SPRING EVENT

UW3MT

THREE MINUTE THESIS

PRESENTED BY

The Graduate School's Office of Graduate Student Affairs & UW Libraries Research Commons

05.22.25

4-6 PM @ ALDER AUDITORIUM, UW SEATTLE

Welcome!

THIS VEAR'S THEME >

Impact for the Public Good

UW 3MT® is a professional development competition that celebrates the exciting capstone and research experiences of master's and doctoral students at the University of Washington from all three campuses. The competition supports graduate students' capacity to effectively and simply explain their capstone, thesis or dissertation projects in three minutes, in verbiage appropriate for a public audience. Presenters will have a chance to win First Place, Runner Up, and People's Choice awards (generously sponsored by The Graduate School).

We are thrilled you have joined us for this exciting event!

#uw3mt / #uwgradsuccess 🗶





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COMPETING FINALIST

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Stacey Alfonso



SHE/HER

Ph.D. Student, Learning Sciences and Human Development COLLEGE OF EDUCATION. SEATTLE

PRESENTATION TITLE >

With Nature: An Ethnographic Study of Child-Nature Connectedness

With an ardent commitment to promoting naturebased learning and equitable access to nature for all children, Stacey's research centers on early childhood experiences about, in, and with nature. Her investigation delves into the intricate processes by which children cultivate understanding of and connections with the environment. Stacey's mission is to enrich educators' and researchers' perspectives on child-nature relationships, as well as deepen the understanding of nature's features that facilitate development and learning.

AFFILIATIONS >

Pre-doctoral instructor; Cultivate Learning RA; co-lead of UW RSO Student-Parent-Caregiver Advocacy (SPCA); colead of Natural Start Alliance/NAAEE NatStart Grad Network; AERA Environmental Education (SIG #33), Early Education and Child Development (SIG #32)

FELLOWSHIPS/FUNDING >

Society for Research in Child Development (SRCD) Student and Early Career Council (SECC) Dissertation Research Funding Awards; UW Graduate Student Conference Presentation Award; internal advisee funding; UW Resilience Lab: Resilience and Compassion Seed Grant



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Harsha Amaravadi



SHE/HER

Ph.D. Student, Health Service SCHOOL OF PUBLIC HEALTH, SEATTLE

PRESENTATION TITLE >

Too Sick to be True? Evaluating **Medicare's Patient Driven Payment Model**

Harsha's research examines how payment policies shape care delivery, particularly in cancer rehabilitation and post-acute care settings. Harsha's dissertation evaluates the effects of Medicare's skilled nursing facility payment reform on care for people with advanced cancer. More broadly, she is interested in using quasi-experimental methods and observational data to generate real-world evidence that informs value-based payment reforms, centering patient outcomes while addressing healthcare costs. She holds an MPH from Tufts University and is currently an NIH TL-1 scholar. Originally from Boston, Harsha enjoys dancing, cooking, and exploring Seattle's music and park scenes.

AFFILIATIONS >

UW Academy Health student member

FELLOWSHIPS/FUNDING >

National Center for Advancing Translational Sciences of the National Institutes of Health under award number TL1TR002318 (2024-2025); National Research Service Award, Agency for Healthcare Quality and Research T32 Fellow (2021-2024)



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COMPETING FINALIST

Daniil Filienko



HE/HIM

Master's Student, Computer Science & Systems SCHOOL OF ENGINEERING & TECHNOLOGY, TACOMA

PRESENTATION TITLE >

Fighting Tuberculosis: AI Conversations that Change Lives

Daniil is a graduate student in Computer Science and Systems at the University of Washington, Tacoma, where he has earned his M.S. and B.S. degrees with distinctions. His research lies at the intersection of machine learning and health AI with a particular focus on large language models (LLMs), privacy preserving machine learning, and responsible AI deployment. Daniil has contributed to interdisciplinary projects tackling real-world healthcare challenges such as tuberculosis treatment adherence and mental health support for caregivers using LLM-based tools. His research works has been presented at venues such as the AMIA Annual Symposium and various workshops, focused on deploying LLMs and Generative AI for healthcare applications.

