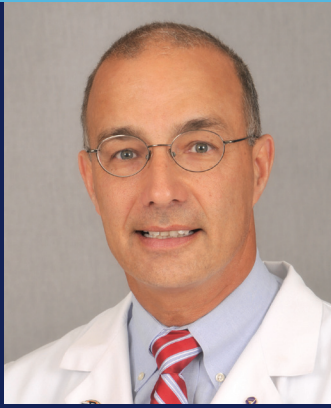


Overview



Charles J. Yeo, MD, FACS

Samuel D. Gross Professor and Chair
Department of Surgery

One Jefferson

There is palpable excitement in the air here at Jefferson. Efforts to transform our University, led by our new President Stephen K. Klasko, MD, MBA, are well underway. Many from our Department have contributed to the changes we see on the horizon. "Health Is All We Do" ...has been embraced as our new motto.

"We will reimagine health care, health education and discovery to create unparalleled value" ...has been embraced as our vision statement.

A recent extensive strategic retreat process has generated a Blueprint for Strategic Action (BSA) with four foundational enablers. These are:

- Partnerships
- Diversity
- Technology
- Philanthropy.

These foundational enablers are designed to help support our six critical pillars, which should be thought of as our six focused areas of energy:

- Patients and Families First
- One Jefferson
- Seamless Clinical Enterprise
- High-Impact Science
- Programs of Global Distinction
- Forward Thinking Education.

I am delighted to report that we in the Department of Surgery will have major roles in each of these six pillars as we help to transform Jefferson over the near and far future. For example, we are already a top decile performer in several areas under the category of Patients and Families First. Our clinical enterprise has expanded, we participate in numerous clinical trials, and we have embraced regional satellite facilities. We see contributions to High-Impact Science from our ECMO program, from our oncology programs, in the area of endovascular biology, and in education. Moreover, we offer exceptional destination programs and we have driven curricular change and educational initiatives.

American health care is changing. The Patient Protection and Affordable Care Act (PPACA) has launched. The excitement on campus is palpable. We are proud that... "Health Is All We Do".

Area Hospitals Turn to Jefferson's Adult ECMO Program

In 2010, Thomas Jefferson University Hospital introduced new capabilities for portable extracorporeal membrane oxygenation (ECMO), which provides both cardiac and respiratory support to individuals with severely diseased or damaged heart and lungs. Since then, the hospital has built the area's only comprehensive, surgeon-led Adult ECMO Program that includes a dedicated unit and team of clinicians with special training and experience in using this life-saving technology.

"Our program is gaining recognition in the community, with other hospitals increasingly referring critically ill patients to our team," says Nicholas C. Cavarocchi, MD, FACS, FCCP, Director of the Surgical Cardiac Care Unit and Professor of Surgery. He notes that two recent patient stories illustrate how Jefferson's ECMO Program is saving lives through innovative mobile life support.



Joel Claros

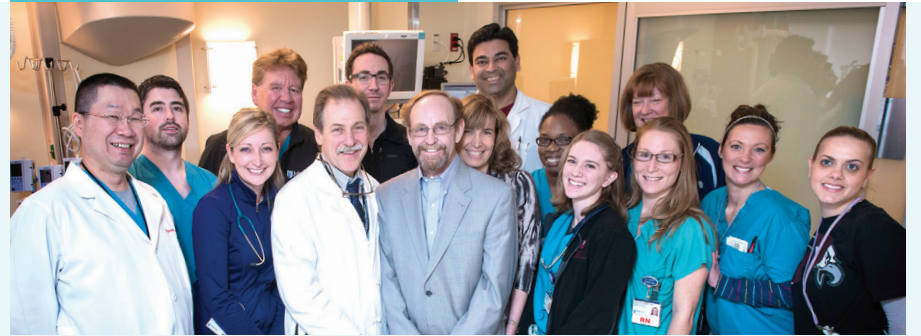
Saving a Young Life

In early February, 17-year-old Joel Claros' heart stopped beating at his home in Philadelphia. His family immediately called 911, and the arriving paramedics found him without a pulse. After successfully resuscitating him, they transported him to Methodist Hospital in South Philadelphia, where he remained in shock. Recognizing the severity of his condition, Methodist physicians reached out to Jefferson. Methodist is one of the Thomas Jefferson University Hospitals, and several surgeons work at both locations.

