CLASS NOTES

'60s

When **Thomas Medsger** (Rheumatology Fellow '65–'66, Internal Medicine Resident '66–'68) started his rheumatology fellowship at the University of Pittsburgh, Professor Gerald Rodnan introduced him to scleroderma, the rheumatic disease. That pointed Medsger toward a research subject and career path. When Rodnan, also known as the "Father of Scleroderma Research" died unexpectedly in 1983, Medsger assumed his position as chief of the Division of Rheumatology and Clinical Immunology. Medsger also directs the Scleroderma Research Program. Since he assumed that position, he has treated nearly 3,000 patients with systemic scleroderma (which can cause the skin and internal organs to harden) and 500 patients with localized scleroderma (which affects only the skin); his patients are referred to him from physicians all over the world. Medsger created the first National Registry for Childhood Scleroderma, which keeps a blood sample from every child known to have the disease; the antinuclear antibodies found in the blood could yield interesting answers in researching this autoimmune disease, he explains. Recently, the Scleroderma Foundation named him Doctor of the Year.

In 1988, the Chinese Medical Association invited **Constance Keefer** (MD '69) and other pediatricians to China. As Keefer toured Chinese maternity wards, she noticed that mothers and babies were kept separate, except during feeding time. She told her host, Zhang Peiying, the now retired director of Taiyuan Children's Hospital, that in the United States, babies stay in their mothers' rooms, fostering healthy bonds. In 2000, Peiying invited Keefer back. As she toured the hospitals, she saw mothers and babies together in rooms. When Keefer mentioned it, Peiying said, "Oh yeah, we listened." Keefer studied with Harvard University's famed pediatrician T. Berry Brazelton and works at Brazelton Touchpoints Center, affiliated with Children's Hospital of Boston, where she trains people how to interpret a child's behavior and nurture a child. In addition, Keefer directs the newborn nursery at the hospital.

'80s

Since 2004, the Sentara Norfolk General Hospital, in Norfolk, Va., has experienced an 84 percent decrease in ventilator-related pneumonias and a 63 percent drop in overall ICU infections. Who's the mover and shaker behind these changes?

COURTESY SONNENFELD

Sonnenfeld has conducted nine experiments in space.

ROCKET MAN

GERALD SONNENFELD

In the mid-1970s, Gerald Sonnenfeld (PhD '75) arrived at Stanford University's infectious disease lab, only to be sent away—well, sort of. It seemed the lab had an opportunity to send a postdoc down the highway a few miles to the NASA Ames Research Center. Sonnenfeld, the new guy in the lab, put aside his initial disappointment at being singled out. Being part of the space program could have exciting outcomes, he thought. This was the age of the moon walk, when some hoped space travel would become as common as air travel.

Sonnenfeld fell in love with the research. He wanted to spend as much time in the NASA lab as possible.

He studied what is now called interferon gamma, which is a protein secreted by immune cells in response to inflammation and viruses. The topic became a career-long pursuit. Sonnenfeld has conducted nine experiments in space (oftentimes, animals were sent for experimentation). He went on to discover that outside the earth's atmosphere, people experience lowered production

William Brock (MD '80, Internal Medicine Resident '80–'83). Brock is medical director of critical care quality for Sentara Healthcare; with his colleagues, he standardizes healthcare practices at Sentara's six hospitals in Virginia. The American Hospital Association Quest for Quality rated Sentara Norfolk General the best-performing hospital in the nation.

Keefer tours a maternity ward in China.

Elizabeth Jaffee (Internal Medicine Intern '86, Internal Medicine Resident '86–'88, Research Fellow '88–'89) remembers being on rounds one March night in 1986 when she was paged. It was her father. Her 51-year-old uncle had pancreatic cancer, he told her. She started crying. "Why are you still crying?" her father asked—he thought that chemotherapy and radiation would cure Jaffee's uncle. Jaffee knew that these treatments were considered largely ineffective for pancreatic cancer. Two months later, her uncle died. The incident led Jaffee, now at Johns Hopkins University, to develop vaccines for cancer of the pancreas and breast. Her pancreatic cancer vaccine (it serves as both a treatment and a preventative) is now in Phase 2 of clinical testing. She plans to test another vaccine on patients within the next two years.

'90s

Susan Dorr Goold (Internal Medicine Resident '87–'90) is associate professor of internal medicine at the University of Michigan, Ann Arbor. She has created computer games and other activities to educate patients about HMOs and the importance of making smart choices about health care. Goold has been researching and writing about medical ethics since 1990, covering issues such as financial incentives for physicians and how they affect patient care.

