



## Christopher W. Seder, MD

The Arthur E. Diggs, MD, and L. Penfield Faber, MD, Professor of Surgical Sciences



### Advancement of Medicine

At its core, the Arthur E. Diggs, MD, and L. Penfield Faber, MD, Endowed Chair has allowed me to build the Rush Lung Center clinical research team. This year we are graduating our second Rush Lung Center Clinical Research Scholar. These positions have been fully financed by the Diggs-Faber fund. **Arsalan Khan, MD**, and **Wara Naeem, MD**, have each spent two years performing research at Rush under my guidance. Together they have produced multiple peer-reviewed manuscripts, presented dozens of studies, and have written a foundation grant. Arsalan matched into the general surgery program at Washington University in St. Louis and Wara is in the process of applying to training programs now. In addition, for the 2025-2026 academic year, we have two full-time Rush general surgery residents in our lab. Finally, this past summer we had an undergraduate college student and high school student working with us. Your generosity is not only facilitating important research, but also providing talented, aspiring physicians learning opportunities they may not have otherwise had.

The overarching goal of our work is to use clinical characteristics, genomic data and radiology imaging to predict which patients have aggressive forms of lung cancer that are most likely to recur. In the last year, we have expanded our lines of study into other disease types like esophageal cancer and thymus cancer. Since I received Arthur E. Diggs, MD, and L. Penfield Faber, MD, Endowed Chair in February 2022, the Rush Lung Center clinical research team has produced 20 peer-reviewed manuscripts, published in prestigious journals including *Journal of the American College of Surgeons*, *Annals of Thoracic Surgery* and *Annals of Surgical Oncology*. In addition, our scholars have given 28 presentations at national meetings. At the moment, we have a variety of additional manuscripts under review and abstracts being considered for presentation at national meetings.



## Clinical Research

The Rush Lung Center Clinical Research Team has organized clinical and genomic data from approximately 1,400 lung cancer patients. This data was analyzed by our bioinformatics team, work made possible by the endowment. Patients were carefully selected based on criteria specific to the goal of isolating a unique genomic signature for recurrence. We currently possess differential gene expression profiles, specific pathway analyses and principal component analysis results, which we plan to validate using data from a cohort of patients included in the TracerX trial that closely resembles ours.

## Publication Highlights — Abbreviated

- Khan AA, Shah SK, Naeem W, Ansari M, Alex GC, Geissen NM, Liptay MJ, Seder CW. Association Between Social Vulnerability Index and Time to Treatment in Resectable Non-Small Cell Lung Cancer. *Ann Thorac Surg*. 2025 Nov;120(5):937-945. doi: 10.1016/j.athoracsur.2025.04.018. Epub 2025 May 6. PMID: 40339972.
- Naeem W, Khan AA, Ansari M, Adebayo OW, Basu S, Alex G, Geissen N, Liptay MJ, Seder CW. CT-based emphysema score is associated with prolonged air leak after lung resection: a retrospective cohort study. *J Thorac Dis*. 2025 Nov 30;17(11):9397-9410. doi: 10.21037/jtd-2025-946. Epub 2025 Nov 26. PMID: 41376978; PMCID: PMC12688616.

## The Year Ahead: 2026 and Beyond

Over the next year, you can expect that funds from the Diggs-Faber Endowed Chair will be used for additional bioinformatic analysis, employing a similar methodology for consistency and stronger evidence. This will be followed with laboratory work aimed at understanding if our findings translate into tissue protein biomarkers specific to disease recurrence. All the preliminary data generated for this study was made possible through your generosity and the Arthur E. Diggs, MD, and L. Penfield Faber, MD, Endowed Chair of Surgical Science.



## **With Gratitude**

As always, I want to thank you for your generosity in establishing the Arthur E. Diggs, MD, and L. Penfield Faber, MD, Endowed Chair of Surgical Science. I'd like to express my deep condolences on the passing of Mr. Hollensteiner. I always enjoyed my conversations with him and am grateful for his role in supporting our work over the years. As I previously indicated, I plan to submit a biannual report to you as a means of keeping you informed about the research and educational initiatives your philanthropy is funding.