

# AMSER GUIDE TO APPLYING FOR RADIOLOGY RESIDENCY

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## INTRODUCTION

This document is intended to give you guidance when considering or applying to a residency in radiology. It includes answers to the most common questions that advisors have been asked, as well as some 'hard data' from the national websites. Some advice reflects personal opinion of the authors.

The timeline illustrated below is an ideal guide line. Please realize that even if you decide as late as mid-summer or even fall in your 4<sup>th</sup> year of medical school that you wish to apply to a radiology residency program, it is not 'too late'.

## TIME LINE

### FIRST YEAR OF MEDICAL SCHOOL

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#### GENERAL

- Job one: Study as hard as you did in college.
  - We can't underestimate the value of having a solid knowledge base and doing well on USMLE Step 1 and/or COMLEX (for D.O. students).  
THE VALUE OF A GOOD STEP 1 SCORE CANNOT BE OVERSTATED
  - You have greater options – i.e., you won't be shut out of any specialties.
- Be well-balanced:
  - Join student interest groups to learn about different fields. You aren't obligated to pursue that specialty just for checking it out.
  - Check into the availability of a Radiology Interest Group at your medical school. If there is not one – think about starting one.
  - Get involved with one volunteer/charity organization.
- Join professional societies from different specialties:
  - Many are free or have only a small membership fee for students
  - Literature may help you decide on specialty ("I don't mind reading articles on... all of my life")
  - Good on residency application- "I was a member of the XXX since my 1<sup>st</sup> year medical school."
  - e.g., Radiological Society of North America (RSNA), Association of University Radiologists (AUR)
- Get to know the field of radiology:
  - Radiology is a consultation field that needs a deep and broad knowledge base, and has continually changing modalities and techniques. It is a field that requires a serious commitment to consistent studying to obtain skills and stay current.
  - Shadow radiologists and talk to residents to get to know the field. If there are radiology faculty advisors at your school, you can meet with them.

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#### SPRING

- If you're not involved in a research project already, begin to look for a project for the summer. The research does not have to be in the field you finally decide on. Programs like to see you have the discipline and interest to do ANY research. You might have time at the end of 3<sup>rd</sup> year to do research in the specialty you choose.
  - Broadens your experience
  - Presents possible opportunities to present at a conference or submit research for publication

- Helps you work closely with a faculty member, who can write you a strong letter of recommendation. (see under “Letters of Reference” section also)
- Have a game plan for your research project.
  - Assess your interests, special skills, inclinations, short-comings.  
Approach a potential research mentor with a CV or summary of your experiences and skills.
  - Exercise ingenuity and initiative in finding a project.  
Pick your research mentor wisely: this is one of the most important factors in being productive.
    - ◆ Ask around for research opportunities and be persistent until you find one.  
e.g., Email the student director(s) in areas you are interested for suggestions. They often circulate emails to the department.
    - ◆ Do not expect the attendings to have menus of instantly-available projects ready to go.
    - ◆ You may present your own ideas and ask for mentorship.
  - Projects listed as ‘in progress’ or ‘submitted’ do not yet officially exist
    - ◆ Show initiative in finishing a project – you can set a goal with your mentor, such as an exhibit or presentation at a national conference, rather than vague “research.”

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## SUMMER

- Do a research project over the summer – you can make your first contacts in Radiology
- If you have done a research project already (paper, exhibit), you may do something else that will strengthen your application, e.g., working abroad on a medical mission, volunteer work, charity work
- **Summer Stipends** - there are multiple opportunities so apply for these.
  - Check with your Dean's Office
  - Check with professional societies: e.g., Society Nuclear Medicine, the RSNA, NIH, etc.
- If you haven't done so, consider shadowing radiologists.
- Enjoy this summer - this is also a great time to travel and have fun.

## SECOND YEAR OF MEDICAL SCHOOL

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## GENERAL

- Study hard. Grades and USMLEs/COMLEX DO count!  
Set up a 6 month study schedule for USMLE/COMLEX Step 1.
- Continue to be active in your interest groups and other extracurricular organizations.  
Become an officer of a group, e.g., the Radiology Interest Group
- Continue your “summer” research or start another project.
- Schedule your 3rd year rotations.
  - Schedule early rotations in areas of your interest - to confirm or reject areas. But don't panic if you can't get in or you can't take a 3<sup>rd</sup> year radiology rotation at your school.
  - If radiology is a 4<sup>th</sup> rotation, to get exposure to radiology, you should:
    - ◆ Follow up your patients' radiological studies on clinical rotations
    - ◆ Shadow radiologists/talk to radiology residents if you haven't do so already
    - ◆ Stay involved with interest groups, if possible

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## HOW TO STUDY FOR STEP 1:

- Study hard during year 1 and year 2

- Did we say “THE VALUE OF A GOOD STEP 1 SCORE CANNOT BE OVERSTATED?”
- January Year 2: Begin to review material from year 1, with your priority being to do well in class.
- Once classes end in year 2, take 4-5 weeks for the intensive Step 1 studying.
- **What to use for studying:**  
Pick a few resources and stick to them. For example:
  - Online question bank
    - ◆ Kaplan Q Bank or USMLE World
  - National Board of Medical Examiners (NBME) website
    - ◆ Mini-tests that use real questions, which may appear on the real test
    - ◆ Timed and give you a score report – correlates well to end score
  - Goljan for USMLE Review
  - First Aid for Step 1 - good review resource, but not enough material or detail

## THIRD YEAR OF MEDICAL SCHOOL

### GENERAL

- 3rd year rotations:
  - Radiology residencies look for excellent grades in the core rotations.
- How to do well in 3<sup>rd</sup> year:
  - Work and study hard to get honors, especially in medicine and surgery, if you can.
  - The grading system for 3<sup>rd</sup> year is subjective. The grade is based on a combination of your evaluation and a shelf exam (multiple choice tests taken by all students nationally).
    - ◆ Always show up on time, be enthusiastic, offer to help, ask a lot of appropriate questions, and try to learn as much as you can.
    - ◆ **Stand out from the crowd** - do more than “just pass.”
    - ◆ Study hard, like you did in year 1 and 2, for the shelf exams.
- Letters of Reference (see under “Letters of Reference” section also):
  - If you do well in a rotation, ask for a letter right away so your attending can write a personal letter. It’s best if they offer an unsolicited letter, but at any rate, ask if they feel comfortable in writing a strong letter.
- **Plan your 4<sup>th</sup> year schedule**
  - Ask current 4<sup>th</sup> year students at your school how, where and why they scheduled their 4<sup>th</sup> year and what they would have done again or changed.
  - If Radiology is not a 3<sup>rd</sup> year rotation at your school, apply early for 4<sup>th</sup> year radiology clerkships - July or August. If you can’t get one, screw up your courage and meet with the radiology clerkship director to explain your interest in radiology. (see “When should I take my radiology clerkship?”)
  - Consider taking **Sub-Internship** or Acting Internship in medicine or surgery early during 4<sup>th</sup> year
    - ◆ Can boost your grades/evaluations if needed
    - ◆ Can yield a strong letter of recommendation
    - ◆ Will allow flexibility during interviews and a fun end to your 4<sup>th</sup> year (if a required 4<sup>th</sup> year rotation)
  - **Interview season:** late October -early February, with the peak in late November to mid-January
    - ◆ Schedule rotations that are flexible - eg, an online course, research or self-study

- ◆ Consider vacation in December, January, or both months.

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## SPRING/EARLY SUMMER

- Contact the Radiology faculty advisor (and any other areas that you are interested in) and arrange a preliminary meeting to discuss your grades, Step 1 score, and career plans.
- Set up email account that sounds professional and one that will roll over when your school email closes if it does not have an alumni account. [babewbigones@gmail.com](mailto:babewbigones@gmail.com) will not be a good one.
- Schedule physical exam and update immunization records and titers, including varicella, in case needed
- Check the website of programs you are interested in to see if they require anything special
- A letter you are in good academic standing from academic affair
- Update your CV – professional-looking and 1 page, longer only if multiple publications.
- Summary of research, including citations for all your publications – another page if needed
- Start working on your Personal Statement (see “Personal Statement” section) – 1 page only
- Photograph for applications
  - Play it safe: look professional and show that you understand the unwritten conventions
  - The photograph is used during ranking to help remember who is who, so it should look like you on the day of interview: clothes, hairstyle, facial hair etc. and have a pleasant smile.
  - Don’t let us say “what was he/she thinking....” No weird stuff. No Pets. No significant others.
  - Head-and-shoulder only.
  - B&W image & not too dark - to be more certain of how it will transmit and photocopy
  - Send as jpeg, not too low or high resolution so it prints as ~ 3x4 cm

**Away rotations:** (see “Away Rotation” section)

Consider scheduling at a place where you think you may want to do residency: at a target, not a reach place.

### **“Meet the Experts” get-together**

- Many schools arrange a meeting or dinner for interested 3<sup>rd</sup> year students with the matched 4<sup>th</sup> year students for an information exchange session. If this does not occur at your school, start one by contacting the Radiology faculty advisor (also great thing to add to CV in addition to being valuable for you).

### **Mock Interviews**

- If this is not formally done at your school, ask your advisor or students affairs office if you may need one.
- You can set one up with a faculty member you don’t know so they can give you feedback.

## FOURTH YEAR OF MEDICAL SCHOOL

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## SUMMER

- Do a Radiology Elective if you have not previously
- Meet with the Radiology faculty advisor to discuss your draft personal statement, letters of reference and program application lists (see sections below).

### **MSPE**

- Schedule a meeting for your Medical Student Performance Evaluation (MSPE) with your Dean.
- Proof read it when it is completed, as there are often mistakes in the letter.

### **TRANSCRIPT**

- Check your transcript to make sure all of your grades have been submitted and submitted correctly.