In medicine, the "golden hour" refers to the first 60 minutes after a critical injury—it's when surgical intervention is most likely to save lives. **Kevin Ralph Ward** (Emergency Medicine Resident '89–'92) says there is no golden hour for wounded soldiers on the battlefield. Ward is associate director of the Virginia Commonwealth University Reanimation Engineering Shock Center, a critical illness research center. As director of a special program there, Ward develops new therapies for severely wounded soldiers. Among the weapons his program is hoping to add to the army medic's arsenal: new blood substitutes, tourniquets, bandages, monitors to measure intracranial pressure, and ways to control abdominal pain without surgery.

Inspired by the work of Pitt psychiatric epidemiologists Nancy Day (an expert on alcohol and drug abuse) and Mary Amanda Dew (known for her heart-transplant research), **Andrea DiMartini** (Psychiatry Resident '87–'91) created her own research niche. Since 1998, DiMartini has served on the liver transplant team at Pitt's Starzl Transplantation Institute. She's interested in the behaviors of liver transplant patients before and after their transplants and getting them other help they need, which may include rehab. She has two National Institutes of Health grants to investigate outcomes in these patients.

When **Craig A. Buchman** (Surgery Intern '91, Pediatric Otolaryngology Research Fellow '92, Otolaryngology Resident '92–'96) saw his first cochlear implant in 1992, he was hooked. He always enjoyed engineering and neural systems—and the tiny, intricate device with spidery electrodes that attach to the inner ear seemed to be a good blend of his interests. Since then, he has implanted them in more than 500 children. Buchman is a professor of otolaryngology/head and neck surgery at the University of North Carolina at Chapel Hill and chief of the otology/neurology and skull base surgery division at the North Carolina Neurosciences Hospital. Giving children the opportunity to develop normal hearing, speech, and language skills is what he loves about his work. "How does it get better than that?" he asks.

Michael Ford McGrath (Thoracic Surgery Resident '96–'99, Pediatric Cardiothoracic Surgery Fellow '99) reports that he misses green grass, his dogs, and even his son's lizard. His general and thoracic surgery practice was named the best in Virginia by *U.S. News and World Report*. These days, however, McGrath is stationed at the Al Asad air base in Iraq with Naval Mobile Construction Battalion 24 as the medical officer. He remembers operating on a 22-year-old Marine when a nurse walked in and informed the surgeon that the soldier on the table had twins he'd never met. "It ramped up the tension level in there, because we were going to do everything we could to make sure he got out of that hospital and home so he could see them," McGrath says. McGrath is the son of actress Constance Towers Gavin and the stepson of John Gavin, former actor, former president of the Screen Actors Guild, and former ambassador to Mexico.

When President George W. Bush suggested that intelligent design be taught in school, **Eric Lenze** (Geriatric Psychiatry Fellow '98–'99, Late Life Mood Disorders Fellow '99–'01) felt overwhelming frustration. You may have seen his letter to the editor of *The New York Times* expressing his annoyance. It ran in August. Lenze is an assistant professor of psychiatry in Pitt's School of Medicine.

The pager beeped. **Tara Williams** (MD '99) returned the call. She learned that one of her patients just died in an accident—the patient was an infant. *What do I say to the parents*, she wondered. Williams, mother of four girls herself, found it hard to think of something comforting to say to the baby's mom. As associate director of the pediatric residency program at Case Western Reserve University and MetroHealth Medical Center in Cleveland, Williams thinks a lot about training the residents she mentors to be empathetic. —*Nita Chawla, Meghan Holohan, Erin Lawley, Erica Lloyd*

of interferon gamma. The impact of this immune response isn't fully understood, but Sonnenfeld suspects it makes astronauts more likely to contract infections on long flights.

In 2004, the American Society for Gravitational and Space Biology awarded Sonnenfeld its Orr E. Reynolds Distinguished Service Award.

Sonnenfeld holds three patents, but not every development has borne fruit: A few years ago, he worked with Genentech, in South San Francisco—which was founded by Herbert Boyer, who received his bacteriology PhD from Pitt in 1963—to develop an interferon gamma treatment for patients who'd suffered serious trauma. Sonnenfeld sees promising clinical potential for interferon gamma; however, that particular experimental therapy didn't work.