"We sent our ECMO team to Methodist and cannulated the patient there before bringing him to Jefferson for further treatment. That quick decision saved his life," Dr. Cavarocchi says, adding that Methodist's Chair of Surgery, Francesco Palazzo, MD, FACS, stayed close at hand to help ensure a smooth process for Hitoshi Hirose, MD, PhD, FACS, the ECMO physician on call.

Joel was later diagnosed with a primary arrhythmia secondary to viral cardiomyopathy. In other words, a virus caused his acute cardiomyopathy, which aggravated previously undiagnosed arrhythmia and led to cardiac arrest. Dr. Cavarocchi notes that Joel has since made a full recovery, and his prognosis is excellent.

Clinical Integration



Patient Steve Burkes and his wife Caroline Henrich (center) returned to Jefferson just weeks after his illness to thank Drs. Hitoshi Hirose (far left), Harrison Pitcher (fourth from left), and Nicholas Cavarocchi, (to left of patient) and other members of the Adult ECMO Program.

Treating Acute Respiratory Failure

In March, Jefferson's Adult ECMO Program saved the life of Kennett Square resident and entrepreneur Steve Burkes. Burkes, 59, and his wife, Caroline Henrich, an attorney, report that his symptoms started with chills and fever. Since Burkes had recently been playing with their new Amazon parrot, the couple thought perhaps he had contracted an infection from the bird. Instead, it turned out to be Acute Respiratory Distress Syndrome (ARDS), caused by a rare bacterial infection unrelated to the parrot.

By the time Henrich drove her husband to Jennersville Regional Hospital, he was incoherent. ("I felt like I was burning up from the inside – but nothing hurt," he recalls.) After the hospital initially stabilized him, Burkes' first chest X-ray looked good. But by the next morning, he had total whiteout of the chest xray, indicating pneumonia. Even with the ventilator fully open, he was still was only in the 70-percent range of oxygenation

and mechanical ventilation was unable to deliver enough oxygen to saturate his blood.

The physician at Jennersville called Jefferson and arranged for Burkes to be transported via chopper to Center City, where he made a full recovery in just 10 days. Henrich lauds the fact that their small regional hospital knew when to call Jefferson: "The communication and transition between the two, as well as every single professional at Jefferson, impressed me beyond belief. Steve was fortunate to have these teams of medical experts working together so closely – especially with so many people and so many parts that could have gone wrong."

Dr. Cavarocchi is eager to spread the word to clinicians to all local hospitals: "If you have a patient in respiratory or cardiogenic shock, call us – we'll be able to come get that patient and take care of them." Jefferson's ECMO team can be reached by making a single call to **1-800-JEFF-121**.

Faculty Profile

Susan Lanza-Jacoby, PhD

It's been 35 years since the Chair of Surgery at the time, Dr. Francis E. Rosato, Sr., hired Susan Lanza-Jacoby, PhD, to develop a research function within Jefferson's Department of Surgery. Since then, her lab has been among the first to show that COX2 inhibitors are protective against the development of breast cancer. More recently, it was the first to identify that a 25-percent decrease in daily caloric intake delayed the onset of pancreatic cancer. And despite growing competition for grant dollars, Dr. Jacoby has been able to remain an independent investigator since coming to Jefferson in 1979.

Outside the lab, Dr. Jacoby has been involved in curriculum development and teaching and has served on various College Committees (the Institutional Review Board is among her current appointments). In the mid- to late 1980s, she helped develop a Nutrition Education Program for the medical students, which was integrated into all four years of the medical school curricula. In the following decade, she became involved in the Problem-Based Learning approach, which was used in Jefferson's Medical Scholars Program.



Most recently, her lab has been building on the prior work on pancreatic cancer – investigating whether an agent that mimics the metabolic effects of calorie restriction will achieve the same cancer prevention effects as restricting food intake.

Dr. Jacoby, who eventually plans to segue into a second career as a nutrition counselor, says she has found great satisfaction in conducting research – delving into scientific problems and discovering new findings that shed light on previously unsolved questions. She has also enjoyed working with students, including numerous surgical residents whom she has mentored – among them, Dr. Ernest (Gary) Rosato, her former boss' son and current Director of the Division of General Surgery.