

Professional Summary

Results-driven Ph.D. candidate specializing in immunology, with extensive hands-on experience in translational research and advanced laboratory techniques. Expertise in designing and executing complex in vivo and in vitro experiments, managing projects, and analyzing large datasets. Eager to transition to an industry research role to apply scientific rigor, innovative problem-solving, and collaborative skills to drive product development and discovery.

Education

Ph.D. (candidate) in Biological Sciences | Purdue University, West Lafayette, IN | Aug 2022 – Present
Specialization in Microbiology, Immunology, and Infectious Diseases

B.S. in Biochemistry | University of Wisconsin-Madison, Madison, WI | Sept 2015 – Dec 2018
Graduated With Distinction

Technical Skills

- **Advanced Lab Techniques:** Flow cytometry (FACS), histology, ELISA, qPCR, primary cell culture, western blotting, transfection.
 - **Animal Models:** Mouse colony management, genotyping (PCR), in vivo experimental design, cell isolation and transplantation, IACUC protocol compliance.
 - **Data Analysis & Tools:** GraphPad Prism, statistical analysis, data visualization, scientific report and figure preparation.
 - **Project Management:** Protocol design, experimental reproducibility, equipment calibration, sterile technique, quality control.
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Research Experience

Graduate Research Assistant, Matthew Olson Lab | Purdue University | Aug 2022 – Present

- **Project Management:** Led a research project to characterize pathogenic T cell subsets in mouse models of intestinal inflammation, providing potential therapeutic targets.
- **Methodology:** Independently designed and executed a range of experiments, including primary murine T cell isolation, culture, and functional assays (cytokine production, proliferation).
- **Data Integrity:** Developed and validated biochemical assays (ELISA, flow cytometry, qPCR) to quantify inflammatory markers, ensuring high data quality and reproducibility.
- **Analysis & Communication:** Utilized GraphPad Prism to analyze complex datasets and prepare comprehensive statistical reports for publication.

Researcher, Goo Taeg Oh Lab | Ewha Womans University, Seoul, South Korea | Jul 2019 – Mar 2020

- Investigated effects of oxidative stress on cardiomyocytes using in vitro and in vivo models, applying western blotting, electron microscopy, and immunofluorescence microscopy.
- Designed and implemented experimental protocols for mitochondrial function assays to study cardiac hypertrophy.

Research Assistant, Jing Fan Lab | Morgridge Institute for Research, Madison, WI | Nov 2016 – Jun 2019

- Optimized and executed biochemical assays to evaluate immune cell function and metabolic pathways.
- Maintained and managed mammalian cell cultures and transfections, ensuring research continuity and data integrity.

Leadership & Service

Graduate Teaching Assistant | BIOL 11000 – Purdue University | Aug 2025 – Present

- Lab section and recitation lead, guiding students through complex concepts and experimental procedures.

Volunteer, Emergency Department (Patient Liaison) | IU Health Arnett Hospital | June 2025 – Present

- Supporting clinical staff by maintaining medical supplies and a clean, organized environment.
- Assisting with patient communication, transportation, and non-clinical care.

Graduate Teaching Assistant | BIOL19500 – Purdue University | Jan 2024 – May 2024

- Led undergraduate lab sessions and assisted students with experiment design and troubleshooting.

Biological Sciences Graduate Student Association Officer | Purdue University | Aug 2023 – Jun 2025

- Vice president (2024 – 2025); organization of professional and mental health events, supporting role for event organization
- Social Chair (2023 – 2024); organization of social events for internal and external social events involving department students.

Republic of Korea Army | SOS Children's Villages, Seoul, South Korea | Apr 2020 – Dec 2021

- Fulfilled mandatory service by managing daily care and organizing programs for children at a local orphanage.
- Developed strong organizational and leadership skills in a structured and community-focused environment.

Chemistry Faculty Assistant | University of Wisconsin-Madison, Madison, WI | Jan 2019 – May 2019

- Guided lectures and lab sessions for general chemistry courses, supporting student learning and safety compliance.

Awards & Publications

- **Awards:**
 - SIRG Graduate Research Assistantship (Purdue Institute for Cancer Research | Apr 2024)
 - Ross Fellowship (Purdue University Graduate School | Aug 2022)
 - Cargill-Benevenga Research Stipend (UW – Madison, Nutritional Sciences | 2018)
- **Conferences:**
 - Upcoming Oral & Poster presentation at the Autumn Immunology Conference, Chicago, IL, Nov 2025.
- **Publications:**
 - **Yeo F**, Wang M, Park S, et al. (In revisions, 2025) *Journal of Immunology*
 - Canaria DA, Rodriguez JA, Wang L, **Yeo F**, et al. (2023) *Frontiers in Immunology*, 14, 1275423.
 - Sonn SK, ... **Yeo F**, et al. (2022) *Redox Biology*, 51, 102275.
 - Seim GL, Britt EC, John SV, **Yeo F**, et al. (2019) *Nature Metabolism*, 1(7), 731–742.