

SHIVA EK VENKATESWARAN

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EDUCATION

University of Pennsylvania, Philadelphia, PA

May 2027

- Candidate for Bachelor of Arts
- Major: Biology & Health Policy | Minor: Statistics
- Campus Involvements: Perry World House Fellow (2025-2026), Kite and Key Society (Tour Guide), Philadelphia Lung Cancer Screening Initiative (Founder & Director), Educational Pipeline (TA), Student Committee on Undergraduate Education (SCUE)

PROFESSIONAL EXPERIENCE

Memorial Sloan Kettering Cancer Center, Radiation Oncology & Global Health Research Fellow

Sept. 2024 – Present

- Lead outcomes research at the Iyengar Lab to analyze internal and national datasets, with a focus on uncovering biological drivers of cancer outcomes, and informing global health strategies in oncology.

Mass General Brigham & Harvard Medical School, Surgical Oncology Research Fellow

Feb. 2022 – Present

- Conducting retrospective analyses at the Chi-Fu Yang Lab to inform thoracic surgery guidelines; lead surgical study design and support patient recruitment across three NIH-funded trials aimed at advancing responsible lung cancer screening and improving surgical outcomes.

Center for Medicare & Medicaid Services, Health Policy Intern

May. 2024 – Present

- Developing a payment policy for a future artificial kidney under the ESRD Prospective Payment System (PPS), conducting research on existing models, analyzing data, and drafting recommendations to promote cost-effective, accountable, and high-quality care for patients with Stage V ESRD.

Locust Bioventures, Co-Director & Strategy Consultant

Sept. 2023 – Present

- Supported the commercialization of cutting-edge biotech innovations through clinical trial design, market research, and financial modeling, helping transition academic research from Nobel and Breakthrough Prize winning labs into successful, venture-backed startups.

National Aeronautics and Space Administration (NASA), Knowledge Management Intern

March 2022 – Aug. 2022

- Researched past NASA LaRC projects, documented key lessons learned, and edited/published the Risk Reduction Manual SharePoint page, elevating it into a multimedia resource for internal use by future flight-based project teams

LEADERSHIP EXPERIENCE

American Lung Cancer Screening Initiative (ALCSI), National Director of International Policy

Feb. 2022 – Present

- Led advocacy efforts for federal legislation recognizing Lung Cancer Screening Awareness Month and expanding access to screening and smoking cessation resources; aiding in American Medical Association support for adding lung cancer screening information to cigarette packaging.
- Leading a team to establish a Global Lung Cancer Screening Day, in collaboration with the U.S. Department of Health and Human Services and the UK Department of Health and Social Care

International Genetically Engineered Machine (iGEM), International Ambassador & UN Delegate

June. 2022 – Dec. 2024

- Served as the youngest leader of a global network of biotech researchers, entrepreneurs, and policymakers, provided mentorship, resources, and organized workshops at iGEM 2022 Jamboree (500+ attendees); authored biannual iGEM Digest Magazine promoting diversity in synthetic biology
- Developed policy recommendations on sustainable synthetic biology, presented on behalf of the iGEM Foundation at the UN COP15 Convention, informing international discussions on biodiversity governance and biotech regulation.

INNOVATION EXPERIENCE

CADlock: An Amplification-based Coronary Artery Disease Diagnostic

Jan. 2021 – Dec. 2022

- Led development and testing of a patented CAD diagnostic biosensor, combining lab research with clinical validation. Created a detailed business plan with market analysis, stakeholder engagement, and financial strategy.
- Awards: iGEM International Grand Prize (1st/346 Teams) & Regeneron Biomedical Science Award

SELECTED PUBLICATIONS [\[see all\]](#)

- Potter AL, Vaddaraju V, Venkateswaran S, Mansur A, et al. Deaths due to COVID-19 in patients with cancer during different waves of the pandemic in the US. *JAMA Oncol.* 2023. [\[DOI\]](#)
- Venkateswaran S, Wang D, AL Potter, Yang CJ. Safety and Optimizing Ergonomics for Cardiothoracic Surgeons. *Thorac Surg Clin.* 2024. [\[DOI\]](#)
- Mathey-Andrews CA, Abruzzo AR, Venkateswaran S, Potter AL, et al. Segmentectomy vs lobectomy for early non-small cell lung cancer with visceral pleural invasion. *Ann Thorac Surg.* 2023. [\[DOI\]](#)
- Gilmore AL, Willmann J, Olachea S, ... Venkateswaran S, et al. Prevalence and Development of Cachexia Before and After Diagnosis of Non-small Cell Lung Cancer. *Am J Clin Oncol.* 2025 [\[DOI\]](#)

ADDITIONAL INFO

- Skills: STATA, R, Python (Pandas), Microsoft Office (Excel, Word, PowerPoint), Data Analytics, Data Visualizations, Health Policy Analysis, Survey Design, Program Evaluation