Residency Match: The 7 most competitive medical specialties

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Nearly 95 percent of U.S. allopathic senior medical students matched for postgraduate year 1 (PGY-1) positions in the 2018 Main Residency Match, but that’s not to say the competition in certain specialties wasn’t fierce. Find out about the most competitive medical specialties for applicants when it comes to the residency Match.

The National Resident Matching Program (NRMP) considers the most competitive specialties those that match with the highest percentage of U.S. medical school graduates. In 2018, seven specialties—counting PGY-1 positions and advanced postgraduate year 2 (PGY-2) positions—offered at least 25 positions and were filled by a share of 85 percent or more U.S. senior allopathic medical school graduates.

Competitiveness may be a factor to consider when choosing a specialty. Other factors include a passion for the specialty, risk of burnout and work-life balance. FREIDA™—a recently revamped AMA tool that offers searchable, sortable data on 11,000-plus residency and fellowship programs accredited by the Accreditation Council on Graduate Medical Education—can help you gather the information you need to find the right match.

The AMA provides a guide for medical students on choosing a medical specialty that presents a clear, approachable overview of specialties and subspecialties and the AMA “Shadow Me” Specialty Series speaks to real physicians for specialty-specific insight.

Now here’s a look at the most competitive medical specialties that were part of the NRMP in 2018.

**Integrated interventional radiology**

**Percentage of positions filled by U.S. senior medical school graduates:** 95.5 percent.
Behind the numbers: In total, 217 U.S. senior medical students applied for the 35 PGY-1 positions offered in integrated interventional radiology. All of the positions were filled, 34 of them by U.S. seniors.

Those numbers only tell part of the story, however. Integrated interventional radiology is among the 11 specialties in which applicants can rank advanced (PGY-2 level) programs on their primary rank order list. Advanced programs typically begin in the second year of residency training.

The Match offers applicants the opportunity to obtain a “full course of training” by simultaneously matching to preliminary PGY-1 positions and advanced PGY-2 positions. In 2018, 93 U.S. seniors matched in advance positions in integrated interventional radiology. That demographic filled 94.9 percent of those positions.

Orthopedic surgery

Percentage of positions filled by U.S. seniors: 93.1 percent.

Behind the numbers: With 849 U.S. seniors applying and 738 total PGY-1 matches, orthopedic surgery was one of four specialties that didn’t have enough positions to accommodate all U.S. seniors who preferred that specialty. That list also includes interventional radiology, neurological surgery and plastic surgery.

Integrated plastic surgery

Percentage of positions filled by U.S. seniors: 92.9 percent.

Behind the numbers: 185 U.S. senior medical school graduates applied to PGY-1 positions in integrated plastic surgery. The specialty had 156 total matches. Among those who reported data to the NRMP, U.S. seniors listed an average of 5.8 abstracts, presentations and publications in their Electronic Residency Application Service applications.

Radiation oncology

Percentage positions filled by U.S. seniors: 92.9 percent.
Behind the numbers: Of the specialties on this list, three were calculated using data from PGY-1 and PGY-2 advanced positions. Radiation oncology fills a larger number of its Match positions through advanced positions than any of the other listed specialties. Radiation oncology filled 172 positions as PGY-2s—162 of them were filled by U.S. seniors—and just 15 positions as PGY-1s.

Neurological surgery

Percentage of positions filled by U.S. seniors: 90.2 percent.

Behind the numbers: 240 U.S. seniors applied for PGY-1 positions in neurological surgery. The specialty had 225 total matches. Neurological surgery was among the specialties that had the highest percentages of matched U.S. seniors with a PhD—14 percent.

Otolaryngology

Percentage of positions filled by U.S. seniors: 90.2 percent.

Behind the numbers: In 2018, 299 U.S. seniors applied for PGY-1 position in otolaryngology. With 303 total matches, it marked the second year in which the number of otolaryngology PGY-1 positions offered exceeded the number of U.S. seniors applying to work in the specialty.

Thoracic surgery

Percentage of positions filled by U.S. seniors: 86.1 percent.

Behind the numbers: 72 U.S. seniors applied for PGY-1 positions in thoracic surgery. The specialty had 36 total matches (U.S. seniors, IMGs and others) for 36 positions, making it one of eight specialties with at least 10 positions in the Match and 100 percent fill rates.

Editor's note: A previous version of this story did not account for the nearly 3,000 applicants who matched into advanced PGY-2 level programs. In examining the shares of PGY-1 and PGY-2 positions filled by U.S. allopathic seniors, radiation oncology entered our top seven list. Dermatology, with a U.S. fill rate of 82 percent, fell to tenth place.
In some highly competitive specialties, such as dermatology, the share of U.S. seniors matching does not capture the reality that the remainder of the positions are filled not by IMGs, but by U.S.-trained medical school graduates reapplying to be matched into a residency program in the specialty.