In 2012, Rosen was named director of Johns Hopkins’ Division of Rheumatology. Since then, the South African native has expanded the fellowship program and doubled its faculty, from 14 to 28.

Now, as new vice dean for research, Rosen leads a research enterprise that receives more federal support annually—in excess of $574 million in 2013—than counterparts at other U.S. medical schools. First on his to-do list, he says, is encouraging people “to think about diseases in old and new ways.”

“It’s advice borne of experience.”

Over the past 10 years, having observed a large number of patients with rheumatic diseases develop cancer, Rosen became convinced of a “strange confluence” between cancer and autoimmunity. So he brainstormed with Scleroderma Center Director Fred Wigley, rheumatology researchers Livia Casciola-Rosen and Ami Shah, and the cancer genetics group of Bert Vogelstein and Ken Kinzler. Together they launched a study using blood and tumor tissue samples from 16 patients with both scleroderma and different kinds of cancer.

Patients with scleroderma, explains Rosen, often make antibodies to a protein called RPC1. The antibodies likely cause the organ damage characteristic of the disease. Although the reason behind this antibody production remains unknown, a breakthrough came in 2013, when Rosen, Vogelstein and colleagues showed that cancers from a majority of patients with scleroderma with antibodies to RPC1 had a mutation in the gene POLR3A, which codes for RPC1. These alterations created a foreign form of RPC1 that appears to trigger an immune response.

These findings suggest that scleroderma represents a powerful immune response to cancer, which cross-reacts with the patient’s own tissues and causes disease. In the patients with scleroderma without a discernable cancer—80 percent of the total—it is possible that this natural immune response was powerful enough to control the cancer completely. Rosen expects this research to spur additional studies into possible connections between cancer and other autoimmune diseases, including lupus and myositis. “It takes years to make discoveries,” he says, “but moments of intensity and asking the right questions can lead to meaningful findings.”

(Continued on page 2)
Beyond the Dome

Introducing Mark Anderson
Director, Department of Medicine

When Myron Weisfeldt announced that he would retire in June 2014, his decision opened a vacancy for one of the most renowned positions in academic medicine: the William Osler Professor of Medicine, director of the Department of Medicine in the Johns Hopkins University School of Medicine and physician-in-chief of The Johns Hopkins Hospital.

Meanwhile, hundreds of miles away, Mark Anderson was perfectly content being chair and department executive officer of internal medicine and director of the Cardiovascular Research Center at the University of Iowa Carver College of Medicine. A renowned researcher on heart failure and sudden cardiac death, Anderson received his Ph.D. in physiology and his M.D. from the University of Minnesota, completed his internal medicine residency and fellowships in cardiology and clinical cardiac electrophysiology at Stanford, joined the faculty at Vanderbilt, then moved in 2005 to the University of Iowa Carver College of Medicine.

We feel incredibly fortunate to have him as our next leader and to build on the great successes of Dr. Weisfeldt. Dr. Anderson has demonstrated commitment to all pillars of the tripartite mission and brings to our department a vision and energy that will undoubtedly take us to new heights in the setting of unparalleled challenges.

Please join me in welcoming Dr. Anderson to our family.

Sanjay Desai, Director,
Osler Medical Training Program

The search for Weisfeldt’s successor included candidates from around the nation, but it was Anderson who took the helm on Aug. 15.

What prompted you to pursue the position at Johns Hopkins?
There was obviously a process and approach. I was happy where I was, so it took a little reckoning. But I knew I’d be filled with regret if I didn’t take this opportunity. It’s a chance to participate in something truly outstanding and to contribute to academic medicine in a way that I couldn’t at any other place.

Now that you’re here, what are your first steps?
My biggest priority will be meeting with and listening to people. Though I think I understand the big-picture issues, every place is different. I will be working with division directors, vice chairs, service line leaders, nursing partners, our colleagues at Johns Hopkins Bayview Medical Center.

Rheumatology to Cancer
(from page 1)

“Antony’s huge discovery has affected science around the world,” says Sanjay Desai, director of the Osler Medical Training Program. Desai also recognizes Rosen’s positive impact on Johns Hopkins trainees.

Laura Cappelli fondly recalls her first interaction with Rosen during her Osler training. Then her attending physician, he encouraged Cappelli to extract fluid from a patient’s knee; afterward, Rosen praised her skill. “Despite his remarkable accomplishments, he’s never arrogant,” she adds, “and has something compelling to say about every subject.”

For Cappelli and others pursuing careers in academic medicine, today’s flattened research funding can be discouraging. Rosen, however, says he’s hopeful, “as long as we stay creative, take advantage of novel opportunities and create venues that pull people from different disciplines together to talk about important, basic problems in human disease and biology.”


Now a second-year rheumatology fellow, Cappelli describes Rosen as generous and warm.
Support the Osler Fund for Scholarship

By investing in the future of our young doctors, we continue the legacy of William Osler to prepare and inspire the next generation of leaders. If you are interested in supporting our housestaff, contact Donna Bolin at 410-550-9893 or by email at dbolin1@jhmi.edu.
On the Wards

Rewarding Care

Michael Mueller well recalls the young man who arrived at the outpatient clinic with soaring hypertension. Mueller, then an Osler intern, and other residents had evaluated him before, urging him to go to the hospital's emergency department to avert kidney failure. He'd consistently refused. This time, Mueller phoned the patient several times, fast-tracked his medications and ultimately convinced him to be admitted. Mueller later learned that the patient had agreed only “because my doctor told me to.”

Hearing himself referred to as “my doctor,” says Mueller, became a touchstone. “I guess the patient felt that I really cared about him.” A year later, Mueller continues caring for that patient, who has chronic kidney disease and has had a fistula placed.

Mueller’s persistence did not escape notice. As he neared the end of his internship in 2013, Mueller received the Norman and Mary Stewart Memorial Award, which recognizes a member of the Osler housestaff—identified by a senior resident—who demonstrates “outstanding, compassionate care in the ambulatory setting, exemplifying the tradition of dedication that defines a great physician.”

Established in 2009 by Johns Hopkins physicians Rosalyn and Matt Stewart, the award is named for Matt’s deceased parents, who both became very sick during 2007 and 2008 and endured more than 50 Johns Hopkins Hospital admissions and countless outpatient visits. What stood out for Matt was the care provided by Osler interns and residents. “They don’t look at care as a problem-based exercise but as a patient-based problem. My mom appreciated that someone took several hours to get a detailed picture of her medical history—and her life.”

For Mueller, the prize holds special meaning, because previous awardees were his role models. “The Osler program,” he says, “gives you a lot of independence to intervene. We work together with patients to improve their health and help them reach their goals.”

Department of Medicine Annual Awards 2014

- Ambulatory Preceptor Award
- Gail Berkenblit
- Part-Time Faculty Member
- David Cromwell
- Full-Time Faculty Member
- Dan Brotman
- Fellow Award
- Steve Keller and Ruben Hernaez
- Basic Student Teaching Award—Intern
- Erin Parry
- Basic Student Teaching Award—Senior Resident
- Raymond Young
- Norman and Mary Stewart Memorial Award
- Jeremy Epstein
- Frank L. Coulson Jr. Award for Clinical Excellence
- Matthew Crim
- Norman Anderson, M.D. Memorial Award (as voted by faculty and nursing)
- Kathryn Kline
- Priya Palagummi Memorial Award
- Erin Wilfong
- Daniel Baker Award (as voted by faculty and nursing)
- Rob Bradsher