

James Metz, MD '95: Beaming into Medical History

He's considered the father of proton beam therapy at the University of Pennsylvania (Penn). And he's had a hand in the development of proton therapy facilities around the world to treat cancer. But his passion for radiation oncology was ignited right here at Robert Wood Johnson Medical School. James Metz, MD '95, remembers the day it happened.

It was during Career Night," Dr. Metz recalls. "There were tables set up for different specialties. I was set on pursuing medical oncology, so I was looking for that table. Then I saw the radiation oncology representative sitting in a corner with no one around. I got into a great conversation with him, and he encouraged me to do a summer research program, which I did." He adds, "I loved the clinical and research exposure. I knew this was it. That experience was the reason I decided to make radiation oncology my career."

The combination of the humanistic side of medicine and the technical side appealed to him. "I enjoy the intense

BY LYND A RUDOLPH

relationships with patients, and the fact that radiation oncologists treat any area of the body," he says. "I get to treat people of all ages, babies through adults. For me, it was that broad mix of patients I would see, and the exposure to what was going on with technology, that was the ideal blend of the two worlds."

An Enviable Career

Today, Dr. Metz serves as chair, Department of Radiation Oncology, at the Perelman School of Medicine and holds the Henry K. Pancoast Endowed Professorship. At Penn since 1996, he is also currently associate director for clinical services and programs at the Abramson Cancer Center of the University of Pennsyl-

vania—a National Cancer Institute-designated Comprehensive Cancer Center since 1973—and is considered a leading expert in the design and implementation of proton therapy facilities. His relationship with Penn began with a residency there, and then he was hired to lead the proton beam initiative.

"When I was hired in 1999, there were only two proton centers operational in the country. They hired me to help build the one at Penn," says Dr. Metz. "We opened the Roberts Proton Therapy Center in 2010—it ended up being the fifth center opened in the United States and the largest fully integrated proton therapy center in the world, based on the number of rooms and patients treated." Including other radiation oncology services, the program treats about 450 patients a day on site and at 11 satellite facilities.

Proton therapy is external beam radiotherapy. It works by aiming energized particles, in this case protons, onto the target tumor. Because of the accuracy of the beam, proton therapy delivers a higher dose of treatment directly to the tumor, while sparing healthy tissue. Patients with cancers of the brain and skull base, breast,



COURTESY OF JAMES METZ, MD '95

gastrointestinal tract (a specialization of Dr. Metz's), genitourinary system, head and neck, or lung, and those with lymphomas, sarcomas, or pediatric tumors, can be treated with proton beam therapy.

The center at Penn was developed from the ground up. Dr. Metz and his team have also created unique training programs for other proton centers—both to assist in the building of them and to train others in the treatment of patients. “We train more people than anyone in the world,” says Dr. Metz, “including facilities in Sweden and China.” Ten centers are due to open soon, and an international group of clinicians will be arriving for training in the coming months.

Dr. Metz is excited by proton tech-

nology's evolution and its possibilities. “It continues to improve,” he explains. “We use pencil beam scanning now—we can put the radiation dose exactly where we want it. And we can integrate it with advanced chemotherapy and imaging.” Dr. Metz believes that in the near future, we will see the use of proton beam therapy with novel biologic agents. He also describes what this therapy means to cancer patients who in the past had limited options: “We can treat patients now we couldn't treat before, particularly patients who had radiation exposure in the past. When there's a local failure, we can re-treat because of our ability to spare the normal tissues that have been radiated before. There are just a lot of new opportunities.”

Dr. Metz believes Penn and other cancer centers will continue to bring high-tech, cutting-edge cancer care closer to patients. “Moving technology closer, translating clinical trials into treatments closer to people's homes—that's the future,” he emphasizes. “If you look at cancer care in this country, 85 percent of it is already delivered in a community setting.”