- If you are missing grades, contact the department secretary and encourage those grades with something gentle like, “Is there any additional information I can provide to help my evaluator complete this submission?”

### Plan to take Step 2

- See “When should I take Step 2” below

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### SEPTEMBER/OCTOBER

Diagnostic Radiology is a regular match. **SUBMIT APPLICATIONS SUBMITTED AS SOON AS POSSIBLE ON OR AFTER SEPTEMBER 1<sup>st</sup>**

- Some programs only take first X number of applications
- The earlier you apply, the greater the chance you have of getting interviews
- It shows how motivated and enthusiastic you are about applying to residency
- Make a tentative calendar making blocks of time for each region you plan on interviewing in.
- Interview offers start in September, but many programs wait until they receive the MSPE (November 1<sup>st</sup>)

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### NOVEMBER

- MSPE released November 1<sup>st</sup>.
- Interview offers will come in more steadily until the end of November/beginning of December
- You will feel crushed when those rejections come in the 1<sup>st</sup> two weeks of November but that’s when they come and then the interview invitations start rolling in. Be strong!
- Schedule as many interviews in November as your elective allows to allow greater flexibility later
- Do not write off a program even if you do not hear from them by December. No news means you are still on the list.
- Applicants cancel interviews so programs may contact you even at the last minute, so always be available to take an interview offer. (See “When you can contact a Program Directly” section)

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### DECEMBER/JANUARY

Take vacation or another rotation where you can miss A LOT of time off for interviews, especially at the last minute.

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### LATE JANUARY-FEBRUARY

- Make your rank list: Set up meeting with advisors to help with rank order. (see “How to Rank” section)
- Contact your top 5 programs to let them know (see “When you can contact a Program Directly” section).

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### FEBRUARY-APRIL

- Take BLS/ACLS early so you won’t have to take it at the last minute before internship (and you might get that time off during internship orientation).

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### MARCH-MAY

- “Meet the Experts Meeting” - Arrange a meeting with the other 4<sup>th</sup> years and celebrate and commiserate and share with Radiology faculty advisor and 3<sup>rd</sup> years about what you did right or wrong.

## SUMMARY TIMELINE

<b>Contact Radiology faculty advisor</b>	As soon as possible, or by March of Year 3
<b>“Meet the Experts” Dinner/Meeting</b>	<b>March or April Year 3</b>
<b>Group Meeting with radiology faculty advisor</b>	April- July Year 3 – depends on school
<b>Mock Interviews (can arrange if not offered)</b>	May-September
<b>Radiology Elective</b>	If 3 <sup>rd</sup> year elective or required - early If 4 <sup>th</sup> year elective – July - August Year 4
<b>Draft personal statement</b>	June/July Year 4 (send to advisors/friends)
<b>Final personal statement</b>	July/August Year 4
<b>Develop program lists</b>	August Year 4
<b>ERAS applications open (Radiology is not early match)</b>	Sept 1 Year 4 – STRONGLY RECOMMENDED on day 1
<b>ERAS applications close</b>	Variable
<b>Deans letters arrive</b>	Nov 1 Year 4
<b>Interviews</b>	Nov-Jan Year 4
<b>Rank list entry open</b>	Mid January
<b>Rank list entry close</b>	Mid February
<b>Unmatched candidates listed</b>	Mid March, Monday
<b>Match day</b>	Mid March, Thursday

## GENERAL ADVICE ABOUT APPLYING TO RADIOLOGY RESIDENCIES

### WHEN SHOULD YOU CONTACT THE MEDICAL STUDENT RADIOLOGY FACULTY ADVISOR?

- As soon as you are considering radiology as a career, meet with the radiology faculty advisor at your school. If there is no official faculty advisor, meet with the radiology clerkship director and/or the residency program director.
- If you are in your 1<sup>st</sup> or 2<sup>nd</sup> year of medical school, the advisor can direct you to a PGY2 radiology resident or a PGY1 resident doing an internship prior to radiology to discuss the field with you, and the advisor can help set up opportunities to shadow radiologists and to get involved in research.
- Be honest with your advisor: Does something personal or professional need addressing?

### HOW LONG IS RADIOLOGY TRAINING?

- General Diagnostic Radiology Residency – generally 5 years
  - First year in a preliminary medicine, transitional program, or preliminary surgery program

- Four years in radiology at the same or different institution
- Categorical programs: less common - PGY 1-5
  - PGY 1 intern year and the radiology residency are combined , and applied to together
- Advanced programs: most common - PGY 2-5
  - Advanced programs start at PGY 2 (PGY 1 intern year is applied to separately)
- Special programs – combination of fellowship or research with residency. Usually 5 year programs that may include rotations through clinical areas (e.g. vascular surgery for the interventional pathway). Some of these are applied to through a separate NRMP match, and some (e.g., Holman Pathway) are applied to after starting at a program. Information should be on the program websites.
  - PEDRAP: Pediatric Emphasis Diagnostic Radiology Alternative Pathway
    - ◆ eg, UCLA, Drexel, Brigham & Women’s, U of Arkansas, Baylor  
[http://theabr.org/ic/ic\\_ped/ic\\_ped\\_pedrap.html](http://theabr.org/ic/ic_ped/ic_ped_pedrap.html)
  - DIRECT Pathway:  
The Diagnostic and Interventional Radiology Enhanced Clinical Training Pathway  
For list, see [http://theabr.org/ic/ic\\_vir/ic\\_vir\\_direct.html](http://theabr.org/ic/ic_vir/ic_vir_direct.html)
  - Infomatics - Check on program websites
  - Research
    - ◆ 5 year research track:  
eg, Mallinckrodt , U of Virginia, U of Texas, UCSD, Penn, UCSF, Brigham & Women’s, Emory, UW, Utah, Standard
    - ◆ Holman Research Pathway – apply as a PGY2  
[http://theabr.org/ic/ic\\_other/ic\\_holman.html](http://theabr.org/ic/ic_other/ic_holman.html)
- Diagnostic Radiology Fellowships – 1-3 years
  - The majority of radiology residents complete a year, or even two, of fellowship training
  - Abdominal imaging, musculoskeletal imaging, interventional radiology, neuroradiology, pediatric radiology, nuclear medicine, PET etc
- Other imaging training programs/pathways
  - Nuclear medicine residency – Currently this should be very carefully evaluated by each individual due to the limited number of positions available for non-radiologist nuclear medicine physicians

### How do I apply to different types of programs?

- The majority of programs you interview at for radiology are for advanced positions (PGY2 start) and do not include the intern year. You apply for and rank the intern year separately.
- There are some programs that include the intern year, which you do not need to interview for separately.
  - Some radiology programs offer an intern year interview with the radiology interview, but you have to rank and match at the intern year separately (hopefully you can set up the interview for the same day).
  - Other programs let you rank them in two ways. For example, you may be able to rank a program for their advanced positions and for their categorical PGY1 positions (this will be 2 separate entries on your rank list).

### WHEN SHOULD I TAKE MY RADIOLOGY CLERKSHIP?

- If you are applying to a diagnostic radiology residency, a general diagnostic radiology clerkship is critically important. This can help to confirm your interest in the field.
- Take it early as possible.

- If it is not a required 3<sup>rd</sup> year clerkship in your school, especially if you are not certain about radiology, schedule your clerkship/elective as early as possible in your fourth year, ie, in July-August .

### WHAT OTHER ELECTIVES ARE THERE IN RADIOLOGY AND SHOULD I TAKE THEM?

Additional radiology electives are not necessary to apply in radiology.

You may consider doing one to:

- Help confirm or deny interest for those who are still tentative
- Show potential programs your interest in the field
- Increase your potential sources for letters of reference

If you do an additional radiology elective, you should:

- Do a subspecialty elective rather than repeat the basic elective
  - e.g., neuroimaging, interventional radiology, women's imaging
  - It reads better on your transcript
  - You have more personal interaction and will get to know the radiologists better (good for letters of reference – see “Letters of Reference” below)
- Produce something from it – e.g., a paper, case report, poster, abstract, teaching module
- Consider a different institution to get a different perspective and experience (see “Away Rotations” below) and to let them get to know you.

Don't do more than one extra radiology elective because:

- You have the rest of your life to do radiology
- Other electives will broaden your understanding of medicine and make you a more interesting candidate. This might be your last chance to do something outside of radiology.

### SUBINTERNSHIP OR ACTING INTERNSHIP

You do not have to have completed a sub-internship before you apply in radiology. Depending on your school, you can choose to do it in medicine or surgery, or other fields, with the majority of students doing medicine. You should definitely not do it during interview season, i.e., November through February, other than that, it will depend on the student and circumstances:

- Do this early in your fourth year if you need to boost your grades, or to get it over with.
- Do it late, in March or April, to free up summer for electives and to study for the USMLE Step 2.

### AWAY ROTATIONS

Away rotations are not necessary. Not all programs take outside students.

Away rotations can be a double-edged sword:

- **Pros**
  - You get insight into what the program is like, and what it is like living in the location where it is
  - The program gets to know you well and it shows your interest in the program
  - It may get you an interview when you might not just on paper
- **Cons**
  - No guarantees for interview or matching
  - It is like a month-long interview: you will be compared to the best student they've ever had.
  - If you go: sparkle. Be first in, last out, dress well, spend your evenings looking things up, preparing, and studying.

- However, if you do poorly, you lose only one of your potential interviews . We have all had students who have been great for the first couple of days (a.k.a., an interview), but didn't look so good after 4 weeks.

### **Where**

Do the away elective:

- In an area of the country you must match at or at a particular institution you're particularly interested You can get a letter from that different geographic area to send to that area.
- At your high target programs, i.e., not your "reach" programs, where you are likely to get an interview anyway. In other words, you don't want to waste your time at a program that you won't get into, but you can potentially increase your chances to get into a program.

