



Mary Jo Fidler, MD

Alice Pirie Wirtz Chair of Medical Oncology

Advancement of Medicine

In 2024 I was delighted to support the work of a resident seeking a career in medical oncology. He studied the relationship between allostatic load — or stress levels — and patients being diagnosed with EGFR-driven non-small cell lung cancer.

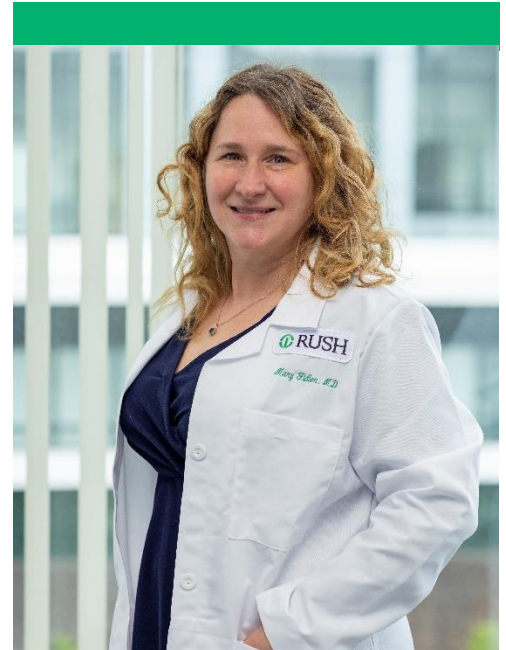
Allostatic load is designed to measure physical evidence of societal stressors and includes body mass, high blood pressure and blood-based measures of inflammation. There are emerging data suggesting a correlation with cancer development, and we showed that a higher allostatic load was associated with increasing stages of EGFR-driven lung cancer. EGFR-mutated lung cancer occurs in about 15-20% of lung adenocarcinoma and has some associations with Asian ethnicity, non-smoking history and most recently particle air pollution. Our resident, **Louis Filipak, MD**, was able to present our preliminary findings at the 5th Annual National EGFR Resisters Research Summit.

This past calendar year, I was able to assist our group in publishing a manuscript which was the first to note increase in skeletal muscle mass in patients with advanced non-small cell lung cancer receiving first line treatment.

Another notable result of your generous support has allowed me to mentor **Koosha Paydary, PhD**, who earned a Top Poster Ribbon at the 2025 Conference of the American Society for Clinical Pharmacology and Therapeutics for *Real World Characterization of Drug-Drug Interactions Among Patients with Oncogene-Driven Non-Small Cell Lung Cancer Using Tyrosine Kinase Inhibitors*.

Research

The generous funds of the Alice Pirie Wirtz Chair of Medical Oncology have given me the flexibility to support statistical analyses, opportunities for our early-career faculty and trainees to publish and present their work, and the availability of my time to mentor and lead initiatives continuing to study





supportive care for our patients with lung cancer and delve into what drives particular cancers common in those with a less significant smoking history.

Scholarly Service

- In addition to the work highlighted above, I am honored to be an associate editor for the International Society for the Study of Lung Cancer's Lung Cancer News publication.
- I was invited to present at several national conferences and serve on interesting panels discussing the incorporation of immunotherapy in resectable lung cancer.

The Year Ahead: 2025 and Beyond

This year we will be prioritizing our efforts in cancer cachexia and EGFR-mutated non-small cell lung cancer. Regarding cancer cachexia, we are generating preliminary data learning how proteins secreted by cancer have direct effects on skeletal muscle cells to lay the groundwork for federally funded opportunities in lung cancer. We are working on correlating cancer gene expression with cachexia, whose relation is relatively unknown in patients with gene rearranged "driver" mutations like EGFR.

With Gratitude

Many thanks to the Wirtz family for their generous support of my chair. I am filling the large shoes of the previous chair holder, **Philip Bonomi, MD**, and with your support, I am able to advance our group's research interests to better manage and improve the lives of patients diagnosed with lung cancer.