

EXTRA! EXTRA!: On November 8, Dartmouth rated what may be the 2010 version of a banner headline: a Google home-page link. The browser's tribute to the x-ray linked to a Wikipedia entry citing Dartmouth as the site, in 1896, of the first medical x-ray in the U.S.

Mirza knew in his bones that DH was a good fit

Dr. Sohail Mirza's recruitment to Dartmouth-Hitchcock began with a three-word e-mail: "Can we talk?" That was all Dr. James Weinstein, then chair of orthopaedics, wrote. Weinstein knew about Mirza's research in spine surgery outcomes and liked his approach to medicine. He'd also been a scientific reviewer for several of Mirza's National Institutes of Health grants. And, as editor of the journal *Spine*, Weinstein had published several of Mirza's papers.

Likewise, Mirza knew a lot about Weinstein. The leader of the \$15-million Spine Patient Outcomes Research Trial, the nation's largest study of back pain, "Weinstein is the leading figure in changing orthopaedics," says Mirza. So when he got that brief e-mail, his first thought was "What trouble did I get into?"

Spine: Mirza soon learned that Weinstein was looking for someone to replace himself when he stepped down as chair to make more time for his role as director of the Dartmouth Institute for Health Policy and Clinical Practice. But Mirza, who specializes in cancer of the spine, was happy at the University of Washington, where he had trained and been on the faculty for 19 years. He had little desire to uproot his practice, his research, and his family for a position in rural New Hampshire.

That changed when he visited Dartmouth and attended the orthopaedics department's weekly meeting. "The entire faculty in orthopaedics and all of the

residents were in the room," recalls Mirza, and they were "talking about clinical cases and asking big questions. What is the right treatment here? Does the patient know all the choices? I hadn't seen that [before]."

Lots: He found the emphasis on delivering the right care, not just on increasing clinical production, "very refreshing." Lots of institutions talk about patient-centered care, says Mirza, "but the way it was actually lived out in this institution was inspiring for me." So he joined the department in 2008 and became its chair in 2010.

Mirza wants to build on the foundation Weinstein left and do no less than "change the world of orthopaedics for the better," he says. That means measuring outcomes for every procedure, making sure all patients are informed about their

choices, and developing systems that incorporate those practices efficiently and routinely.

"Nobody has been able to do that," says Mirza. "The general assumption is that you can't do all these things and still run a busy practice that is successful as a business. . . . Our challenge is to show how it can be done."

Mirza is also working with neurology, radiation oncology, and palliative care to build an interdisciplinary spine cancer program—a service lacking in the region, he says, and thus "a huge opportunity." Another "huge opportunity" he sees is working under the leadership of Weinstein, who is now also co-president of DH; Dr. Wiley Souba, the new dean of DMS; and Dr. Jim Yong Kim, the president of Dartmouth College.

"I wouldn't have considered [moving] to any other place," says Mirza. "Only Dartmouth."

JENNIFER DURGIN

The emphasis on delivering the right care was "very refreshing."



Sohail Mirza, intent here in the OR, is also intent on his new role as chair of ortho.

MARK WASHINGTON

Union between Uruguay and the Upper Valley passes 10-year mark

Medicine no longer recognizes national boundaries," says Dr. David Roberts, a DHMC neurosurgeon. "We are all part of the same global effort." Perhaps no one at Dartmouth-Hitchcock embraced that philosophy more enthusiastically than the late Dr. Peter Williamson, a longtime professor of neurology. He traveled the world helping to treat patients and train clinicians.

Field: On a visit in 2000 to Montevideo, Uruguay, Williamson found a group of surgeons poised but not equipped to improve their diagnosis and treatment of epilepsy—a field in which Williamson was an international leader. Uruguay had excellent residency programs in neurology and neurosurgery but needed more sophisticated instrumentation and training in the latest techniques.

Mark Natola, DHMC's manager of neurodiagnostics, was a member of the first team to visit Uruguay, in 2001. His challenge? To make American equipment compatible with foreign electrical circuits and computer networks. On that trip, the team brought monitoring instruments and taught Uruguayan clinicians the fundamentals of developing an epilepsy program; they also identified six patients who could benefit from surgery.