### **What**

Do your homework:

- Talk to students or residents with ties to the program, look online to identify appropriate entrance points.
- Identify your area of interest/ability, and also an area which will expose you to the residents, Program Director, or other people vital to the selection process.
- If you are planning to do research there, set it up ahead of time so you'll hit the ground running.
- Try to do a specialty away elective. If you join their general radiology elective, you be a new fish in someone else's pool. You don't want to waste this elective month trying to find someone else's cafeteria.

### **When**

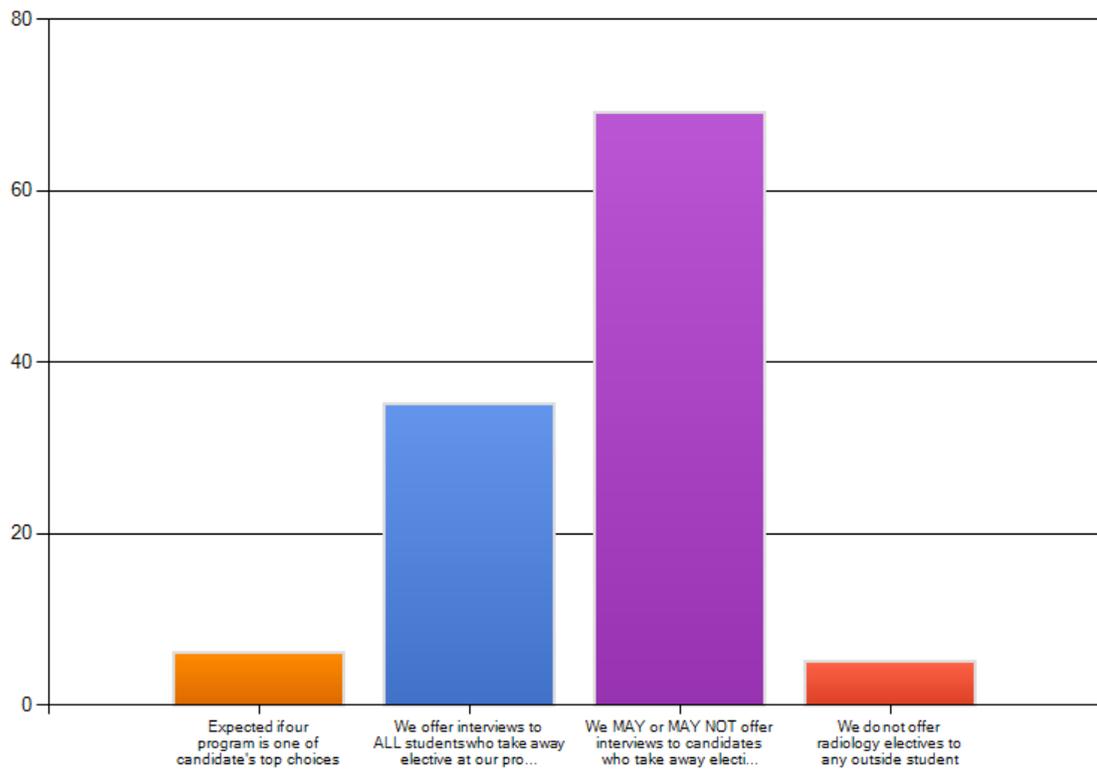
Latest by October of 4<sup>th</sup> year

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### **AWAY ROTATIONS, NOT RADIOLOGY**

- If you plan to do an Away Rotation that is not radiology – eg, your Subinternship or other electives, introduce yourself to radiology program coordinator, program director, head of residency selection, other radiologists
- Below are some data on away rotations from the program director's point of view:

**Away electives at YOUR program (please check all that apply):**



AMSER Program Director survey (Neutze J, 2010)

**WHAT MAKES A SUCCESSFUL APPLICANT AND HOW SHOULD I PREPARE?**

- High rank in the first 2 years, good grades in the clinical years, high board scores, research experience, strong letters of recommendation, a solid personal statement, your overall personality and how you present yourself are all important at the interview.
- Doing things you enjoy is important - if you are an interesting person, happy and self-confident and feel good about yourself, this shows when you work on the wards and when you interview.

**Table DR-1 Summary Statistics  
Diagnostic Radiology**

Measure	U.S. Seniors		Independent Applicants	
	Matched (n=931)	Unmatched (n=155)	Matched (n=134)	Unmatched (n=257)
1. Mean number of contiguous ranks	11.9	6.5	6.8	3.0
2. Mean number of distinct specialties ranked	1.6	1.9	1.6	1.7
3. Mean USMLE Step 1 score	238	220	235	223
4. Mean USMLE Step 2 score	242	218	239	223
5. Mean number of research experiences	2.7	2.3	2.1	1.8
6. Mean number of abstracts, presentations, and publications	3.5	3.2	4.3	4.4
7. Mean number of work experiences	2.6	2.9	2.7	3.2
8. Mean number of volunteer experiences	5.3	4.7	3.9	2.9
9. Percentage who are AOA members	23.2	1.9	n/a	n/a
10. Percentage who graduated from one of the 40 U.S. medical schools with the highest NIH funding	34.0	26.5	n/a	n/a
11. Percentage who have Ph.D. degree	5.0	5.2	n/a	n/a
12. Percentage who have another graduate degree	10.4	17.4	n/a	n/a

Screen Shot - <http://www.nrmp.org/data/chartingoutcomes2009v3.pdf>, p 45

## WHAT PROGRAM DIRECTORS ARE LOOKING FOR

Below are the results from the 2005 APDR Annual Survey Results

33. Part 1- Please rate the importance of each of these criteria for selecting an applicant to interview

Selecting for Interview	Extremely Important	Somewhat Important	Not Important at all
Audition elective in Department	31	43	26
Dean's letter	30	59	11
Letters of recommendation	32	59	8
AOA	31	52	17
USMLE Step 1 score	63	34	2
USMLE Step 2 score	33	50	17
Medical School	30	59	11
Class rank	56	39	5
Geographic location	20	52	29
Personal Statement	9	70	21
Research experience	13	66	20
Interest of applicant in program	26	55	18

<http://www.apdr.org/directors/upload/2005SurveyResults.pdf>

For more details that program directors may be looking for, see the [NRMP survey](#) in appendix below and full results at <http://www.nrmp.org/data/programresultsbyspecialty.pdf>

## WHAT ABOUT OSTEOPATHIC STUDENTS?

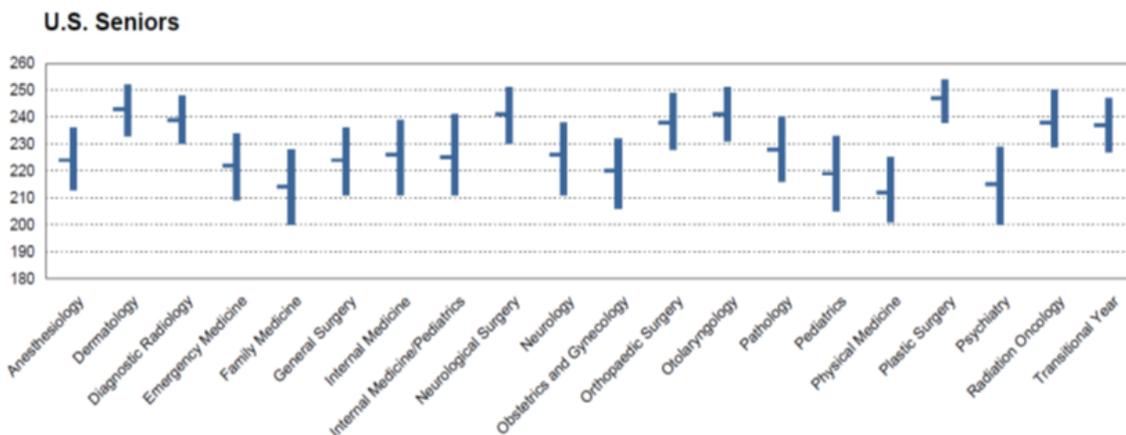
Students from osteopathic medical schools can consider applying to allopathic radiology residencies as well as osteopathic residencies; however, they tend to be at a disadvantage applying for Radiology Residencies. This is not to say that you cannot become a radiologist, but programs vary widely as to whether they take osteopathic students. Some residencies do not, or rarely, interview DO candidates, others welcome them. Students should look the "track record" of a program (how many D.O students have been matched in the last few years). They should consider getting involved in research and pursuing publications to be competitive with their allopathic colleagues. They may want to take elective at programs of interest, particularly if they are in allopathic institutions which may not know their osteopathic school well.. We would highly recommend that you take NMBE Step 1 and 2 exams as well as COMPLEX. As a guideline for COMPLEX scores, >550 = Good; >600 = Very good; >650 = Excellent. Students who have taken Step 1 and achieved an excellent score are likely to be favored over those with only COMPLEX.