AFFILIATIONS >

PPML/RHAIL Research Lab

FELLOWSHIPS/FUNDING >

Carwein-Andrews Distinguished Fellowship; NIH AIM-AHEAD Research Fellowship; GSEE Tuition Award; UW **Graduate University Grant**



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Gizem Gökçe-Alpkılıç



SHE/HER

Ph.D. Student, Molecular Engineering & Sciences Institute THE GRADUATE SCHOOL. SEATTLE

PRESENTATION TITLE >

Disarming a Killer: A New Way to Fight Superbugs

At the Institute for Protein Design, Gizem's research focuses on de novo peptide design against diseaserelated targets, combining machine learning, Rosetta modeling, and AlphaFold with experimental methods like yeast surface display, peptide synthesis, and protein expression and purification. She has coauthored publications in Cell and Science, contributed to a patent on orally bioavailable macrocycles, and received first-place honors for her senior design project and poster presentations. Gizem has presented her work at international conferences, including Keystone Symposia and the International Materials Research Congress.

FELLOWSHIPS/FUNDING >

Fulbright Ph.D. Scholarship



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COMPETING FINALIST

Nicole Gregorio



SHE/HER

Ph.D. Student, Bioengineering **COLLEGE OF ENGINEERING & SCHOOL OF MEDICINE**

PRESENTATION TITLE >

How Can Jell-O Help Us Heal Better?

Nicole is a Ph.D. student in Bioengineering who has worked to develop new protein-based hydrogels for applications in regenerative medicine. Outside of her research she has a passion for teaching, science communication, and STEM outreach work.

AFFILIATIONS >

STEM Pals Co-Lead; Engage Board Member; STEP-UP Trainee; ISCRM and IPD collaborator

FELLOWSHIPS/FUNDING >

NSF Graduate Research Fellowship Program (GRFP)



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Kevin **Jiang**



HE/HIM

Ph.D. Student, Bioengineering **COLLEGE OF ENGINEERING & SCHOOL OF MEDICINE**

PRESENTATION TITLE >

Preventing The Next Pandemic: Developing Next Generation At-Home Diagnostics

Kevin's research focuses on the development of diagnostic technologies that could be implemented in remote or home settings without compromising test accuracy or requiring complex protocols. Prior to grad school, he spent four years working in the Bay Area biotech space at Cepheid and Boehringer Ingelheim. For him, diagnostics is not only a passion, but a powerful tool that is instrumental in the fight against any disease. Outside of the lab, Kevin is active in educational outreach, working with local community college students through the UW HEARO initiative and high school STEM teachers through Fred Hutch's Science Education Partnership program. You can find him in his free time either on a tennis court or the nearest boba shop.

AFFILIATIONS >

Senior Venture Analyst (Washington Research Foundation); Graduate Student Mentor (Science Education Partnership); Lead Mentor (HEARO)

FELLOWSHIPS/FUNDING >

Finalist, UW Graduate School Medal





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COMPETING FINALIST

Eric Osnes



HE/HIM/HIS

Master's Student, Jurisprudence SCHOOL OF LAW, SEATTLE

PRESENTATION TITLE >

Charting New Frontiers: Adapting Maritime Salvage and Rescue Laws for the Space Age

Eric is a former ship Captain and marine salvage expert. He attended the California Maritime Academy where he obtained a BSc degree and subsequently earned an MBA in international business at Seattle University. His career has been focused on heavily regulated industries such as maritime and business aviation, which are very similar in nature. Eric has had the opportunity to live and work in Norway and have traveled throughout the Pacific Ocean, Gulf Coast, Asia, and Europe. He's a true Seattleite, having been born here and lived here for a large portion of his life. He just keep coming back to the Pacific Northwest, which he will always call home. Eric's husky, Miss Ripley, agrees that they should stay here.

AFFILIATIONS >

Law Student Member of American Bar Association and King County Bar Association; Pacific Northwest Business Aviation Association (PNBAA).

FELLOWSHIPS/FUNDING >

Law School Scholarships in Fall 2023, Winter 2024, and Fall 2024.



