

Early Experience in the Implementation of an Abdominal Imaging Junior Fellowship for Fourth-Year Radiology Residents

Laura Heacock, MD, Andrew B. Rosenkrantz, MD, Alec Megibow, MD, Nicole Hindman, MD

JUNIOR FELLOWSHIPS: CHALLENGES AND OPPORTUNITIES

The change in the timing of the ABR's core and certifying examinations has allowed radiology program directors and residents to transform the fourth year into a flexible learning experience tailored to residents' interests [1-3]. Although this flexibility makes it possible to craft unique educational opportunities for senior residents, without a clear structure, explicit expectations, and monitored accountability, the opportunity for a potentially deeply rewarding experience will go unfulfilled.

At our institution, radiology residents can elect to commit between 6 and 12 months of their fourth year within a single area within the department; this block of time is termed a junior fellowship and may be spent in any radiology subspecialty, radiology research, or global health. In this article, we share the experience of the first eight fourth-year residents who completed abdominal imaging junior fellowships: one fourth-year resident in 2014-2015 (who spent 9 months) and seven fourth-year residents in 2015-2016 (6 months each). An additional three fourth-year residents recently began 6-month junior fellowships in 2016-2017.

The abdominal imaging section in the Department of Radiology at New York University Langone Medical Center (NYULMC) has 19 core faculty members who interpret approximately 6,900 studies monthly (1,000 plain film and fluoroscopy, 1,500 CT, 1,200 MRI, and 3,200 ultrasound), encompassing inpatient and outpatient work. The section does not currently perform any interventional procedures, but elective interventional time during the junior fellowship is available for trainees upon request.

Neither our program nor, to the best of our knowledge, other radiology residency programs around the country have determined how a junior fellowship experience can be accredited. Because junior fellowships do not fall under specific ACGME requirements, our curriculum is tailored to our departmental strengths rather than to superimposed requirements from an outside organization. This has obvious implications as residents who have completed the abdominal imaging junior fellowship apply for jobs or for academic positions. All eight individuals who have completed abdominal junior fellowships have highlighted their experiences when applying for jobs, with the backing of the NYULMC abdominal imaging faculty.

WHAT WE DID

Residents reach out to the given section's junior fellowship director early in the third year to express interest. Fourth-year residents completing abdominal imaging junior fellowships may elect to arrange their time in the subspecialty as a continuous block or divide the time into 1- or 2-month blocks interspersed with other clinical rotations (Table 1). To date, 50% (four of eight) have arranged continuous blocks, and 50% (four of eight) have arranged interspersed blocks. The content of the months in the abdominal imaging junior fellowship is also flexible. To date, 50% (four of eight) have dedicated the entire abdominal imaging junior fellowship to body MRI and CT, whereas 50% (four of eight) have evenly divided the block between body MRI and ultrasound. Block scheduling is managed by the chief residents with input from the program director, the abdominal imaging junior fellowship director (N.H.), and the abdominal imaging fellowship director. Junior fellows are allotted up to two weeks of vacation and provide one week of emergency radiology coverage (matching that of fourth year residents not pursuing a junior fellowship).

When on the body MRI service, junior fellows spend at least three

Table 1. Representative fourth-year resident schedules for organizing a 6-month abdominal imaging junior fellowship using a continuous or interspersed approach

Approach	July	August	September	October	November	December	January	February	March	April	May	June
Continuous	ABD	ABD	ABD	ABD	ABD	ABD	Breast	NM	MSK	IR	Chest	Neuro
Interspersed	ABD	MSK	ABD	Chest	Neuro	ABD	Breast	NM	ABD	ABD	IR	ABD

Note: ABD = abdominal imaging; IR = interventional radiology; MSK = musculoskeletal; NM = nuclear medicine; Neuro = neuroradiology.

days a week interpreting abdominopelvic MRI examinations, one day a week interpreting CT examinations and performing fluoroscopy, and optionally spending 1 day a week as an academic day (discussed later). Although daily volume varies, junior fellows are expected to place reports for a minimum of 7 to 10 MRI examinations or 30 CT examinations. While on the ultrasound service, 4 days are spent interpreting approximately 25 to 50 ultrasound examinations a day, in addition to hands-on scanning, with an optional academic day once weekly. These expectations and goals are clearly detailed in written documents distributed at the beginning of the junior fellowship. The day-to-day schedules are flexible and parallel the schedule for the body MRI fellowship.

Junior fellows start and end their day at the same time as the service's fellows and attending radiologist, reading from a shared worklist. Read-out sessions occur continually throughout the day, with attending radiologists reading side by side with residents, junior fellows, and senior fellows. Junior fellows attend section conferences and multidisciplinary conferences in lieu of traditional resident case conference and didactic lectures; a broad range of intra-departmental and multidisciplinary conferences are available (Table 2). Junior and senior fellows routinely present at multidisciplinary conferences, with junior fellows presenting at least once monthly.

Junior and senior fellows are treated as identical in terms of workstation teaching (including the ability to interact with volume acquired data from CT or MRI, dual-energy CT processing and analysis, and multiparametric and perfusion analyses) and level of independence. Nonetheless, the two differ in several respects. Although a high level of research is expected and received from the residents and junior fellows, the senior fellows are expected to produce and are largely successful in producing a higher volume of major meeting abstracts and peer-reviewed publications in preparation for an academic career. The senior fellows attend additional closed fellow-centric didactic sessions. Finally, senior fellows provide

after-hours coverage for MRI injections. However, the junior fellows are invited to attend resident didactic sessions and are included in the resident evening and overnight call pools.

All junior fellows indicated an interest in, and received academic time for, pursuing dedicated research in abdominal imaging during their junior fellowship. To receive academic time, the junior fellow must present a mentored research proposal to the junior fellowship director. If accepted for dedicated time, the junior fellow receives 1 academic day a week until the project is completed. A national survey of radiology residents reported that 9% of fourth-year electives offered academic time [4]; we believe such time

Table 2. Partial list of sectional and multidisciplinary conferences commonly attended by abdominal imaging junior fellows

Sectional

- Abdominal imaging journal club
- Abdominal imaging case conference
- Body MRI case conference
- Body MRI physics
- Research update meeting

Institutional

- Multidisciplinary GI oncology conference
- Multidisciplinary gynecology/oncology conference
- Multidisciplinary urology tumor board
- Multidisciplinary pancreatic disease conference
- Multidisciplinary liver transplant conference
- Multidisciplinary endometriosis conference
- Multidisciplinary surgical M&M conference
- Multidisciplinary inflammatory bowel disease conference
- Multidisciplinary complex hernia conference
- Multidisciplinary hematology/oncology conference

Note: GI = gastrointestinal; M&M = morbidity and mortality.

Download English Version:

<https://daneshyari.com/en/article/5726559>

Download Persian Version:

<https://daneshyari.com/article/5726559>

[Daneshyari.com](https://daneshyari.com)