## HOW COMPETITIVE IS RADIOLOGY?

- Radiology is one of the **more** competitive residencies. The average for USMLE Step 1 score in 2009 was 238 and for Step 2 was 242, which is above the average of most of the other specialties (see graphs below).
- In 2009 there were 944 PGY 2 & 151 PGY1 positions in the match in diagnostic radiology. The NRMP match results below for an idea of how it lies in relation to the other specialties, in terms of board scores.
- Refer to NRMP data to see where you fit into the applicant pool.  
<http://www.nrmp.org/data/chartingoutcomes2009v3.pdf> , August 2009  
<http://www.nrmp.org/data/resultsanddata2009.pdf>, April 2009

Screen shots, Charting Outcomes, p9 & 10

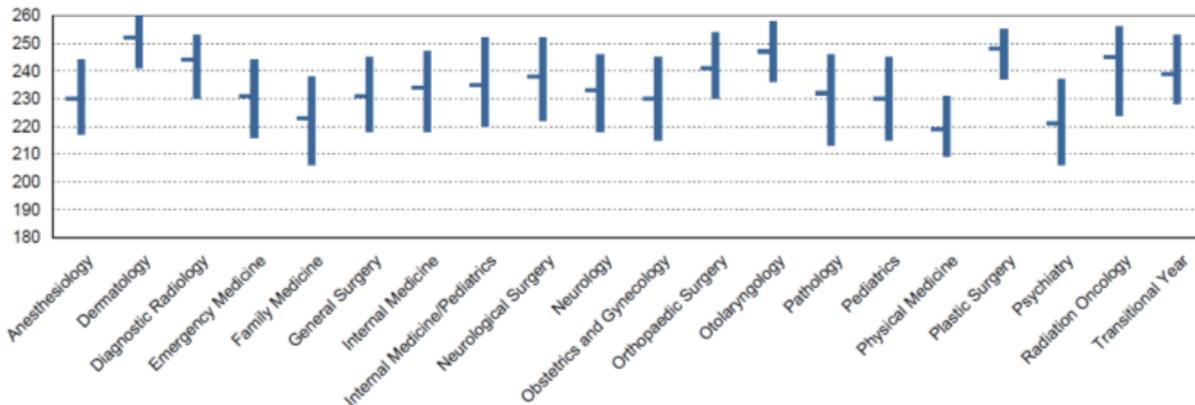
**Chart 6** USMLE Step 1 Scores of Matched Applicants by Preferred Specialty and Applicant Type



**Chart  
7**

**USMLE Step 2 Scores of Matched Applicants  
by Preferred Specialty and Applicant Type**

U.S. Seniors



**HOW IMPORTANT ARE YOUR BOARD SCORES?**

- While radiology residency programs may not have a specific minimum score to grant an interview, many may use Step 1 board scores a threshold to screen applicants for an interview.
- The threshold depends on the program, but most programs use a cutoff of 220 or above, and some as high as 240.
- This thins out the stack of the hundreds of applications, and as there is a high correlation between Step 1 scores and pass rates on the rigorous radiology boards. ([http://www.apdr.org/directors/upload/2010\\_Annual\\_Survey\\_Summary.pdf](http://www.apdr.org/directors/upload/2010_Annual_Survey_Summary.pdf), question 31-32)
- Don't let a slightly lower score scare you away from applying if you have an otherwise strong application. However, it is important that you talk with a radiology faculty advisor, so that you are realistic in your goals and have made back-up plans (see "Less Competitive?" below).

**DO I NEED TO DO RESEARCH?**

Research is a priority, especially at competitive and academic programs, as it shows that you are proactive and a contributor.

[http://www.apdr.org/directors/upload/2010\\_Annual\\_Survey\\_Summary.pdf](http://www.apdr.org/directors/upload/2010_Annual_Survey_Summary.pdf), q 27

(See "Timeline, First Year" above)

- It is great if the research is related to radiology, but it doesn't have to be, i.e., in the case of a late decision.
- Rigorous scientific pursuits and publishing in any field have much in common and show dexterity and experience.
- It is not too late, even in July of 4<sup>th</sup> year – you can do something short.
  - Case reports
  - Exhibits
    - ◆ Educational/Scientific
    - ◆ Case of the Day
  - Educational resources – e.g., programs, websites that the department of radiology is producing
- If you have the high grades and scores but have no research background – and yet want to go to a top-tier academic program, you may consider spending an extra year or two developing your research credentials and CV.

- If you started research or published something after you submitted your application, submit a brief summary of this to the programs you've applied to and take this to the interview. If you publish after the interview, you should send this to the programs as well. (See "When you can contact a program directly" below)

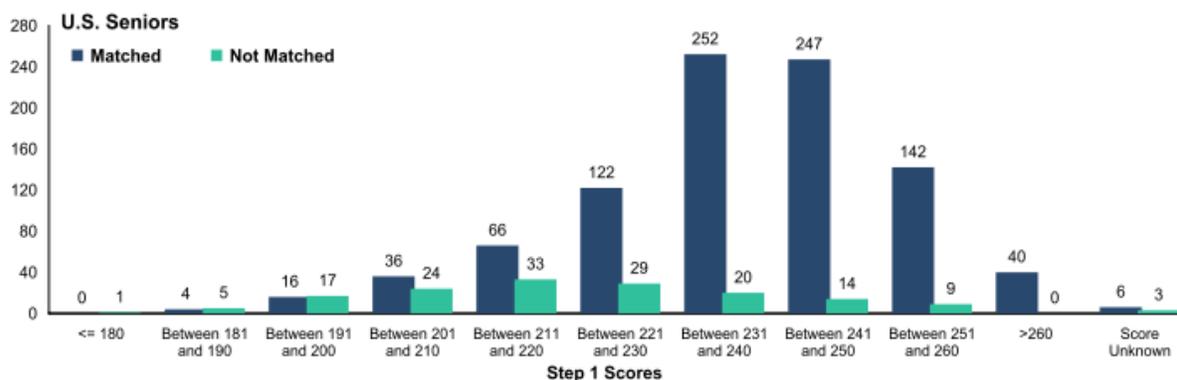
#### HOW IMPORTANT ARE EXTRACURRICULAR ACTIVITIES?

- Better to do one extracurricular activity in depth than many superficially.
- An interest group and some type of volunteer/charity organization is a great start.
- Being an officer or having a leadership position is even better.

#### WHEN SHOULD I TAKE USMLE STEP 2?

- The average Step 2 score was a 242 in 2009 for a matched Radiology applicant with known scores. (<http://www.nrmp.org/data/chartingoutcomes2009v3.pdf>).
- If you have a **weak Step 1 score, <220: take Step 2 EARLY**, in July or August, to show you have improved and send score if you do better.
- If you did well or average on Step 1, take Step 2 in September or October at the latest.
- NOTE: If Step 2 results are released before you submit application, results cannot be withheld. If the scores come after you sent your applications on September 1, you are not obligated to release these scores, but if you can do so if you score well. It takes about 6 weeks to get the score.
- Note #2:
  - Some programs require Step 2 to be completed before ranking applicants
  - Many programs take the Step 2 score as seriously as that of Step 1 and this may set you ahead of others with similar Step 1 scores for both late interview screening and ranking
  - Most people do 10-20 points better than on Step 1
  - Doing very well on Step 2 only improves your credentials.
  - Aim high, so take a month off (or a less vigorous elective if you're more confident)
    - ◆ Use something like USMLE World questions and CRUSH STEP2

**Chart DR-3** USMLE Step 1 Scores  
*Diagnostic Radiology*



**Chart DR-4** USMLE Step 2 Scores  
*Diagnostic Radiology*

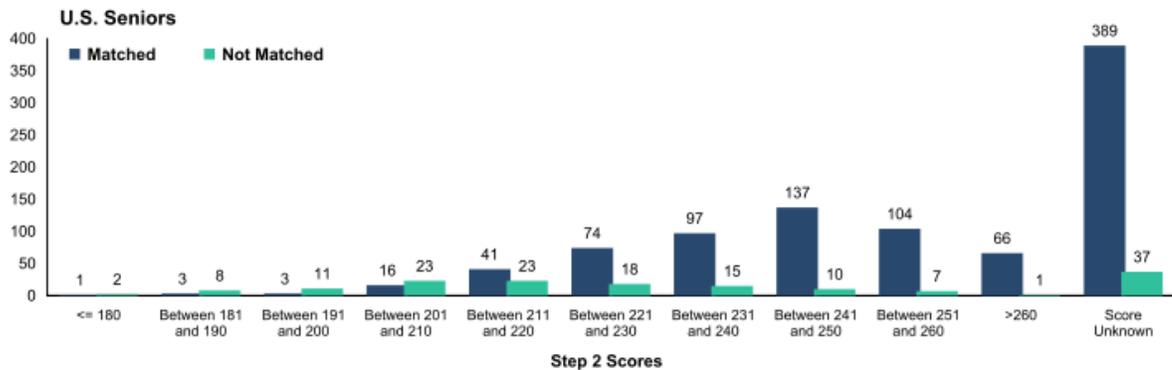


Chart DR-3 USMLE Step 1 & Chart DR-4 for USMLE Step 2 scores (above)

## HOW TO APPLY FOR A RADIOLOGY RESIDENCY

### PERSONAL STATEMENTS

These are as painful for programs to read as you to write. They can hurt you rather than help you in many cases. Being mainstream and “average” here is OK, but make it personal

- Have a lot of people read it, including those who read a lot of them
  - Friends and family
  - Advisors in student affairs
  - Radiology faculty advisor
- **Basic language skills are required: DO NOT SOUND ILLITERATE**
  - It should be readable with short sentences and no spelling/grammatical errors, no factual errors
  - Proofread well - don't trust spell-check.
  - It should be concise & coherent
  - No more than one page, ¾ is fine
  - Original & eloquent is welcome, but less important
- Being interesting and witty, with a “hook” to draw the reader in, is of course desirable.
- Don't assume it will get read, but make first couple sentences good in case it does. Not all programs read them at the initial ERAS review stage.
- It can be based on 1 or more stories that illustrate your life. You want sell yourself and show personality.
- ERAS will allow you to select a different personal statement for each program.
  - It will increase your odds of getting an interview at certain locations, if you include a few lines on why you want to go to the area or to a specific program – ie, family lives there, significant other is there/going there, grew up there, want to live there in the future, etc. , why a New Yorker might go to Texas or vice versa
  - BE CAREFUL – don't send the wrong statement to the wrong program

## WHAT TO WRITE ABOUT:

Your essay puts a face on the student.