Such is the nature of research, he'd say. He'll bring his optimism and determination to bear in his new job as vice president for research at Binghamton University, one of the SUNY schools. Until recently, he was the associate dean for basic sciences and graduate studies at the Morehouse School of Medicine, in Atlanta. He also chaired Morehouse's Department of Microbiology, Biochemistry, and Immunology as well as its Intellectual Property Committee. —*Meghan Holohan*

THE WAY WE ARE
DEEP IN THE HEART OF TEXAS

When **Sheldon Weinstein** was a medical student, he joined **Henry Bahnson** in the operating room for the first time. The seasoned surgeon turned to Weinstein, saying, "Shelly, if there is any way you can improve my surgical skills, tell me. If there is anything that I can do for you, I'll tell you." Bahnson's modesty impressed Weinstein (MD '63, Res '67), whose experiences with both Bahnson, then chair of surgery, and **Bernard Fisher** (MD '43), who is now a Distinguished Service Professor of Surgery, influenced him to go into obstetrics and gynecology.

Bahnson and Fisher's student has an inventive streak. While at Pitt, Weinstein developed an early model fetal EKG. While in private practice in Dallas, he helped develop a technique (an electrosurgical excision procedure) that replaced vaginal cold-knife biopsies, which were often risky for women. This year, he won the Distinguished Surgeon Award from the Society of Gynecologic Surgeons; it is unusual for a private practice physician to win the award.


Weinstein

When **Philip Raskin** (MD '66) was a medical student at Pitt, an intern at Magee Womens Hospital by the name of Sheldon Weinstein taught him how to treat gonorrhea. Later, Raskin, too, migrated to Texas. He says if he hadn't been traveling that weekend, he would have joined in on the fun at a Sept. 30 reunion for Pitt med alumni that Weinstein hosted in Dallas, which went off despite Texas' uninvited guest, Hurricane Rita. (Weinstein's wasn't the only gathering for Southwest alumni this fall; **Bruce Coull**, MD '72, hosted a Sept. 16 event in Tucson, Ariz.)


Raskin

Even though Raskin enjoyed working with Weinstein, he pursued a career in endocrinology. In 1993, Raskin, the Clifton and Betsy Robinson Chair in Biomedical Research at the University of Texas Southwestern Medical Center in Dallas, participated in a study showing that if patients manage diabetes early on, they do not suffer from serious vision and foot problems. Raskin is now the principal investigator at UT Southwestern for a follow-up study, in which researchers at several centers are determining what drugs best treat type 1 diabetes.


O'Malley

Bert O'Malley (MD '63), also based in Texas, says he is still doing research on female hormones. O'Malley, one of Pitt med's most eminent alumni, talks about how much he enjoys the scientific method, even though "Mother Nature gives up her secrets grudgingly."

He reports that little has changed since we last talked to him in 2000, when he was this magazine's cover model; he has moved closer to the Baylor College of Medicine, Houston, where he chairs the Department of Molecular and Cellular Biology. He is hoping to figure out how coactivator proteins influence how hormones work and tumors develop. Once we understand coactivators, he says, we might be able to manipulate them to prevent the growth of tumors. —*MH*

Want to host a reunion in your town? Contact Pat Carver at: cpat@pitt.edu or 412-647-5307.

IN MEMORIAM

'40s
MARTIN R. SCHLESINGER
MD '44
JULY 20, 2005

J. ALBERT JACKSON
MD '48
NOVEMBER 20, 2004

'50s
THOMAS Q. SPITZER
MD '52
JULY 1, 2005

RAYMOND J. BOYLAN SR.
MD '53
AUGUST 21, 2005

RICHARD ALAN PETERS
MD '54
MAY 23, 2005

MARWIN A.K. LOMMEN
MD '55
JULY 1, 2005

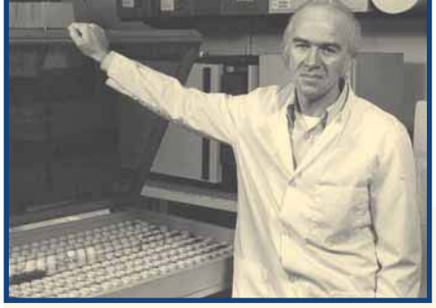
'60s
ROGER K. JONES
MD '63
NOVEMBER 4, 2004

FRANK B. KERN
MD '66
JULY 13, 2005

'70s
SARA JAYNE MILLER-LEWIS (SNYDER)
MD '79
AUGUST 20, 2005

FACULTY
RAY MCKENZIE
SEPTEMBER 27, 2005

WALTER JOSEPH REIS
JULY 24, 2005


Phillips, who recently retired, at Pitt in the '70s.

