

## Changing Lives Through Research



**Dr. Berger is heading the new Section of Surgical Oncology at Jefferson in Center City while working to expand oncology services to Northeast Philadelphia through Nazareth Hospital. At the same time, he is working on formalizing a curriculum and continuing his work on several clinical studies.**

# Dr. Adam Berger Heads New Section of Surgical Oncology

Adam Berger, MD, FACS has been named Chief of the new Section of Surgical Oncology in the Department of Surgery. The section's specialty overlaps with several divisions in the Department of Surgery and therefore includes surgeons specializing in many areas, including pancreatic cancer, breast cancer, and thyroid cancer.

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Dr. Berger is taking on this latest administrative challenge in addition to his ongoing clinical, research and educational responsibilities. His efforts have not gone unnoticed. As a Cancer Liaison Physician at Jefferson, Dr. Berger recently received an *Outstanding Performance Award* for going above and beyond the scope of the normal duties of serving as a liaison between the Hospital's cancer program and the American College of Surgeons Commission on Cancer.

As Section Chief, Dr. Berger's first task will be formalizing a surgical oncology curriculum for medical students and

residents. Jefferson will also be applying for an NIH T-32 training grant to allow one surgical resident to be more formally trained in oncologic basic science for two years during his or her residency. Dr. Berger will be a co-investigator on this grant.

In addition to his clinical and educational responsibilities as Section Chief, Dr. Berger is the Principal Investigator (PI) for a number of national and international clinical studies. As a surgeon, Dr. Berger feels a responsibility to encourage his patients to enroll in clinical trials. "We are often the first doctor that a patient sees after his or her diagnosis, and we form a strong bond," he says. "Part of my role is to advise my patients and emphasize the potential impact of their involvement in clinical trials for cancer research."

One such trial is a randomized trial of two surgical techniques for pancreaticojejunostomy (connecting the pancreas to the jejunum) in patients undergoing a Whipple procedure, to treat cancerous tumors of the pancreas. "There have not been a lot of randomized prospective trials on these techniques," says Dr. Berger, "This is the largest study to date." So far the technique that favored invagination of the pancreas

*Joseph Cozzitorto, is a Research Associate at the Jefferson Center for Pancreatic, Biliary and Related Cancers.*

### How did you come to work at Jefferson?

My wife, Ellen, had been diagnosed with pancreatic cancer, and our physician in Princeton recommended that we come to Jefferson for her surgery. I had worked for 25 years in the field of molecular biology, so during one of our visits, I inquired whether the department was doing any research. Dr. Yeo thought my experience was a good fit for Dr. Jonathan Brody, who was about to establish a new lab dedicated to pancreatic cancer. That was in 2006, and I've been commuting from my home in South Brunswick, NJ, ever since.

### What did your prior experience involve?

I did Plant Molecular Biology, while working for EniChem America, an Italian startup company and American Cyanamid Corporation, which specializes in agricultural chemistry. At American Cyanamid I isolated genes of agronomic interest and generated mutations that would allow plants to survive in the presence of herbicide. I had also done biomedical and basic research in academia and for other companies in molecular biology. The way I look at it is that every other job I've had was a preparation for the work I do now.

has resulted in fewer pancreatic leaks and fewer adverse patient outcomes. Dr. Berger presented this research at the Annual Meeting of the Southern Surgical Association in 2008.

A second trial for which Dr. Berger is a PI studies the use of a new drug—ZD6474—in combination with chemotherapy and radiation prior to surgery for patients with esophageal cancer. Dr. Berger conceptualized and designed the study in consultation with AstraZeneca. "Most trials report a pathologically complete response rate of about 20 percent," says Dr. Berger. "So far, five out of eight patients (63 percent) in our current trial have had pathologically complete responses—meaning the tumor has been entirely eliminated—which is very encouraging."

Dr. Berger is also a surgical co-investigator for a multi-institutional trial through the Radiation Therapy Oncology Group, the first Phase III trial to compare the effects of chemotherapy and radiation versus chemotherapy alone



## On the Job

### What do you do in Dr. Brody's lab?

I do cloning work, which involves isolating certain genes from cultures of mammalian cells or clinical samples of patient tumors and inserting them into plasmids so that they can be used in experiments. We also investigate drug activity in cultured cells that have been transfected with these genes. I have co-authored several articles on our findings. I also manage the lab, which includes two residents, a PhD investigator, a research assistant, and volunteers. As the lab's Principal Investigator, Dr. Brody always has creative ideas for experiments that keep the projects moving forward. It's a very team-oriented environment.

for pancreas cancer patients following surgical removal of the head of the pancreas. "Unlike in the United States, European physicians tend to think the combined treatments are worse for the patient's long-term survival and quality of life," says Dr. Berger. Approximately 900 patients will be enrolled, in Europe, Canada, and the United States. "This study has been a long time in the making," says Dr. Berger, "but the results will be groundbreaking for how we treat pancreatic cancer."

This surgical oncology expertise is now accessible beyond the Jefferson Center City campus. Dr. Berger provides surgical oncology services to Nazareth Hospital in Northeast Philadelphia as a part of the Jefferson Cancer Network. The Nazareth team also includes five Jefferson medical oncologists and radiation oncologists. Dr. Berger notes, "Our goal is to reach out and bring our first-rate care to surrounding communities."