- Cast yourself in the most flattering light while being honest – humble yet assertive
- Things that do not appear elsewhere on your application.
- Something interesting about yourself or your background that we can talk about at interviews
- What attracts you to radiology
- What you intend to do in radiology
- What you can bring to the program – e.g., special skills
- Something outstanding from undergraduate years or outside interest ,e.g., Olympic swimmer
- Programs want applicants who want to come to their program to stay there, so you can make this clear.
- If you have clearly changed career paths, explain why
- Problems to address - ‘odd things’ in application – years out of medical school, prior residencies (why are you changing) etc

## **DON'T:**

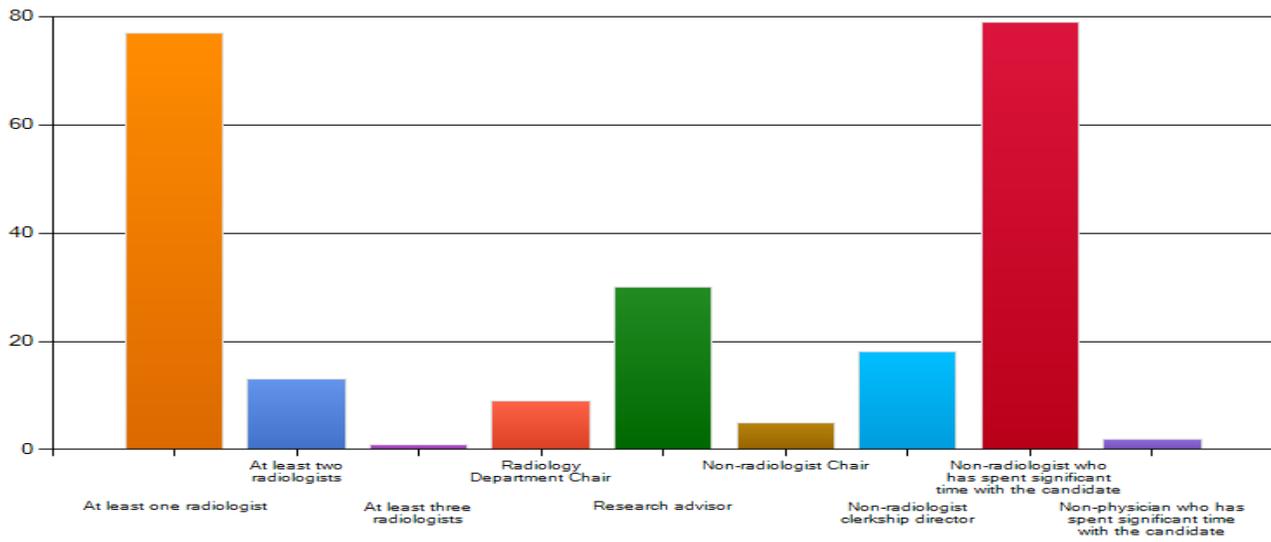
- Put anything in that you can't/don't want to talk about at interviews
- Mention your love of photography
- Tell us you are a ‘visual learner’
- Make your personal statement weird – do not stand out in a bad way.
- Cause us to question your stability (eg. if you choose to talk about a tragedy)
- Sound pompous or tactless

## **DO NOT LIE.**

## LETTERS OF REFERENCE

- Plan to get 4-5 letters of reference.
  - You can submit up to 4 letters/program.  
Plan on 4 in case one writer doesn't do it, you have a back up letter.
  - You can submit different letters to different programs, but be careful.
- Get 3-4 letters from clinical faculty members
  - 2 from core clerkships
  - 1 or 2 radiology (preferably 2)  
Because of the intimate nature of the radiology community, the interviewers may see a letter from someone they know and respect, which will especially mean a lot
  - Non-clinical faculty members (e.g., in research) do not “count” towards your 3 letters, but this may be important if applying to research heavy academic programs.
- Get the letters from someone who knows you very well enough to talk about your personal and professional strengths
  - It's best if they offer an unsolicited letter, but you can scout out if they think well of you if e.g., if they write glowing comments on evaluations (“I wish the candidate were going into my specialty.”)
  - It is not important to get a letter from a “big name,” but if a “big name” knows you well enough to write a genuine and personal letter, it doesn't hurt. Usually the department chair does not know you well enough to write a personal letter and that will show in the superficiality of the letter.

**Letters of recommendation: From whom do you like to see letters of recommendation, knowing it should be someone who knows candidate well enough to write a letter (please check all that apply):**



AMSER Program Director survey (Neutze J, 2010)

### TIMELINE FOR LETTERS OF REFERENCE

- Don't ask for letters at the last minute – you want to give the letter writer lots of time to write. These should be submitted at the same time as your application, on September 1 of 4<sup>th</sup> year. Also, this suggests to the letter writer you may procrastinate or that you are unorganized.

#### By end of July:

- Ask faculty for letters and double-check if they can do it by September 1
- Approach by email to be clear about reason for meeting and your hopes for their enthusiastic support
- Leave them wiggle-room to refuse, and look for cues when you meet with them
  - "...if you feel you can write me a strong one" or "...if you feel you are the right person to speak up for me"

#### By early August:

- Give them your packet, telling them you will follow up by Labor Day. Do not misrepresent anything in your information packet, which should include:
  - Clearly-labeled manila envelope or folder containing your materials
  - Final draft resume, Personal statement, Transcripts, ERAS number and instructions
  - Stamped envelope addressed to the student affairs office - faxed LORs tend to acquire artifacts

#### By Labor Day:

- Remind faculty gently if the letters are not submitted.
  - "I am so honored that you are writing a letter of reference. Just a reminder, my advisor insists my package be complete by September 10; please feel free to contact me if you have any questions or need more information to assist you in completing my letter."
  - NOTE: you can and should submit your application on September 1 but your letters do not have to be in by that date. You will just indicate on your applications from whom they will be getting letters.

### CURRICULUM VITAE

- Easy to read

- One page(or front and back of one page if you've done a lot) - Brief but descriptive and detail-oriented; use active, lively verbs and adjectives
- Chronologic: no gaps (otherwise explain in Personal Statement)
- Professional and traditional: syntax, grammar, spelling, simple design
- Well-rounded, interesting, distinguishable
- Accomplishments: Role & Outcomes
  - Represent accurately: prepare to discuss, DO NOT exaggerate involvement in projects
  - Lead w/strengths & highlight them
  - Undergraduate only if outstanding/relevant
- Suggested headings:
  - Education: board scores, grades, (rank)
  - Honors in Basic Sciences or Clerkships - AOA
  - Honors/awards
  - Research – list all – if many you may go over the 1 page limit
  - Grants
  - Publications, presentation, projects
    - ◆ Format **academic publications or presentations** in the conventional bibliography style.
    - ◆ **Boldface** your name in each entry for easy visual scanning.
  - Work Experience – list all, including back to high school
  - Leadership/Volunteer/Community service – define role
  - Other: professional organizations, skills, languages, personal information
  - Activities:
    - ◆ Details may spark conversation at interviews
    - ◆ Listing without specifics is at best non-engaging and at worst suspicious
    - ◆ **ONLY** include if you are prepared to discuss!! Only having done an activity once or twice does not make it a hobby

## UPDATES TO CV

- Since there are several months between submitting your ERAS application and your interview, send updates **to publications or awards** by email and/or bring to interviews.
- Do not update papers rejected and since re-sent to 2nd journal

### For example:

"Dear -----

Please add the following changes to my Radiology Residency application file:

- 1) My paper "-----" has been accepted by the Journal of -----for publication in -----
- 2) My abstract "-----" has been for presentation at the ----- meeting
- 3) I have been awarded the "-----" award for my achievements in the field of -----

I look forward to my interview later this month.

Thank you,

-----, MS IV

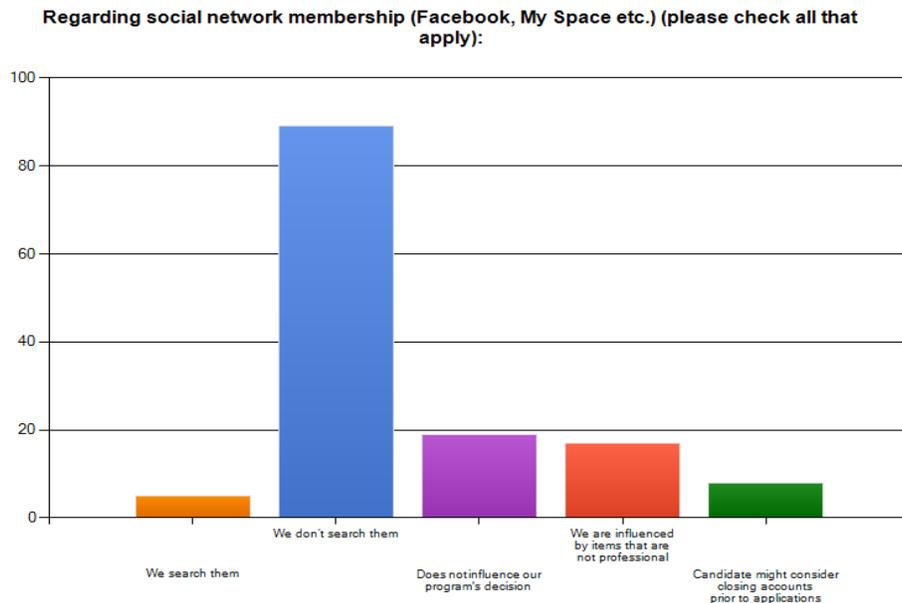
----- School of Medicine

Class of 20XX"

## SOCIAL NETWORKING SITES

Don't risk it – close them. Many departments will search these networks before interviewing students or even at the time of ERAS review.

- Stay cyber squeaky clean.
- Get any compromising photographs OFF THE WEB NOW!! Candidates have been presented with copies of these at interviews....



