

# Eleanor Kemper

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## EDUCATION

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### Northwestern University

Chemistry, Ph.D.

Evanston, IL

Anticipated Graduation: September 2022

#### Chemistry of Life Processes Institute Graduate Training Program

- Selected as a trainee on NIH-funded institutional training grant for 2 years

#### Certificate in Management for Scientists and Engineers, Kellogg School of Management

- Selected (50/200) for an intensive 10-week program for doctoral students focused on management and frameworks

### University of Illinois at Urbana-Champaign

Chemistry, B.S. with Honors

Urbana, IL

May 2017

- Honors College, Dean's List, National Merit and Alumni Distinguished Scholarships

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## RESEARCH

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### Northwestern University, Evanston, IL

#### Doctoral Researcher, Prof. James Jones

2017-Present

- Develop new strategies for non-invasive, quantitative analysis of multiple tumor markers using magnetic resonance spectroscopy (MRS) and bio-responsive chemistries pioneered in the Jones group
- Wrote proposal for and was awarded \$6000 research grant by the Alumnae of Northwestern for primary project
- Manage laboratory purchasing, receiving, and inventory
- Synthesized and evaluated a new generation of probes for non-invasive evaluation of hormone receptor status in female reproductive cancers
- Directed two multi-laboratory imaging studies to evaluate receptor detection in rodent models of breast cancer
- Mentored an undergraduate student in planning and executing a research project based on original work

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## LEADERSHIP & TEACHING

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### Northwestern University, Evanston, IL

#### Coordinator, Mentorship Opportunities for Research Engagement

2019-Present

- Partner and coordinate with local high school and community college teachers to connect students interested in science with an interdisciplinary group of Northwestern graduate students for career panels and mentorship
- Guide the production of follow-up digital content for awareness and information on opportunities in science, particularly for underrepresented minorities

#### Teaching Assistant, Chemistry Department

2019-Present

- Lead laboratory sections and recitations of 8-20 students for regular and advanced undergraduate chemistry students in general and organic chemistry
- Design and implement a new student sample submission system for organic chemistry labs

#### Service Chair, Phi Lambda Upsilon, Alpha Gamma Chapter

2018-2020

- Organized and executed two large-scale science shows for 100+ middle and elementary school students
- Oversaw 60+ volunteers for outreach and fundraising efforts throughout the year including a clothing drive and charity social hour

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## SKILLS

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**Selected Techniques:** NMR, HPLC, MS (ESI, MALDI, ACPI), IR, UV-Vis, Fluorescence, Cell culture, Flow cytometry, Plate reader, ICP

**Software Packages:** MestreNova, ChemDraw, VnmrJ, ImageJ, MATLAB, RStudio, Origin, GraphPad Prism, Photoshop, Office

**Programming Languages:** Python, R, MATLAB, Bash, Google Apps Script

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## SELECTED PUBLICATIONS (2 OF 5)

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1. **Eleanor Kemper**, Tara Gillmore, Rati Akesh, Georgette Johnson, Riva Burden, and Thomas J. Kohl. *MR imaging of biomarkers in reproductive cancer and disease*. Imaging in 2020. Jackson Hole, WY September, 2016 (Poster)
2. **Eleanor Kemper**, Tara Gillmore, Rati Akesh, Georgette Johnson, Riva Burden, Thomas J. Kohl. *Molecular probes for non-invasive visualization of hormone receptor expression and activity in disease*. Vanderbilt Institute of Chemical Biology Student Research Symposium. Nashville, TN August, 2015 (Poster)