Spotlight on Lung Cancer

Lung cancer is the third-most common cancer in the U.S., with an estimated 226,650 new cases diagnosed in 2025.

Lung cancer death rates continue to decline. From 2014 to 2023, the death rate decreased by 4.7% per year in men and 3.5% per year in women. But, lung cancer remains the leading cause of cancer deaths in the United States.

Our Impact on Lung Cancer Research

We've funded

91 grants totaling over $32.5 million.

V Foundation funded researchers, over their careers, have:

Received
over 614 grants and $8.5 billion in funding.

Produced
over 10,000 publications.

Worked on
142 clinical trials.

V Foundation Funded Researchers – Proven Positive Impact

- **Jasmine (Xianghong) Zhou, Ph.D.,** a 2022 Translational Grantee at Jonsson Cancer Center at the University of California, Los Angeles, studies ways to develop non-invasive tests for diagnosis and monitoring of cancer.
- One method that is being developed is called cell-free DNA (cfDNA) or liquid biopsy, which analyzes free DNA fragments in body fluids such as blood, plasma, or urine.
- This process aims to detect cancer cells or cancer-related biomarkers in the body that could allow for frequent monitoring and assessment of risk or cancer progression. However, there have been challenges in accurately quantifying cfDNA and determining which tissue it has come from.
- Dr. Zhou and colleagues have identified specific markers (called methylation patterns) unique to each tissue, that can potentially help identify which tissue or organ the cfDNA is associated with.
- This is a huge breakthrough, and the findings provide two significant steps forward in improving liquid biopsy by both helping to identify which tissue the cells are coming from and to more accurately predict clinical outcomes in patients.

Jasmine (Xianghong) Zhou, Ph.D., 2022 Translational Grantee