AMSER Program Director survey (Neutze J, 2010)

## AUNT MINNIE

DO NOT use chat rooms/forums such as [www.auntminnie.com](http://www.auntminnie.com) during interview season. Unfortunately the information on that site is about 1/3 true, 1/3 inaccurate and 1/3 slanderous, and you cannot tell which is which. You may get biased against a potentially excellent program. Also, people from the programs may skim this site, so something you write on the site may come back to haunt you. And, it will just make you anxious because it seems that the same five people chat about their incredible credentials and how they don't think they are going to match. Who wants to be in a residency program with them anyway?

## ELECTRONIC RESIDENCY APPLICATION SYSTEM (ERAS)

HOW DO I APPLY AND WHAT IS THE ELECTRONIC RESIDENCY APPLICATION SERVICE( ERAS)?

<http://www.aamc.org/programs/eras/>

- The central application for residency
- You create one application online and submit it to as many programs as you want
- The more programs you apply to, the more expensive it is. This is an investment.
- Complete your application by the September 1 opening date to maximize your chances
- Programs start reviewing applications as soon as they arrive so you have the best chance of an interview earlier

**The National Resident Matching Program (NRMP)** is a private, not-for-profit corporation established in 1952 to provide a uniform date of appointment to positions in graduate medical education (GME) in the United States. <http://www.nrmp.org/>

#### WHEN DO I HEAR FROM THE PROGRAMS?

- Many students are called for interviews before the Dean's letters are available (although the letter is used for ranking)
  - [http://www.apdr.org/directors/upload/2010\\_Annual\\_Survey\\_Summary.pdf](http://www.apdr.org/directors/upload/2010_Annual_Survey_Summary.pdf) q 29 & 30.
- You will start hearing from programs via email in October or even earlier, with the majority responding in mid and late November.

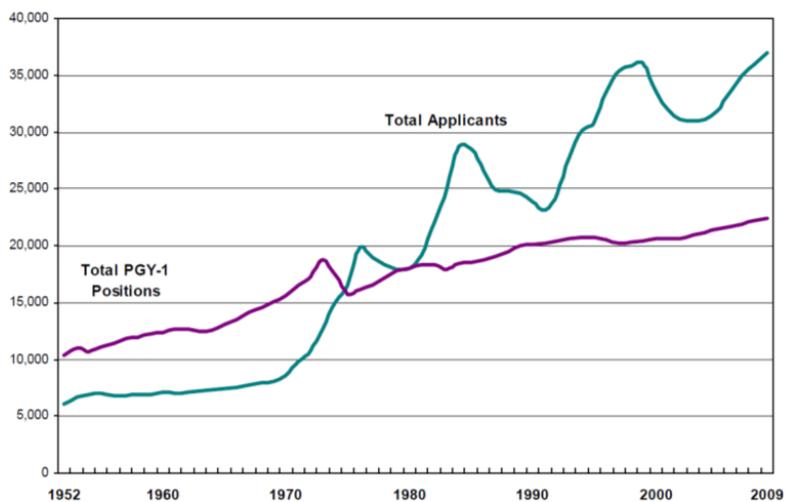
#### TO HOW MANY PROGRAMS AND WHERE SHOULD I APPLY?

Obviously this depends on the student, but there are trends and suggestions to consider.

#### HOW MANY PROGRAMS?

- In 2010, the NRMP had the largest number of applicants in their history.
- The recent openings of new medical schools, without a proportional increase in residency program positions, has made it increasingly difficult to match, especially into a competitive specialty like radiology.
- Therefore, "how many?" is becoming more important than "where?"

**Figure 1** Applicants and 1st Year Positions in the Match, 1952 - 2009



<http://www.nrmp.org/data/resultsanddata2009.pdf>

- It is a numbers game and you want to maximize your chances of matching.
  - According to the 2009 Match outcomes, a current US Senior who ranked 8.5 programs in radiology had a 90% chance of matching. Those who ranked 13 or 14 programs had a 97% chance. Note: You will rank places where you have interviewed.
  - Said another way, the average US senior who matched ranked 11.9 programs whereas the average US senior who did not match ranked 6.5 programs.

- <http://www.nrmp.org/data/chartingoutcomes2009v3.pdf>).
- Most applied to 25-35, with a range of 1-60 and a median of 27.
- **Apply to as many as you think you need to get you the 15 radiology interviews.**
- You know where you stand based on how competitive you are. *For some people it may be 30 programs while others may want to apply to 60 or 70.*
  - If you apply to “too many” programs you can always decline the interview offers.
- It is expensive, but think of applying for residency as part of the investment in your education. It will be more expensive and stressful if you do not apply to enough programs and then have to apply again the following year.
- There have been Scramble spots in the past, but don't count on it as it is becoming increasingly more competitive. (see “Match Week” below.)

---

## WHERE TO APPLY?

### Generally:

- Academic programs at large universities are more competitive than smaller community programs
- Larger programs may have more didactic teaching, but you may get less responsibility and ‘hands on’ due to larger numbers of fellows.  
Larger programs may offer more research opportunities.  
Medium-sized programs may have more hands-on opportunity  
Some community programs may have less didactic faculty teaching.
- There are wonderful programs, world-class teachers and mentors, and gratifyingly affordable life-styles waiting in unexpected places.
- With minimal resources, you can teach yourself anything

### Apply broadly to a combination of programs with the goal of obtaining 15 interviews.

- Apply to a range of programs (reach, middle tier, less competitive) and spread your nets wide geographically and apply off the beaten trail.
- It's best to apply a limited number of geographic locations that you like, to a broad range of programs in that area. An added benefit is that you can group the interviews.
- Find out where previous students from your school got interviews and matched.
  - Residency directors don't want to waste interview spots on applicants who are unlikely to come to their program. It may be a waste to apply to certain programs remote from your geographic area that generally doesn't interview students from your area, unless you give a specific reason for being there. Make sure the program director know why you are applying to some place unexpected (always lived in New Jersey but my whole family has now moved to North Dakota).

### How do I know if a program is university, university affiliated or community?

<https://freida.ama-assn.org/Freida/user/viewProgramSearch.do>

Under Frieda, select "optional criteria"

Select "program setting"

Select only university and university affiliated (control-click)

There are no published rankings for diagnostic radiology programs – but no news is good news

- You can use the number of NIH grants, hospital ranking and medical school ranking as general indicators
- At interview, can ask for ranking on board scores
- Ask prior students from your school at the programs
- ACGME: check accreditation

- NRMP: check for match violations
- AuntMinnie: Buyer beware – see comments above, p17

### Competitive geographic areas

- New York City (more specifically Manhattan)
- Washington, D.C - only two radiology programs
- California - if you are not from there or do not have a “good” reason to apply there
- West Coast in general - fewer programs (e.g., only one in Colorado)

### Less competitive areas

- Such as the Midwest – give a reason why you want to be there

## COUPLES MATCH

- Couples matching makes the process much more difficult.
- If both people are applying for fields of medicine that use the regular NRMP match then you make paired rank lists.
- You both must apply to a lot more programs than you would as an individual to make this work
  - Once again, it is a numbers game.
- If one of you gets an interview at a program and the other does not, don’t forget to communicate with the programs!
  - Let them know about your situation and that you both want to go there.
- Shoot for regions where there is a lot of overlap and where there are a lot of programs, like many cities in the northeast.
- Radiology couples matching with an early match individual (ophthalmology, urology, etc.)
  - The good news is the early match person matches before the Radiology person has to rank.
  - So, at least the individual applying for Radiology can rank the place where the other got in #1.
  - The key is once again communication with the program. When the early match individual matches, you should instantly contact the Radiology Department and let them know your significant other has matched there and you are ranking them number 1 (if you are)!

## WHEN YOU CAN CONTACT A PROGRAM DIRECTLY

Communicate! But not too much! Be careful - do not annoy the program coordinator or director.

Times you might consider contacting the program director and/or the coordinator:

1. After you apply, but before you get an interview to show your interest.
  - Especially if you are really interested in this particular program, and it isn’t obvious
2. If you have not heard about an interview and it is late in the interview season, or you got a rejection.
3. If you have updates to your CV.
4. After you interview - your “thank you note”/”I really loved your program” letter (see below).
5. At the end of the interview season, before programs rank the applicants .

## EMAIL ETIQUETTE IN BUSINESS COMMUNICATIONS:

- Headers are important
  - Succinct summary of what the recipient will find within:

- eg “Update to Application for Radiology Residency/----- MSIV”
- No header may lead to deletion by the viral-cautious
- Use professional format and phrasing
- Do not address Program Director OR Co-ordinators by first name
- Use an appropriate, identifiable email name

## WHEN YOU DON'T GET AN INTERVIEW

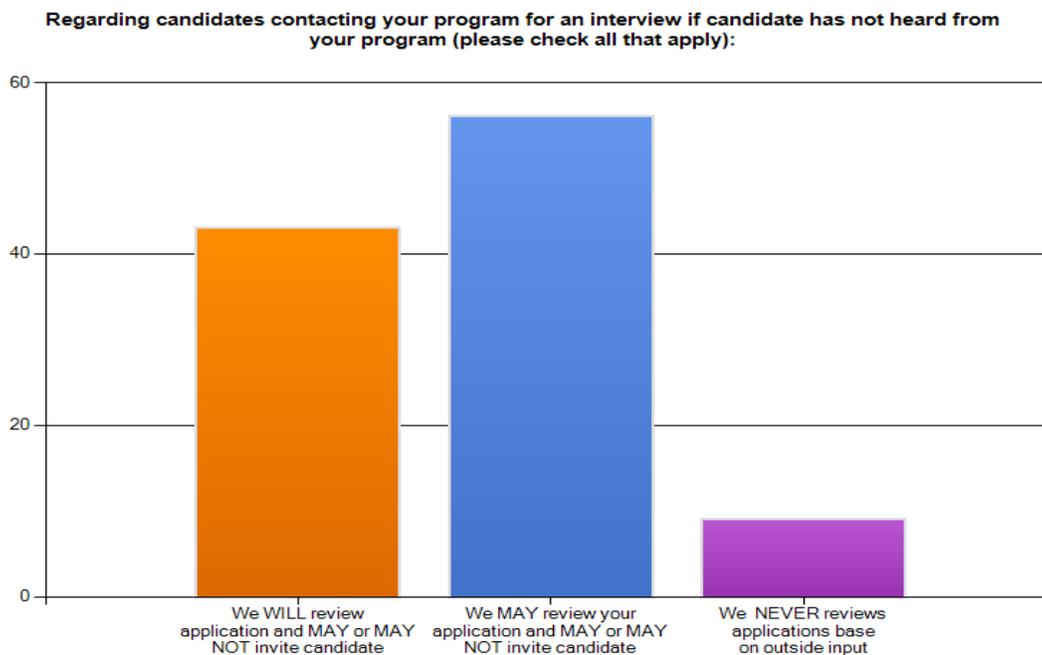
Don't take this personally. Programs receive hundreds of applications for a few places (typically 100 applications per resident place). Programs interview between 10 and 25 students per place available.

