

"Using Macrophage Polarization for Enhanced Delivery and Diagnostics"

Dr. Elizabeth Wayne

Assistant Professor,
Biomedical Engineering and Chemical Engineering
Carnegie Mellon University
Pittsburgh, PA



Tuesday, February 14, 2023
12:00 PM – 1:00 PM
Wolstein Research Building Rm. 1413

Hybrid

Meeting ID: 947 8784 3693
Passcode: 467692

Department of Pathology



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University Hospitals

There will also be a discussion with students where Dr. Wayne will describe and answer questions about her scientific journey and obstacles overcome.

Tuesday, February 14th, 3pm to 4pm, BRB-105 (Refreshments served)

Elizabeth Wayne is a TED Fellow and Assistant Professor at CMU. Elizabeth Wayne works at the interface of immunology and nanoparticle engineering, by exploring the function of monocytes as a cellular theranostic. Her group designs chitosan-based nanoparticles that can modulate macrophage phenotype under inflammatory contexts. Her group designs monocyte biosensors to enable real-time measurements of macrophage polarization. Currently, she is applying these concepts to investigate air-pollution, lung regeneration, atherosclerosis, pre-eclampsia, and cancer. Dr. Wayne's research has competitively been funded through NSF, Genentech, and a prestigious NIH R35 Maximizing Investigator's Research Award.

Dr. Wayne is a science communicator who uses her platform to discuss the future of immunoengineering and issues related to underrepresented minorities in science. In 2017, she gave a TED Talk on immunoengineering which currently has been viewed over 1.5 million times. Dr. Wayne was featured in the Super Cool Scientists: A Women in Science Coloring Book. She is also the co-host of the show PhDivas, a podcast that tells the stories of women in leadership and higher education. Dr. Wayne has been interviewed and written in various platforms including PBS News Hour Brief but Spectacular Series, Aspen Ideas Health Festival, Nature Careers, Nature Medicine, Bust Magazine, The Atlantic, and the LA Times.