

TABLE OF CONTENTS

[Announcements](#)

[People in the News](#)

[My Turn](#)

[RSNA Board of Directors Report](#)

Feature Articles

- [Stereotactic Body Radiotherapy Effective for Treating Spine Tumors](#)
- [Revised Pediatric Guidelines Aid Radiologists in Detecting Child Abuse](#)
- [Early Radiology Exposure Could Lure Medical Students to Specialty](#)
- [Robotic System Aids CT-Guided Needle](#)

[RSNA 2009 Preview \(PDF\)](#)

- [Chicago Events and Attractions Shine at RSNA 2009](#)

Early Radiology Exposure Could Lure Medical Students to Specialty

Improving perceptions and increasing early efforts to expose medical students to radiology could help counteract recent waning interest in the specialty, according to radiology professors.

"Some of the shift has to do with students' misperceptions about what radiologists actually do and the central role that we often play in patient care," said David M. Hovsepian, M.D., a professor of radiology at Stanford University Medical Center and vice-chair of the RSNA News Editorial Board.



David M. Hovsepian, M.D. Stanford University Medical Center



Terry Desser, M.D. Stanford University Medical Center

"We can't expect them to choose a career in radiology if we don't make this clear to them from the very start of their training."

While radiology remains in the top 10 specialty choices, it has fallen from number five in 2007 to number eight in 2009, according to the National Residency Matching Program. The private, nonprofit corporation's 2009 report includes nearly 37,000 applicants and 4,000 graduate programs.

Dr. Hovsepian said the ebb is partly due to limited federal funding for postgraduate medical education which pays for training up to five years, discouraging potential applicants who might discover radiology while training in other programs. [\(LI\)](#) ([Listen In to Dr. Hovsepian discuss radiology's changing applicant pool](#))

"It used to be that you could complete a residency in medicine, for instance, and then do radiology and the government would keep paying for your training," Dr. Hovsepian said. "Now you have to

[R&E Foundation Donors](#)

[Journal Highlights](#)

[Radiology in Public Focus](#)

[RSNA: Working for You](#)

[Program and Grant  
Announcements](#)

[Meeting Watch](#)

[Product News](#)

[RSNA.org](#)

[Medical Meetings](#)

choose your career path to do radiology specifically. From the standpoint of maintaining robust programs, we lose some vitality as well, since our residents now come from a less diverse pool as a result of that limitation."

It is, in fact, the perception of a better lifestyle that keeps radiology among the top specialties, said Terry Desser, M.D., residency program director of Stanford's radiology department.

"They're looking for what's going to be intellectually stimulating, emotionally fulfilling and lucrative," Dr. Desser said. "Many students seem to be starting families at an earlier age and they all have massive amounts of debt, so they make a very practical calculation. They look at the income potential and lifestyle and radiology winds up pretty high on their list."

**Subspecialization is Asset and Liability**

Drs. Hovsepien and Desser agree that subspecialization adds credibility to a radiologist's work, but expressed concern about the impact on appeal to students. "Training in radiology can't be lengthened in perpetuity," said Dr. Desser. "We're competing with specialties where the entire length of training is three years."


Another concern, Dr. Desser said, is the compartmentalizing of emerging radiologists. Medical students often say they are attracted to radiology because of the broad knowledge base required to interact with multiple specialties, she said. "If radiologists are seen as pigeonholed and subspecialized, then that appeal potentially goes away."

Subspecialization is a trend driven by the market, and private practices attach a higher value to fellowship-trained radiologists, said Howard P. Forman, M.D., M.B.A., a professor of diagnostic radiology and management at Yale University School of Medicine and chair of the American College of Radiology (ACR) Committee on Radiologist Resources. "As long as that trend continues, we'll continue to see residents doing one or two fellowships at a minimum," he said.


**Campus Charisma a Necessity**

Immensely important to students' exposure are radiologist role models, Dr. Desser said. "I see some extremely strong radiology departments that for some reason don't get many applicants, while other schools, where there is a particularly charismatic individual

or two, have huge numbers of radiology applicants."