- They are looking for reasons NOT to interview, and these may be fairly superficial, especially towards the end of the application season.

## CONTACTING PROGRAMS:

**Correspondence with programs IS THE KEY to success!**

- Programs want applicants who are interested in their program and did not just apply there because it was another easy click on ERAS.
- Remember, they only choose 100 out of over 600 applications for an interview so be proactive and show your interest.
  - Programs want happy residents who don't transfer after 1 or 2 years to the place they really wanted to be.
- If you find someone with ties to a program you're interested in who is willing to call or email for you, this is helpful.



AMSER Program Director survey (Neutze J, 2010)

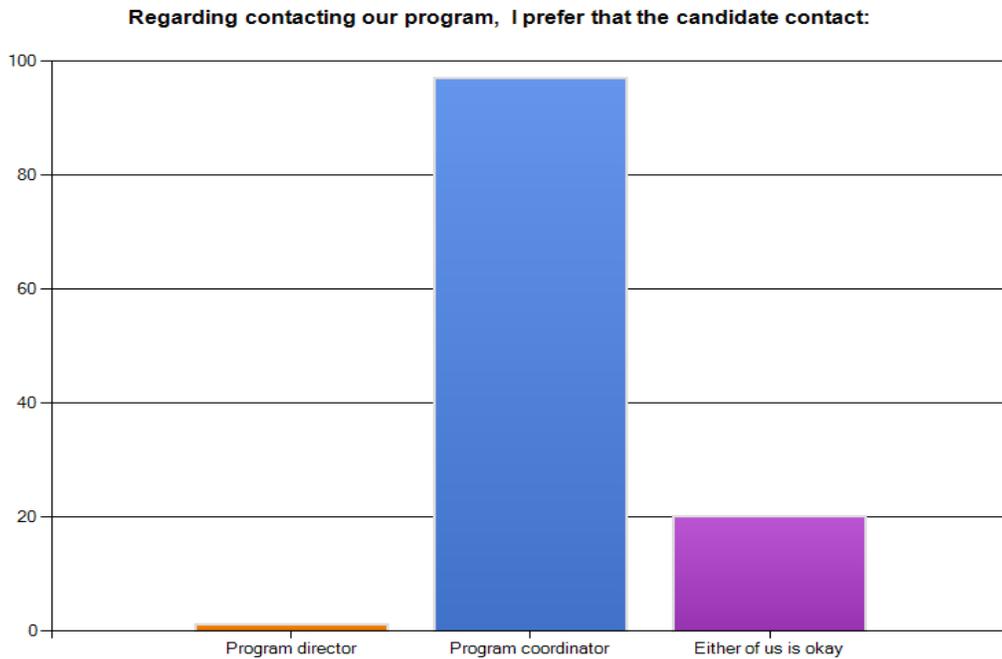
## Which programs to contact

- Choose your top programs - eg, your top 10.

- Programs you haven't heard from
- Programs that have sent you a rejection.
  - Try these **only if you are realistically competitive at and obsessed with a particular program/locale** - some initially-excluded students have gotten interviews and matched at programs this way.

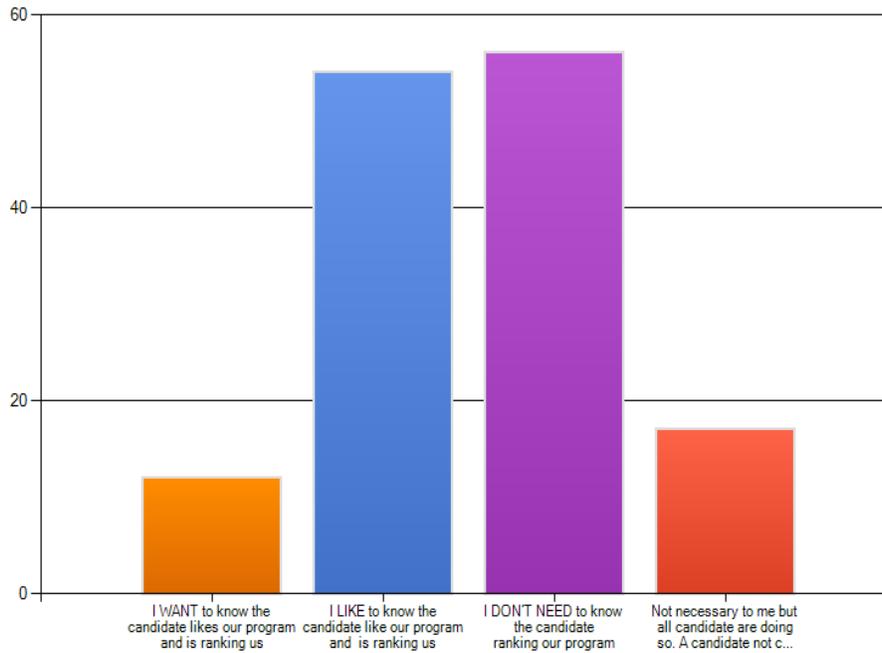
**Who to contact:**

- 99% of the time, contact the program coordinator, and cc to the program director, (their contact information is listed either on the program website or on ERAS). See below



AMSER Program Director survey (Neutze J, 2010)

**Regarding contacting program directors at end of interview sessions (please check all that apply):**



AMSER Program Director survey (Neutze J, 2010)

**How to contact:**

- **Do not be annoying:** brief, professional, articulate email or phone call reiterating your interest
- **Email** is better: You don't have to rehearse and you have more control - it is more difficult to mess up.
- Phone call - a pleasant call to a coordinator can be more personal, but if you call when he or she is busy, it could be annoying, and there is a risk that the call is forgotten or that the program director never gets notice of your inquiry. Cell phone calls may be hard to hear and information may not be correctly conveyed.

**What to say:**

Tell the program you are interested in their program and you would love to have the opportunity to interview with them.

- Tell them about why you are interested in their program.
  - This is particularly important if you are applying to a markedly different geographical area , i.e., grew up there? spouse job opportunities? Couples matching? Have children and need to stay in a specific area? or specific details about their program and why you like it.
  - "I would love to do residency in an area I have never lived before" is absolutely appropriate, but it doesn't carry as much weight as "I have family in the area."
  - Program directors know that most applicants match in areas where they have a family connection or in the region they attend medical school.
- You could send selected data e.g : what school your are from, updates, grades, radiology experiences, Boards, AOA etc.
  - If you opt to share any data, keep it VERY BRIEF, just enough to catch their interest.

- NOTE: Don't be offended if the program directors do not reply, as they get hundreds of emails from students.

#### A common e-mail could read:

Dear Dr. ...

I'm a fourth year student at \_\_\_\_\_ Medical School. I'd like to reiterate my interest in your program and I hope that you'll consider me for an interview. (If you've been rejected, write "I'd like to reiterate my interest in your program and ask if you'd reconsider my application for an interview.") I am particularly interested in your program because (...my family lives in the area/I have heard outstanding reports of your program from a radiologist at my institution/I love the outdoors and wish to move to a rural area....etc, etc) After that---you could include a short paragraph with a few facts—grades, updates, etc-2-3 sentences at most.

Thank you for your time

Your Name

\_\_\_\_\_ Medical School

Class of 20XX

## INTERN YEAR

For your intern year, you may do a year of any clinical service. The majority do a preliminary medicine year.

#### Transitional years:

There are few programs, so these are the most competitive

- Variability - look up the details for each program
- Medicine, Surgery, electives
- Very competitive, particularly the ones in great locations

#### Preliminary medicine:

Most residents do medicine

- These intern years are typically more difficult (more call) than transitional years.
- Don't write off preliminary medicine years however. Some are called "prelim medicine" but when you look at the schedule and talk to the residents they are more like transitional years.

#### Preliminary surgical:

This is a hard year, but easier to get

- Some people think it's an advantage to radiology as you can learn anatomy and procedures.
- Try a less busy program that has less 'scut', more hands-on, to learn the "what & how"
- Often, these are less competitive so if location is paramount to you, this gives you the best chance of getting your top location.

#### Why do I have to go on twice as many interviews?

- As a radiology applicant you must apply, interview, and rank separately for the intern year (postgraduate year 1 (PGY 1)) and your advanced (PGY 2-5) radiology years.
- It is easier to match into your intern year than into radiology so applying to 8-10 should suffice unless you pick only the most competitive transitional year programs in the country, then 10-15.
- Don't count on unfilled positions to scramble into as they are becoming less common. (see "Match Week.")
- The majority of programs you interview at for radiology are for advanced positions and do not include the intern year.
  - Some programs that include the intern year, which you do not need to interview for separately.

- Some radiology programs offer an intern year interview with the radiology interview, but you have to rank and match at the intern year separately (hopefully you can set up the interview for the same day).
- Other programs let you rank them in two ways. For example, you may be able to rank a program for their advanced positions and for their categorical positions (this will be 2 separate entries on your rank list).

