

Aequanimitas

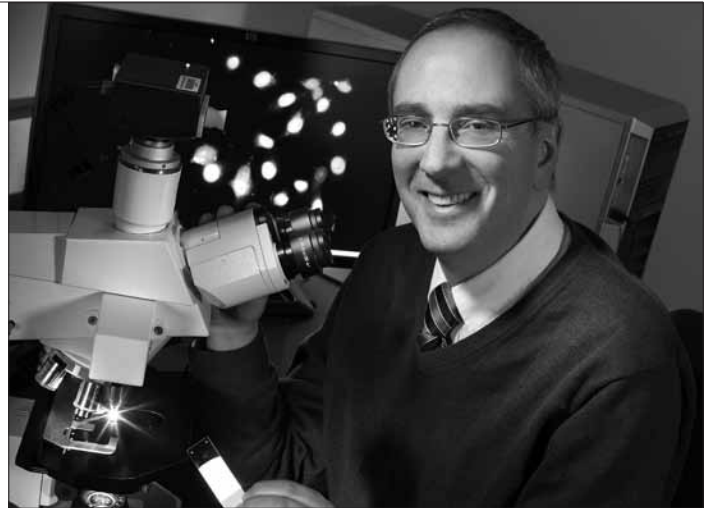


A twice-yearly newsletter for current and former Johns Hopkins Medicine housestaff and friends

Fall 2014

The Road from Rheumatology to Cancer

Even before he began his Osler residency 23 years ago, **Antony Rosen** found rheumatology intriguing. “The diseases are incredibly enigmatic, and I love the hunt,” he says. “I lie awake at night thinking about them.”



“Good ideas,” says Antony Rosen, “come from a slow hunch—a growing body of information focused on human clues.”

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 com-

“Antony’s huge discovery has affected science around the world.”

—Sanjay Desai, director of the Osler Medical Training Program

pletely. 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)

I am excited to introduce Mark Anderson, who assumed the position of William Osler Professor of Medicine and director of the Department of Medicine in August.



In addition to his impressive training (see accompanying story), Dr. Anderson is renowned for his research on cellular signaling and ionic mechanisms that cause heart failure and sudden cardiac death. He is recognized as an international expert in defining the role of calmodulin kinase II (CaMKII) regulation in heart failure and arrhythmias. His laboratory is funded by the National Institutes of Health, the American Heart Association, the American Asthma Foundation and the Fondation Leducq. Widely published, Dr. Anderson is frequently an invited speaker nationally and internationally to present his research. He is a co-founder of Allosteros Therapeutics, a biotech aiming to develop CaMKII inhibitor drugs.

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

PLEASE STAY IN TOUCH

Visit our new dedicated alumni website and check out our searchable directory, calendar of events, photos and links to our Facebook and Twitter pages.

bit.ly/osleralum

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.

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,



Now a second-year rheumatology fellow, Cappelli describes Rosen as generous and warm.

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." ■

To hear Rosen's lecture, "Autoimmunity in Rheumatic Diseases: New Insights" visit <http://tinyurl.com/ka5adsk>.



and leaders at all the other Johns Hopkins Medicine hospitals. By meeting with each of these constituents and discussing overarching ideas, I hope to gain a more nuanced understanding of how to implement our goals.

What are some of those goals?

The big goal is to make sure that the three missions of academic medicine continue to prosper and be informed by Johns Hopkins' history, even as we enter what appears to be a fluid and

potentially treacherous future. From an operational standpoint, we want to ensure that our science, research and development continue to thrive and that we have a diversified portfolio of revenue.

We have some of the best education programs in the country and perhaps the world. They're steeped in history. But we have to figure out how to make sure they stay relevant to the changing nature of health care. There are economics and societal values to consider, all while maintaining the precepts on which Johns Hopkins was built.

What kinds of obstacles do you anticipate?

On the clinical side, we have to figure out how to meet the increasing demand for high-value care. We also want to maintain the outstanding rankings of the medical programs and provide the services our patients and community need, while also being a platform for new and promising

therapies. I don't have all the answers, but part of it will be developing a collaborative financial model that is transparent and equitable—and that uses our partnerships to improve access and provide care in the most efficient settings.

What do you think sets Johns Hopkins apart from other academic medical institutions?

Johns Hopkins is the preeminent academic medical center and preeminent department of medicine in the country. It has a huge scope and scale and has achieved enormous success in its missions. It also has new elements—newly acquired hospitals and international activities that provide degrees of freedom that enrich the possibilities for growing a future. When you look at places in the popular rankings, Johns Hopkins is singular in being at or near the top for clinical care, for its medical school ratings, for its fellowship programs and for its scientific portfolio. ■



photo by Sherrie Formoff

MEET THE NEW ASSISTANT CHIEFS OF SERVICE: From left, Souvik Chatterjee, Bennett Clark, Andrew Hughes and Alexander Billioux.

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.

Aequanimitas

The Johns Hopkins University School of Medicine
Department of Medicine
600 N. Wolfe St.
Baltimore, MD 21287-1720

Paul B. Rothman, M.D., *dean/CEO*
Mark Anderson, M.D., *director, Department of Medicine*
Sanjay Desai, M.D., *director, Osler Medical Training Program*
Judy F. Minkove, *managing editor*
Lauren Manfuso, Judy F. Minkove, *writers*
Dave Dilworth, *designer*

Aequanimitas is published twice a year by Johns Hopkins Medicine Marketing and Communications; Dalal Haldeman, Ph.D., M.B.A., senior vice president.

© 2014 The Johns Hopkins University and The Johns Hopkins Health System Corporation

Non-Profit Org
U.S. Postage
PAID
Permit No. 5415
Baltimore, MD

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



The Osler program, says Michael Mueller, empowered him to help patients.

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." ■

Class Notes

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