A Second First

Along with his leadership in radiation oncology, Dr. Metz is executive director of OncoLink, a website that helps cancer patients, families, health care professionals, and the general public obtain accurate cancer-related information online. Started in 1994

—Continued on page 46

Huda Sayed, MD '11: A Second Home at Robert Wood Johnson Medical School

—Continued from page 39

not want her to leave! Everyone looked up to her there. She is an inspiration of what a doctor should be. She never rushes and takes time with every patient.”

Dr. Sayed still stays in touch with peers and mentors from BCP and the medical school. A BCP alumna helped connect her to Emory, and Dr. Khan remains a close mentor—he even officiated her marriage. And one of her fel-

low alumni, Kristen Kenan-Tate, MD '11, is the godmother of her daughter.

“I am grateful for the opportunity to have participated in Rutgers and Robert Wood Johnson Medical School programs,” she says. “Medicine is not a right, it’s a privilege, and I feel lucky to have earned the privilege to care for others.” **M**

James Metz, MD '95: Beaming into Medical History

—Continued from page 41

as a grassroots effort, it was the first cancer website in the world—and it even preceded Yahoo. Dr. Metz began working on the website in 1996, during his residency training, and moved into the editor-in-chief’s role in 2000. The idea was to get information out to thousands of people around the world in a way that was appropriate for both medically naive and clinically savvy audiences. The site isn’t segmented—there are no specialized portals. People can go as deep as they’d like on any cancer-related subject matter they choose.

Novel personalized programs help patients learn about cancer treatments and predictions about toxicity. The site also offers information and assistance on cancer survivorship. A small group—just seven full-time people—manages the site, with another 200 contributing information. “A big area of interest now is blending data-based content with medical records,” says Dr. Metz. “Because we’ve gathered information on every diagnosis, we can tailor educational information based on what we know holistically about a

diagnosis—even down to the mental health needs. It’s that integrated.”

OncoLink has received numerous awards and recognitions. The team is developing interactive content and personalized information for people, while collecting data to move the field forward. OncoLink has more than 285,000 unique visitors every month.

Where It All Began and Where He’s Headed

“I’ve been so fortunate in my career,” says Dr. Metz. He looks back at his Robert Wood Johnson Medical School experience and how well it prepared him for the significant academic and clinical career milestones he’s tallied up. “I had such good clinical training. I felt like I could step into any environment,” he adds.

That confidence—together with his preparation and education at the medical school—has resulted in a remarkable career. His influence, inquisitiveness, and knowledge have contributed to advancements in patient care and cancer treatment here and around the world. **M**

Esi M. Rhett-Bamberg, MD '07: A Girl Born on Sunday

—Continued from page 43

Department of Anesthesiology at UT for nine years, knew Dr. Rhett first as a resident and then as an outstanding clinical and academic colleague. “Students gravitate to her,” says Dr. Hagberg. “She is kind-hearted, generous, understandable, patient, and fun.”

As an attending anesthesiologist, “Esi is not just astute and skilled, she’s a great member of the team,” says Dr. Hagberg. “Patients trust her, deservedly, and, having volunteered to work as the sole anesthesiologist in the gastroenterology suite while the service was building up—with some of the sickest, most complex patients—she earned the lasting respect of nurses and physicians across multiple departments.”

Dr. Rhett is the immediate past president and an executive board member of the Mary Susan Moore Medical Society. Established in 1991 and renamed six years later for the first black woman to practice medicine in Texas, the organization supports African-American women physicians and provides health education and advocacy to communities of need in the Greater Houston and Galveston area.

A major part of the society’s work consists of mentoring premedical and medical students and raising money for scholarships. In 2014, it received permission from Crystal Emery to show a 10-minute clip from her documentary *Black Women in Medicine* at its Scholarship Awards event. Afterward, Emery stayed in touch as she developed the film into *Against All Odds*, the book in which she would include Dr. Rhett’s story.

It seems right that the relay team member whose name means “a girl born on Sunday” is devoting her career