Stanford was recently named among the top ten best hospitals in the nation by the U.S. News & World Report and ranked among the nation’s best for cardiology and heart surgery – all thanks to you. This is a humble affirmation of our department’s dedication to patient care while delivering exceptional outcomes.

Last month, the DEI Staff Committee hosted the CT Surgery Celebrates Women in Medicine Luncheon, recognizing all women in medicine and highlighting our 20 women faculty, residents, and fellows. We are grateful to the phenomenal women who provide excellent care for our patients and their families.

This fall, we are excited to welcome four clinical faculty to the department: Drs. Irmina Elliott, Brandon Guenthart, and Yihan Lin as Clinical Assistant Professors, and Dr. Pierre Theodore as Clinical Associate Professor.

Please also join me in welcoming Drs. Satoshi Miyairi, Sumanth Kidambi, and Lloyd (Mac) Felmly who joined our department as Clinical Instructors in the Division of Pediatric Cardiac Surgery.

Thank you for your contributions to our community.

Sincerely,

Joseph Woo, MD
Norman E. Shumway Professor and Chair
Stanford Department of Cardiothoracic Surgery

In the News

Department Celebrates Women in Medicine Month
September marks the American Medical Association’s Women in Medicine Month—an annual celebration of women physicians, residents, and trainees. The DEI Staff Committee organized the Stanford Cardiothoracic Surgery Celebrates Women in Medicine Luncheon in appreciation of the women in medicine who have paved the way for leaders in cardiothoracic surgery. Read more.

Stanford Hospital named among top 10 for cardiology and heart surgery
Stanford Health Care was ranked among the top ten hospitals in the nation by the U.S. News & World Report for cardiology and heart surgery, according to the 2022-2023 Best Hospitals rankings. Read more.

Department welcomes four new clinical faculty
The Department of Cardiothoracic Surgery welcomed four new clinical faculty: Irmina Elliott, MD, Brandon Guenthart, MD, and Yihan Lin, MD, MPH, who recently joined as Clinical Assistant Professors, and Pierre Theodore, MD, as Clinical Associate Professor. Read more.
Stanford Health Care ranked in top 10 by U.S. News & World Report
For the eighth year running, the U.S. News & World Report ranks Stanford Health Care as among the nation's highest-rated hospitals. The hospital was named top three in California and best in San Jose metropolitan area. Read more.

Micropreemie survives lifesaving heart surgery for rare fetal heart tumor
Stanford Children’s Health experts, including pediatric cardiothoracic surgeon Michael Ma, MD, helped save baby Angelina Anna Torres-Valencia, who had an extremely rare heart tumor, with a lifesaving heart surgery. Read more.

Dr. Louis Capecci appointed as Cardiothoracic Division Chair at Kapi'olani Medical Center for Women & Children
Louis Capecci, MD, is appointed as the new Cardiothoracic Surgery Division Chair and Pediatric Cardiac Surgery Peer Review Subcommittee Chair at the Kapi'olani Medical Center for Women & Children. Read about Dr. Capecci.

Dr. Natalie Liu appointed as Associate Medical Director for Surgical Services
Natalie Lui, MD, is appointed as Associate Medical Director for Surgical Services as part of the cancer destination service line at Stanford Health Care. Dr. Lui will work collaboratively with cancer DSL leadership and key stakeholders throughout Stanford Medicine. Read about Dr. Lui.

Dr. Yuanjia Zhu receives Western Thoracic Surgical Association Paul C. Samson Resident Prize
Cardiothoracic surgery resident Yuanjia Zhu, MD, MS, was recently awarded the 2022 Paul C. Samson Resident Prize from the Western Thoracic Surgical Association. Read more.

Dr. Ashley Choi receives North American Aortic Valve Repair Symposium Scholarship
Cardiothoracic surgery resident Ashley Choi, MD, MHS, received a scholarship to attend the 5th North American Aortic Valve Repair Symposium Scholarship in September of 2022. Read more.

NIH grant renewal supports Fischbein Lab with research opportunities
Michael Fischbein, MD, PhD, received a four-year NIH grant renewal to study aortic aneurysm development in patients with Marfan syndrome and other genetic connective tissue disorders. Read more.
Assessment of bias in patient safety reporting systems
Elan Burton, MD, MPH, and Stanford Medicine researchers examined whether bias exists in patient safety reporting systems based on demographic characteristics of physicians who are the subject of the event report. Read more.

A novel metabolic pathway to treat heart failure
In a recent study published in the European Heart Journal, Ioannis Karakikes, PhD, and Stanford Medicine colleagues created heart cells from patients’ skin to model the disease in the lab. Read more.

Embryologic origin influences smooth muscle cell phenotype in Marfan syndrome
Michael Fischbein, MD, PhD, and Stanford Medicine researchers published their findings looking at how embryologic origin influences smooth muscle cell phenotypic modulation signatures in Marfan syndrome. Read more.

Single-cell transcriptomic census of endothelial changes induced by matrix stiffness
Recent work by Ngan F. Huang, PhD, and colleagues looked at how substrate stiffness modulates endothelial de-differentiation and the association with atherosclerosis using single-cell analysis. Read more.

Virtual surgical skills training in high school summer program
The Annals of Thoracic Surgery published a report describing the Department of Cardiothoracic Surgery’s approach to a virtual curriculum for its Cardiothoracic Surgical Skills Summer Internship over the past few years. Read more.

Biodesign Faculty Fellows Drs. Maria Currie and Billie-Jean Martin complete program
Congrats to Drs. Maria Currie and Billie-Jean Martin for completing the 2021-2022 Biodesign Faculty Fellowship program! Over several months, they received advanced training and mentoring in health technology innovation to improve patient care. Learn more.
The 11th International Space Station Research & Development Conference featured research from the Department of Cardiothoracic Surgery, including work from Ngan F. Huang, PhD, on tissue engineering, in July of 2022. View program.

The Department of Cardiothoracic Surgery showcased its clinical and research expertise at the 5th North American Aortic Valve Repair Symposium in September of 2022. View program.

We are proud to celebrate the accomplishments of all women in medicine. Thank you for celebrating with us!

Follow us on Twitter.

Featured Publications

An automated line-clearing chest tube system after cardiac surgery.


Deep Learning Preoperative Risk Stratification.

Quantitative biomechanical optimization of neochordal implantation location on mitral leaflets during valve repair.

A Novel Rheumatic Mitral Valve Disease Model with Ex Vivo Hemodynamic and Biomechanical Validation.


The Department of Cardiothoracic Surgery is dedicated to conducting cutting-edge research. Check out more of our faculty publications.

Virtual Surgical Skills Training in a High School Summer Program.

Impact of PhD Degree Versus Non-PhD Research Fellowship on Future Research Productivity Among Academic Cardiothoracic Surgeons.

The potential of CRISPR-Cas9 prime editing for cardiovascular disease research and therapy.

Mapping Atrial Fibrillation After Surgical Therapy to Guide Endocardial Ablation.

Standardization of operative start times for non-emergent cardiac surgical procedures.

Three-dimensional-printed model of surgically resectable sinoatrial involvment mucormycosis.

Performance of a rule-based semi-automated method to optimize chart abstraction for surveillance imaging among patients with the potential of CRISPR-Cas9 prime editing for cardiovascular disease research and therapy.

Deep Learning Preoperative Risk Stratification.

Quantitative biomechanical optimization of neochordal implantation location on mitral leaflets during valve repair.

A Novel Rheumatic Mitral Valve Disease Model with Ex Vivo Hemodynamic and Biomechanical Validation.
