

*Changing Lives Through Research*

**Thomas N. Tulenko, PhD, left, shown conferring with transplant surgeon Cataldo Doria, MD, regularly participates in Grand Rounds and keeps up to date clinically. “The era of the stand-alone scientist is dwindling; applicable research now requires clinicians and scientists to work hand in hand.”**

## Coming of Age: Surgical Research Gains Division, Preps for Expansion

One of Dr. Charles J. Yeo's first initiatives as the new Samuel D. Gross Professor and Chair of Surgery was to establish a Division of Surgical Research and to appoint Thomas N. Tulenko, PhD, Professor of Surgery, Biochemistry and Molecular Pharmacology, Jefferson Medical College of Thomas Jefferson University, as Director. Along with Dr. Tulenko, the new division is composed of researchers Susan Lanza-Jacoby, PhD, Professor of Surgery; Yi Shi, MD, PhD, Research Associate Professor of Medicine; and Hwyda Arafat, MD, PhD, Assistant Professor of Surgery and Pathology, Anatomy and Cell Biology, as well as vascular surgeon Paul DiMuzio, MD, FACS, Assistant Professor of Surgery and Radiology, who is currently devoting most of his time to surgical research.

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“All of us were already conducting funded research at Jefferson,” Dr. Tulenko says, “but now, as a division, we also have a voice in

establishing the direction of the department. As Director, I sit on the executive committee that advises on department policy, and can bring matters up to the committee on behalf of the research staff. This also puts us in better touch, through other division directors, with the clinical surgeons. We’re looking forward to improved communication and more collaborative efforts between surgeons and researchers as a result.”

Surgical research at Jefferson falls into three broad areas: cardiovascular, diabetes and cancer. As for specific research currently in progress, Dr. DiMuzio is developing designer blood vessels for arterial grafting (see article on page 2 of this issue of *Jefferson Surgical Solutions*). Along with work in vascular disease and cardiac disease, Dr. Tulenko is conducting a National Institutes of Health-funded study of Smith-Lemi-Opitz Syndrome, a fetal metabolic disease that causes multiple birth defects. Dr. Shi's research centers on atherosclerosis, Dr. Arafat's largely on pancreatic biology, and Dr. Lanza-Jacoby's on breast cancer; the latter two scientists are also conducting research in the area of pancreatic cancer.

Speaking of which, Dr. Yeo's arrival at

**Patricia Kal Sauter, RN, MSN, ACNP, NCTMB, Gastrointestinal Surgery, Department of Surgery**

*Since graduating from the University of Maryland School of Nursing, Pat Sauter had worked at the Johns Hopkins Hospital in Baltimore –the last 15 years with Charles J. Yeo, MD, whom she accompanied when he was appointed in 2005 as the Samuel D. Gross Professor and Chair of Surgery at Jefferson Medical College of Thomas Jefferson University and at Thomas Jefferson University Hospital. She works four days a week and spends the others on her farm near York, Pennsylvania, with children Kate, age 14, and Jack, 11.*

### **Describe your work with Dr. Yeo.**

I assist Dr. Yeo with his clinical practice. We treat patients primarily with hepatobiliary and pancreas cancers. We hope to continue some of the clinical research projects we worked on at Johns Hopkins.

### **Any other responsibilities?**

Nationwide networking and collaborative research are significant portions of my job. I also do quite a lot of teaching, to patients, families and staff, and precept students from the nurse practitioner program.

Jefferson has also paved the way for expanded research in pancreatic cancer, his primary area of interest. “He’s putting together an exciting multidisciplinary research team, involving both clinical and basic research,” Dr. Tulenko reports. “One component of this program will be development of better surgical protocols. But a larger part will focus on the genetics of the disease to develop effective screening of patients with an eye toward slowing or even preventing pancreatic cancer.”

Dr. Tulenko is confident that the blended research between basic scientists and clinicians that characterizes both the new

*On the job*

### **What are your impressions of Jefferson?**

Everyone is incredibly friendly and helpful. We have a very talented house staff and a bright, intelligent nursing staff. They are fundamental to the department's development.

### **Such as?**

I'd like Jefferson to develop centers of excellence using a collaborative, multidisciplinary approach. We're now using the National Comprehensive Cancer Network's Category 1 concept of multidisciplinary practice. It's highly evidence-based and requires uniform consensus so therapies are safe and patient outcomes are efficient, traceable and cost effective.

Division of Surgical Research and pancreatic cancer research program will further strengthen Jefferson's competitive position for obtaining grants and attracting talent (the department hopes to recruit at least two new researchers in the near future). “As a world-class surgeon, Dr. Yeo will bring a lot of attention and resources to Jefferson. His influence, as well as the recent establishment of the Center for Translational Medicine and the recruitment of Dr. (Richard) Pestell as Director of the Kimmel Cancer Center, make this an exciting time for researchers at Jefferson.”