Another DHMC team, including Roberts, Williamson, and Natola, returned in 2002. Working with Uruguayan neurosur-

For a **WEB EXTRA** with a link to a photo gallery from the Dartmouth-Hitchcock team's most recent visit to Uruguay, see dartmed.dartmouth.edu/w10/we07.

geons, Roberts performed successful lobectomies on five of the six patients identified in 2001; as he operated, he also trained the South American team in how to perform the procedure.

Natola and Williamson made another trip in 2004 to update the equipment and check on the patients. All five reported positive outcomes. Over the next several years, staff from Uruguay visited New Hampshire to observe various aspects of the Dartmouth Epilepsy Program.

Sadly, Williamson died in 2008, but the exchange has lived on. In 2010, one southbound and one northbound exchange took place. In April, Roberts; Natola; Dr. Barbara Jobst, who succeeded Williamson as director of the Epilepsy Program; and Dr. William Spire, a resident in neurosurgery, spent a week in Montevideo supporting the Uruguayans as they began to perform invasive monitoring procedures.

Then Dr. Rodrigo Moragues Gayoso, a sixth-year resident in neurosurgery from Uruguay, spent the month of October observing the Dartmouth specialists at work in their own environment.

Value: Gayoso was impressed by the complexity of the equipment and the delicacy of the surgical techniques he saw. But he says the most important thing he learned was the value of working as a team. Just as a cross-national confederation can lead to good things, so, too, can a cross-disciplinary collaboration produce an outcome that's greater than the sum of its parts.

ROGER P. SMITH, PH.D.

INVESTIGATOR INSIGHT



In this section, we highlight the human side of biomedical investigation, putting a few questions to a researcher at DMS-DHMC.

Timothy Lahey, M.D.

Assistant Professor of Medicine and of Microbiology and Immunology

Lahey studies how the immune system protects people with HIV from tuberculosis and protects against early sexual transmission of HIV infection. He joined the DMS faculty in 2005.

How did you become interested in your field?

I've always been intrigued by how the immune system and some diseases (infections and cancer) evolve in response to each other in real time. It's a wonderful, dynamic biological battle. When I realized I could join that battle by caring for poor and marginalized populations afflicted with infectious diseases, and doing research, I knew I had found my mission in life.

What does your research involve?

One of my projects is a trial—led by my great mentor, Ford von Reyn—of a new tuberculosis vaccine. We're conducting thousands of immunological assays to help shed light on which immune responses to TB are just bystanders and which are really needed to win the war against TB.



What are some recent books you've read?

Paul Harding's *Tinkers* was like eating a big, fat piece of chocolate cake; each sentence was so delicious.

And Jonathan Franzen's *Freedom* was an addictive whirlwind.

What's your favorite nonwork activity?

I love to hang out with my wife, Jessica, and the two lunatics we created, Ben, 11, and Finn, 6. They give meaning to my life. And once in a while, a dim bulb of creativity blinks weakly

above my head, and if I have the strength to put pencil to paper, I will bring forth what can be described as poetry.

Where would you most like to travel?

I want to go to India and eat. Yes, the centuries of accumulated culture would be fascinating, too, I know, I know—I'm an ingrate. But, I confess, it's the food that draws me there.

What's the hardest lesson you've had to learn?

It's difficult for me to accept the role of luck in scientific success. I try to do good work and to represent it persuasively in grant applications, but in the current funding climate, even if the work and the grants are good, the whole kit and caboodle can come crashing down without luck. So should I go do something that pays better and doesn't have the potential to fall apart at the end of each grant cycle? For good or for bad, I meant what I wrote on my medical school application about saving the world; until that big hook pulls me off the stage, I'll keep on trying.

What makes your field hot right now?

Both HIV and TB kill millions of people every year. Any new insight has the potential to help prevent suffering on a global scale.

What has been your best idea or theory?

I think it's important to believe that your next idea is the best idea yet.

What is your most memorable accomplishment?

Being awarded the Clinical Science Teaching Award this year. It was an incredible honor to hood our newly minted graduates and to call them "Doctor" for the first time.

What is a talent you wish you had?

To be able to sing without cracking windows.

What kind of concerts do you enjoy?

My six-year-old loves Dartmouth Gospel Choir concerts so much that he dances in the aisles with complete strangers. It's like attending two performances, of their music and his freedom.