Lorena S. Grundy

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EDUCATION

University of California, Berkeley 2017–2022
- Ph.D. in Chemical and Biomolecular Engineering, advised by Nitash P. Balsara

Princeton University 2013–2017
- B.S.E. *cum laude* in Chemical and Biological Engineering
- Certificates in Sustainable Energy and Applications of Computing

PROFESSIONAL APPOINTMENTS

University of Pennsylvania 2024–present
- Practice Assistant Professor, Chemical and Biomolecular Engineering
- Director, Energy and Sustainability (ENSU) minor
- Founding Director and Faculty Advisor, new Master of Science in Engineering degree program in Energy and Sustainability Engineering

RESEARCH EXPERIENCE

Koretsky Group, Tufts University: post-doctoral scholar 2022–2024
- Depts. of CBE and Education, Institute for Research on Learning and Instruction (IRLI)
- Supported by **ASEE Engineering Postdoctoral Fellowship**

Balsara Lab, UC Berkeley: graduate researcher 2017–2022
- Characterization of morphology and ion transport through polymer electrolytes using NMR, electrochemical methods, and small angle X-ray scattering (SAXS)

Berkeley Nuclear Magnetic Resonance (NMR) Facility: assistant manager 2019

Priestley Lab, Princeton University: undergraduate researcher 2016–2017
- Senior thesis: nanoparticles from block copolymer blends; electron microscopy

Avalos Lab, Princeton University: undergraduate researcher, biofuel engineering 2015

PUBLICATIONS

Eight 1st author journal papers, eight conference (five 1st author); see lorena-grundy.com for complete list.

INVITED TALKS

- Empowering Future Leaders: A Workshop to Share Best Practices in Interdisciplinary Graduate Training to Ensure a Fair Energy Transition, May 2025.
- Framework and Initial Steps Towards Industry-Relevant Undergraduate Electrochemical Engineering Education. Electrochemical Society Spring Meeting, May 2024.
- Limitations to our Understanding of the Limiting Current. Battery Modeling Webinar Series, 2023.
- Inaccessible Current-Induced Phase Transitions in Block Copolymer Electrolytes. APS March, 2022.
- ACS POLY Excellence in Graduate Research Symposium. ACS Spring, 2022.
- Distortion of Lamellae in an Electrolyte Under Polarization. ALS User Meeting, 2021.
- Using ^{7}Li NMR to Detect Order-to-Disorder Transitions. ACS Fall, 2020.

TEACHING AND SERVICE

Lead Instructor
- Renewable Energy Technologies Lab course, in development fall 2026
- Engineering Sustainability at Penn Campus-as-Lab course annually spring 2025–present
- Energy and Sustainability: Science, Engineering and Technology annually fall 2024–present
- Material and Energy Balances of Chemical Processes fall 2024
- Electrochemical Engineering (Tufts) fall 2023
- Learning and Teaching in STEM: A Seminar for Learning Assistants (Tufts) spring 2023

Graduate Student Instructor (GSI): Three-time outstanding GSI award winner 2018–2020

Co-founder, Graduate Certificate in STEM Teaching Practice for 2026 launch 2025–present

Director, school-wide Energy and Sustainability (ENSU) minor 2024–present

Co-director, Sustainability and Environmental Management minor 2025–present

Penn Engineers Without Borders (EWB) Penn Chapter: Faculty Advisor 2024–present

Ethnography in Education Research Forum: Faculty Affiliate 2025–present

American Association of University Professors (AAUP) Penn: Vice President 2025–present

ASEE Chemical Engineering Division (ChED): Communications Chair 2023–present

AIChE Education Division (EdDiv): Membership Committee 2024–present

Berkeley Pre-Engineering Program (PREP) Instructor 2020–2021
- Designed and taught a fully-remote, three-week chemistry course

Coordinated Community Review Team for Sexual Violence and Misconduct 2021–2022

Respect is a Part of Research (RPR): SVSH training facilitator 2019–2021

Berkeley CBE Remote Instruction Committee 2020–2022

Berkeley CBE Graduate Student Advisory Committee (GSAC) President 2019–2020
- Elected to lead and represent graduate students to the faculty

Berkeley CBE GSAC Vice President, Treasurer, and Social Chair 2018–2019

Scientific Journal Reviewer: *ACS Macromolecules, J. Electrochem. Soc., JEE* 2019–present