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Lakshmipriya Rajakumar



SHE/HER

Master's Student, Architecture COLLEGE OF BUILT ENVIRONMENTS, SEATTLE

PRESENTATION TITLE >

Brighter Spaces, Better Learning

A licensed architect with over five years of experience, Lakshmipriya integrates Building Information Modeling (BIM) and computational tools like Revit, Rhino, and Climate Studio to design high-performance environments. Her 3MT research focuses on enhancing daylighting and visual comfort in middle school classrooms, aiming to improve student wellbeing and academic outcomes. She also serves as a Teaching Assistant in architectural history and has received honors from The Architect's Newspaper and Mango Architecture. Lakshmipriya is passionate about merging design technology with sustainable strategies to create impactful educational spaces.

AFFILIATIONS >

American Institute of Architecture Students and American Institute of Architects

FELLOWSHIPS/FUNDING >

Honor Mention from The Architect's Newspaper 2023 and Research Presentation at UW Scholars Studio 2025



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COMPETING FINALIST

Marti **Tooley**



SHE/HER

Ph.D. Student, Molecular Engineering & Sciences Institute THE GRADUATE SCHOOL

PRESENTATION TITLE >

Computational Design of a Novel Platform to Colocalize Cell for **Therapeutic Effects from Cancer Killing to Vaccine Boosting**

Marti discovered her passion for viral engineering as an undergraduate at the University of Tennessee, where she earned her degree in Chemical and Biomolecular Engineering in 2017. In Dr. Eric Boder's lab, she explored ways to re-engineer components of the influenza virus. She continued this path at the Fred Hutchinson Cancer Center in Seattle, contributing to a CRISPR-Cas9 project in Dr. Justin Taylor's lab that aimed to engineer immune cells against RSV, flu, HIV, and EBV. Marti's work focuses on designing next-generation vaccines and therapeutics using computational protein design—an intersection of biology and technology that she finds both challenging and inspiring. She remains driven by the potential of protein engineering to transform how we prevent and treat disease.

AFFILIATIONS >

AiChE; SWE; SHPE; TBP; UW Science Explorers

FELLOWSHIPS/FUNDING >

NSF Graduate Research Fellowship Program (GRFP); **UW Engineering Scholar Award**



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Grace **Umutes**i



SHE/HER/HERS

Ph.D. Student, Global Health Metrics & Implementation Science SCHOOL OF PUBLIC HEALTH & SCHOOL OF MEDICINE, SEATTLE

PRESENTATION TITLE >

Single-Dose HPV Vaccination: A Dose of Hope in the Fight Against **Cervical Cancer in East Africa**

Grace is a dynamic global health professional with over a decade of experience in public health research and programmatic work in low-and middle-income countries (LMICs). She has devoted her academic and professional work to contribute to the design and implementation of innovative strategies to improve health outcomes. Her work spanned from supporting Polio surveillance in West Africa and yellow fever outbreak response activities in DRC to managing health system strengthening activities in Rwanda. More recently, she supported initiatives that generate evidence to improve equitable access to diagnostics services in LMICs and inform strategy to improve HPV vaccination coverage in Kenya.

AFFILIATIONS >

International Clinical Research Center (ICRC); 2021-2022 Dean's Advisory Council for Students (DACS), School of Public Health

FELLOWSHIPS/FUNDING >

2023 L'Oréal-UNESCO For Women In Science Young Talents Awardee; First place award, 2024 International Papillomavirus Conference (IPVC); 2024 International Papillomavirus Society (IPS) Travel Scholarship



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Our Judges



Dr. Tricia SerioUniversity of Washington Provost



Dr. Bruce Montgomery CEO, Avalyn Pharma



Dr. John MacklinProfessor Emeritus,
UW Department of Chemistry



Dr. Jenny WyattARCS President



Dr. Briana FurchPhysician, Vaccine and Infectious
Disease Division, Fred Hutch



Former Chief of Staff & Director of Strategy, Planning & Management for the Communications Division, Gates Foundation

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TO CAST A VOTE



PEOPLE'S CHOICE AWARD >

LET YOUR VOICE BE HEARD!

Or submit your vote at bit.ly/uw3mtpc25

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