WE KNEW YOU WHEN
STEVE PHILLIPS

Every summer, Steve Phillips took graduate students from Pitt's School of Medicine whitewater rafting on the Youghiogheny River. Students loved it when he'd steer his raft through the infamous Dimple Rock rapids. It takes composure to navigate that gnarly pass. Phillips has it down. In his 35 years at the med school, the recently retired associate professor of molecular genetics and biochemistry and associate dean for graduate studies has been known for his enthusiasm but also as the calm in the storm.

"I have heard people say that he must have been a pastor in a former life," says Mike Turner (PhD '06). "No matter how serious or urgent the situation, one would always leave his office feeling comforted."

Phillips knew how to connect with students and did it often. Once, he hunted Turner down in the lab to ask his opinion on some changes to a course he'd created. Turner, then a second-year student, was flattered and humbled.

"Old fogies get used to thinking of things a certain way!" says Phillips. "We need the infusion of youth and high energy that keeps science current."

Phillips was determined to instill in students the proper "habit of mind" for a research career, former students recall. Louis Falo, Pitt's chair of dermatology, was a Pitt undergraduate in the 1980s. His first research experience was with Phillips.

"Without that experience, it's unlikely that I would have chosen a career that included science," says Falo, who went on to pursue an MD/PhD at Harvard.

"When I came back to Pittsburgh, I ran into Steve again, doing what he does best—inspiring young people to be scientists."
—*Josie Fisher*

NONORTHODOXY: ROBERT WELLS

BY ROBIN MEJIA

COURTESY WHITE HOUSE

Wells also has taken a lead role in voicing concerns of the scientific community to government officials. Here he's shown (center, gesticulating) during a meeting with Vice President Dick Cheney (seated directly across from Wells).

Early in his career, Robert Wells (PhD '64) worked under a level of surveillance the biochemist had never experienced before. In 1965, after finishing his PhD at the University of Pittsburgh School of Medicine, Wells had secured a postdoctoral fellowship at the University of Wisconsin with Gobind Khorana, bypassing a faculty offer from Princeton University because he thought Khorana's work was where the action was. Though the term "genetic code" hadn't been coined at the time he joined Khorana's team, Wells knew that the molecules Khorana studied—DNA—would shape the future of his field, biochemistry. Apparently the press agreed. Reporters were camped out monitoring the lab's progress.

History has shown that both Wells and the reporters were right. Within two years of Wells' arrival in Wisconsin, the group had cracked the genetic code. Khorana was awarded a Nobel prize, and Wells launched his own career fresh from having participated in one of the fundamental advances in biochemistry. It's a fact that still manages to amaze new colleagues, especially younger ones.

"Most people I talk with assume ... that anyone who was part of that must be very old and very gray and probably dead by now," says Wells.

They're very wrong. Khorana himself, now at MIT, is still active. And the same mentality that helped Wells recognize the importance of what was happening in Khorana's lab in the 1960s has kept his work extremely relevant.

Today, Wells studies what he calls "nonorthodox" DNA structures. Sometimes strands of DNA forgo the traditional double helix shape we've all become familiar with and form other, "sticky" shapes like hair pins, cruciforms, or tetraplexes—not so orthodox.

One way this happens is when certain sections of DNA decide to expand. These sections are likely to form nonorthodox structures, often causing trouble, including changing the level at which a gene is expressed. These structures are also, Wells discovered, hot spots for mutations.

"There are at least 50 human diseases that are caused by these conformations," he explains, including numerous neurological conditions and leukemias.

"Bob Wells is really a pioneer in the study of nontraditional DNA structures. He has been studying this for years and years. He knew this was important. But the rest of the scientific community didn't appreciate it until the last 10 years," says Joel Gottesfeld, a professor of molecular biology in the Scripps Research Institute, in La Jolla, Calif.

The two scientists are collaborating on a disease called Friedreich's ataxia. People with Friedreich's slowly lose their ability to make voluntary movements. Wells identified a region of sticky DNA important to the disease.

Wells is now the director of the Center for Genome Research in the Institute of Biosciences and Technology at Texas A&M University Health Sciences Center in Houston. There, he and his current crop of up-and-coming researchers are studying the effects of nonorthodox DNA structures on early onset Parkinson's, myotonic dystrophy (a rare condition that causes muscles to waste away), and chronic myeloid leukemia.

"In the next 20 years, we hope to model these diseases and develop therapies for their treatment," he says.

There was a time when such statements were met with skepticism. No longer. This coming March, more than 125 researchers who focus on nonorthodox DNA structures will descend on Houston, Texas. Wells is organizing the first-ever conference dedicated to the topic.

When he recalls his time with Khorana, Wells likes to say, "I was in exactly the right place at exactly the right time."

It's not hard to imagine that someday his students will say the same thing. ■