI — June 2024
Development of a PLP-Inspired "Photodecarboxylase" Catalysis Platform for the Decarboxylative Functionalization of Unprotected Amino Acids

ACS National Meeting, Submitted Talk, New Orleans, LA — March 2024
Titanium photocatalysis via ligand-to-metal charge-transfer activation

Queens College, **City University of New York**, Invited Seminar, Queens, NY — Oct 2023
Designing Catalysts for Selectivity in Natural Product Total Synthesis, Organo-Main Group Catalysis, and Photocatalysis

ICB&DD Monthly Meeting, Membership Seminar, Stony Brook University, Stony Brook, NY — Sept 2023

Teaching: Stony Brook University

Chemistry 348/502, Reaction Mechanisms and Strategies in Organic Chemistry
- 9 undergraduate students, 10 graduate students — Spring 2024
- 12 undergraduate students, 11 graduate students — Spring 2023

Chemistry 384, Intermediate Synthetic and Spectroscopic Laboratory Techniques
- 11 undergraduate students — Fall 2023
- 21 undergraduate students — Fall 2022

Chemistry 619/696, Critical Readings of Current Topics in Chemistry/Organic Chemistry Seminar
- 16 graduate students — Fall 2023

Service Activities: Stony Brook University

Seminar Committee, Dept. of Chemistry, Co-Chairperson — 2022-present
- Engaging Undergraduates in Research Lecture Series — 2023-present
- Merck-SBU Lectures — Feb 2023

- Pfizer-SBU Symposium — Sept 2023
- Symposium on Bioorthogonal Chemistry in Honor of the 2022 Nobel Prize in Chemistry — Dec 2022

Graduate Recruitment Committee, Dept. of Chemistry, Member — 2022-present

Chemical Biology Training Program, Faculty Mentor — 2023-present

SBU-BNL Photochemistry Supergroup, Co-Organizer, with Dr. Matthew Bird, BNL — 2023-present

Graduate Chemical Society, Dept. of Chemistry, Faculty Advisor — 2023-present

Open Rank Faculty Search Committee, Dept. of Chemistry, Member, Inclusion Liaison — 2023-2024

Junior Faculty Search Committee, Dept. of Chemistry, Member — 2022-2023

Merck-SBU Interview Workshop, Organizer — May 2023

Trainee Advising

Current Graduate Students: Yetong Lin (2023-), Ashley Lojko (2023-), Jaclyn Mauro (2023-), Jagrut Shah (2023-), Vincent Huang (MS, 2023-), Agniva Das (2024-), Ayah Fidama (2024-)

Current Undergraduate Students: Emma Scher (2022-, Chemistry '25), Noah Schwartzapfel (2023-, Chemistry '25), Sayan Shil (2023-, Biomedical Engineering '25), Filip Pukarczyk (2024-, Chemistry '26), Maxim Savenkov (2024-, Chemistry '26)

Current Postdoctoral Researchers: Dong-Hang Tan (2023-), Zilu Tang (2023-)

Visitors: Celeste Barefoot (UNC-Wilmington, Chemistry '25) SBU Chemistry REU, Summer 2024

Past Graduate Students: Abubakar Lawal Mohammed (2022-2024, current: Hsiao Group, SBU)

Past Undergraduate Students: Nasiba Khandaker (2022-2023, BS Chemistry '23), Zongle Wei (2022–2023, Chemistry '24), Jacob Fox (2022–2023, Chemistry '24)

Trainee Awards and Recognition

Graduate Students:

- Jagrut Shah: Merck Research Award for Underrepresented Chemists of Color 2024
- Jaclyn Mauro: SBU Chemistry Award for Outstanding Service 2024

Undergraduate Students:

- Emma Scher: ACS Division of Organic Chemistry Summer Undergraduate Research Fellowship 2024
- Maxim Savenkov: SBU Chemistry Dr. Kenneth M. Nicholas-URECA Fellowship 2024
- Jacob Fox: SBU Chemistry Dr. Kenneth M. Nicholas-URECA Fellowship 2023

Advancement to Candidacy Committees

Chairperson: Dominick Rendina (2022-), Ananya Shibana Thennarasu (2022-), Chuying Zou (2023-), Yogesh Kakade (2023-)

Third Member: Chuanzhou Zhu (2023), Kun Lin Hsieh (2022-), Xinyuan Gao (2022-2023)

Reviewing Activities: External

Journals: ACS Catalysis (2022-), ACS Central Science (2024-), Angewandte Chemie (2023-), Chem (2022-), Nature Communications (2024-), Science Advances (2022-), Synlett (2024-)
Grants and Fellowships: ACS Petroleum Research Fund (2023-), NSF (2024-)

Workshops, Programs, and Trainings

Excellence in Teaching Program, SBU, Office of the Vice-Provost for Faculty Affairs 2023-2024
Research Mentoring for Faculty, SBU, Office of Professional Development Fall 2023
Conducting Inclusive Hiring Searches, SBU, Office of Diversity, Inclusion & Intercultural Initiatives Dec 2023
Early Career Investigator Workshop, National Science Foundation, Division of Chemistry May 2023
New Faculty Workshop, American Chemical Society Aug 2022

Outreach and Mentorship Activities

Letters to a Pre-Scientist, STEM Professional Pen Pal 2023-present
Princeton GradFUTURES Mentor Program, Alumni Mentor 2023-present
Bergen County Academies Alumni Career Day, Alumni Presenter 2023