Aaron Eifler, a second-year student at Northwestern University's Feinberg School of Medicine in Chicago, attributes his current career path to his mentors' guidance. Eifler's work in interventional radiology, investigating a novel treatment for pancreatic cancer that combines intraarterial catheter-targeted delivery, MR perfusion monitoring and a functionalized gold nanoparticle, earned him a 2009–10 Howard Hughes Medical Institute Research Training Fellowship.  (Listen In to Aaron Eifler discuss his research project)

"Awareness of prestigious research opportunities like this might help induce more medical students to consider this path," said Reed A. Omary, M.D., M.S., vice-chair of research for radiology at Northwestern and an RSNA Research & Education (R&E) Foundation grant recipient who has mentored Eifler since the student's undergraduate years.

"Without question, I wouldn't have the success or productivity I've had without Dr. Omary and my co-mentor [C. Shad Thaxton, M.D., Ph.D., an assistant professor of urology]," said Eifler. "Visibility on campus is extremely important. If you have a great lecturer in a certain specialty, you might try to get involved and do research with that person."  (Listen In to Aaron Eifler discuss how radiologists can increase their visibility on campus.)

Venu Vadlamudi, M.D., a diagnostic radiology resident at Michigan State University's College of Human Medicine in Flint, is using his status as a resident and leader within organizations, including the Michigan State Medical Society and the American Medical Association (AMA), to recruit medical students on behalf of RSNA and the specialty. "Students may not fully understand what it is we do until they rotate with us," said Dr. Vadlamudi, who helped staff RSNA's booth at AMA's Medical Specialty Showcase in June. "Outreach from the radiology community will allow us to continue to attract the best and the brightest to this dynamic field."

Radiologists face an uphill battle in getting face time in the medical student curriculum, said Dr. Desser, but the fight is worth the effort. "We need to be the ones teaching them anatomy and about imaging and the manifestations of pathophysiology on imaging early in their training, so they recognize what we do and what we contribute."

---

## Stereotypes Drive Perception of Radiology

Radiologists are more than familiar with the stereotypes surrounding their specialty. David Wen, a student finishing his first year at the University of Minnesota Medical School in Minneapolis, admits much of his knowledge of radiology stems from rumor.

"It seems the day-to-day routine of a radiologist entails sitting around waiting for someone to ask you to interpret films," said Wen, who is considering specializing in cardiothoracic surgery. "There's perhaps a lack of social interaction with colleagues in other fields because radiologists are not meandering around, but waiting to be consulted."

Wen said he believes it is important that students work one-on-one with radiologists to better understand their role and dispel current stereotypes. [\(L.I.\)](#) (Listen In to David Wen discuss the need for the radiologist's presence in a clinical setting and the need for one-on-one involvement. )

"To some extent medical students still think radiologists are antisocial geeks," said Terry Desser, M.D., residency program director of Stanford University's radiology department. She referred to "The 12 Medical Specialty Stereotypes," a 2007 comic series by then-medical student Michelle Au, now an anesthesiologist in Atlanta. A panel labeled "Radiology: Rich in the Dark" depicts two white eyeballs in a black room with an X-ray image accompanied by the clink-clink "sound of counting gold doubloons."

"That's not an appealing model, especially for women," Dr. Desser said. "Now that women make up such a large percentage of medical students, we need to be cognizant of the fact that we can't just appeal to students with our cool technology."

For radiologists who want to survive in a competitive market, the days of "easy hours" are over, said David M. Hovsepian, M.D., a professor of radiology at Stanford University Medical Center and vice-chair of the *RSNA News* Editorial Board.

"You can't sit there waiting for the phone to ring," said Dr. Hovsepian. "Somebody's going to outsource you to another specialty or will quickly move in to fill the gap."

Naturally, radiology's allure also depends on the current job market. "If there's worry that those jobs are going to disappear, the turnaround is pretty quick in terms of drop-off applications and people leaving the specialty," Dr. Desser said. "We saw this in the 1990s during the Clinton healthcare reform. It'll be interesting to see how specialty choices play out next year vis-à-vis the Obama healthcare changes."