**As you're applying, you have to decide what is important for you for your intern year.**

- Do you want to be in a specific location, like in the same area as your radiology residency?
- Do you want a cushy year without much call?
- Or do you want to get great training?
- Do you want to be in Hawaii for a year?
- If you want to have options for a prelim year then take that application seriously as well.

## LESS COMPETITIVE CANDIDATE

### IF YOUR BOARD SCORES ARE LOW

If your board scores are low, e.g., <220, but your grades and research are strong, study hard and take Step 2 early (July or August 7, 2010). It takes 6 weeks to get the results back. If you do well, then you may release the scores to the programs you are applying to. Please note that the scores must be revealed if the Step 2 results come before you send your application.

### IF YOUR RESEARCH EXPERIENCE IS MINIMAL

If your board scores and grades are competitive, but you are lacking in research, and you are aiming for a top-tier academic program, you may consider doing an extra year or two of research.

### BACK-UP SPECIALTY

- If you are a less-competitive candidate, you may consider applying to a back-up (less-competitive) specialty, for which you will need a:
  - Different CV
  - Different personal statement
  - LORs: can be from different people
  - PITFALL: Letter or PS to the alternative program shouldn't say that you would make a great radiologist, and letters or PS to radiology shouldn't say that you will be great in another specialty.
- You may rank programs according to field & hospital according to your likes:
  - eg, radiology at "A," "B," and "C" first, then alternative at "D" at , radiology at "E", etc.

NOTE: This can be a dangerous approach. Many Program Directors do not like anything that smells of "lack of commitment to radiology." If you decide to not mention that you are applying to different specialties, do not interview at the same institution in different specialties. Program directors talk to each other.....

## SO YOU GOT THE INTERVIEW, NOW WHAT?

### SCHEDULING INTERVIEWS

- Candidates don't generally schedule their interviews, they are scheduled for them.

- Do your best to clump visits, but resign yourself to flying to destinations several times, because most programs are not flexible with interview dates.
  - Some places do only one or two weekend groups
  - Some offer you a rigid take-or-leave single date.
  - Every so often you will need to choose between two conflicting offers on one fixed date.
- Get addicted to your email and check several time a day, or have someone check it, because a tardy response to an email may get you a "Gee, sorry, we filled those slots".  
Try to **respond to an interview offer within 24 hrs**. Do not put off signing up for an interview while you are waiting to hear from another program.
  - Do a preliminary year interview first, or a school destined to be low on your list. Do the ones you care about in January – you have more practice, and they remember you more for when they rank their list

## CANCELLING INTERVIEWS

- Cancelling interviews is ok, and common towards the end of the interview season. But you **MUST** contact the program.
  - Not turning up is VERY BAD and will get both communicated and remembered later.....
  - Program and student directors get together annually and have long memories.
- Try to avoid last minute cancellations. You are preventing another student from an interview.
- Even if it is last minute, it is courteous and respectful to let the program know you are not coming, and it is possible that the spot still can be offered to someone else.

## TRAVEL

Travel will get expensive. Budget appropriately and make sure you have saved your money. If need be, take out a loan for applying to residency. It is better to match on your first shot and spend a little more money than expected now than have to apply all over again the following year.

### Go the night before.

- The last thing that you want to do is turn up late, or stressed, due to travel problems
- Many programs hold dinners the night before for interviewees

### Accommodations

- Try to use the same chain of hotels. You might get enough “points” for a free stay or free upgrade.
- Ask if there is an on-campus dorm for visitors, or other cheaper housing.

### Planes:

- Plan on paying a lot for your tickets because the priority is getting to your interviews.
- Carry on everything you need for the interview (interview garb and a professional portfolio pad). Often you fly in late at night, start the interview bright and early, and fly out right after the interview (hopefully to go to another one), so you won’t have time to do errands, like retrieving luggage.

**Trains:** Nothing special to add here.

### Automobiles:

- GPS. If you don’t have one, borrow one, buy one, or rent one. They make life so much easier when you are exhausted trying to find the hotel or when you are nervous trying to find the interview location.

- Car rentals are not as expensive as you may think. Check out rates before you go. Rental cars are often cheaper than the cab fare you will pay (like \$20-\$30 per day total, hotwire.com seems to be the cheapest way)
- Most programs will validate your parking so bring you parking ticket into the interview.

## PREPARATION

- Practice interviewing , e.g.,
  - If there are workshops at school, attend these.
  - Arrange for a mock interview with a faculty member you don't know.
- Look up information about the program on their website
  - Lack of knowledge about the program and the use of only generic questions is a turn off.
  - It shows that you are interested, resourceful, and unafraid of doing a little bit of work.
  - Write down specific questions on your portfolio pad so during the interview you can refer to the questions showing the preparation you made.
- Have a nice pen to write with at the interview – no pharmaceutical freebies of any kind.
- Find out exactly where and what time your interview day begins.
- You can send **new information** and/or bring it to the interview: New research, AOA election, brilliant Step 2 scores (see “When you can contact a Program Directly”). If you have the information after the interview, you can send it then too.
- Know everything on your application, including exactly what research project was.
- Dress neatly & conservatively – they should think you know the unwritten rules.
  - Clothing doesn't have to be all black: a little color is okay – eg, interesting blouse or tie.
    - i. Avoid trendy fashions.
    - ii. Not too short a skirt – you don't want to be tugging at it. Not too much cleavage.
  - Clean hands and fingernails (consider removing all nail polish or making conservative choice)
  - No perfume. We don't an allergic reaction.
  - Limit external ornamentation.
  - Comfortable shoes that you can walk long distances in.
- Ask the program coordinator what to expect
  - You may have anything from 2-5 interviews
  - Are there group interviews (more than one interviewer, or more than one interviewee)?
  - Some programs do 'speed interviewing' (10 minute interviews)

## INTERVIEW ADVICE

Summary:

- Be 5 minutes early, not 5 minutes late.
- **Be nice, as you should be every day.** Smile, Eye Contact, Firm hand-shake.
- Dress neatly & conservatively.
- Cell phones must be OFF for the entire time.
- Take detailed notes as soon as you leave.
  - Why would I come here? Not come here?
  - All the programs will run together.

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## DINNER THE NIGHT BEFORE

**Is it necessary to attend? No, it's not, but it gives you a sense of whether or not you will fit it.**

- Programs will often have a dinner the night before the interview for the applicants and the residents
- These can get in the way of travel plans and make your life more difficult. However, they can help you get a sense of what the residents are like, how happy they are, and what it is like living in the area.
- Consider dinner/lunch/socialization as part of the interview. You are 'on the record' for your entire visit. These dinners, from the applicant's perspective, can hurt more than help but use them to your advantage to find out more about the residents and the program.
  - DO NOT get drunk or let loose or complain about anything. ("loose lips sink ships")
  - Many a candidate has been downranked from comments or behavior that occurred at the dinner
- **Most programs listen carefully to resident opinions about candidates.**
- Be kind to your fellow candidates – programs are interested in team players.
- Let them know ahead of time if you have special dietary needs.

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## AT THE INTERVIEW

Most find radiology interviews to be very friendly and mostly a get-to-know-you session. If you've made it to the interview the program is very interested in you and just wants to see what kind of a person you are. Particularly in radiology where you spend a lot of time sitting next to people in the reading room and interacting with clinicians and radiology personnel, they want to make sure you are the sort of person who is friendly, fun, honest, responsible and hard-working.

The easier the interaction during the interview, the better the outcome.

- From when you pull onto campus to the time you leave, you must be in interview mode.
  - Even during lunch or just sitting around waiting be appropriate and respectful.
  - The non-medical staff can exercise astonishing veto power. No-one wants a student who may be rude to technologists, nurses and secretaries in future.
  - Coordinators also have the power to help you, so treat them well.
- This is your time to shine - you are trying to sell yourself, but do not come off as arrogant.
- Relax and enjoy yourself. Be yourself, act interested and be enthusiastic. Interviewers will notice.
- No whining about air connections, hotels, parking, or acts of God.

**Get a feel for the program.**

- Are the residents happy? Do you have an opportunity to meet the residents?
- Some programs may try to "hide" their residents - this is a warning sign!
- Do you feel comfortable during the interview day and in the area the hospital is located?
- Is it somewhere you would want to work and live?

---

## QUESTIONS DURING INTERVIEWS

Specific answers don't matter. Be prepared to be crisp, professional, and eloquent without sounding as if you pre-memorized every word. Use every opportunity you can to sell yourself to the program and to keep a conversation going. Never just respond with a "yes" or "no" answer even if asked a "yes" or "no" question. Write notes right away to help you write thank you notes (if you do so) and especially during ranking the programs.

**Common questions for the candidate**

- You must know and be able to answer questions about everything on your application. You will be amazed by what some interviewers pull out of your application and by what some don't seem to notice.
    - I see on your application....tell me more about this (90% of the questions you will get are phrased like this)?
  - Why did you apply here (second most common)?
  - What particularly interests you about our program?
  - What can I tell you about our program?
  - What are you looking for in a program?
  - Why Radiology?
  - If you couldn't do radiology what would you do? Why didn't you do (your answer) anyway?
  - Tell me a little bit about yourself. Don't say, "What do you mean?" Decide ahead of time if you're going to talk about your life story, about academics, etc. Make it short and sweet – and interesting if possible.
  - Where do you see yourself in 10 years?
  - Tell me about your research.
  - I notice you play...insert name of sport, instrument.
  - What do you like to do for fun? Say something that is not on your application e.g., "I like to go fishing" but don't stop there. Pour your efforts into the hobbies/interest section and that PS, and toss some conversational fodder
  - What sets you apart from the other applicants?
  - Tell me three things your best friend would say he/she liked about you. And didn't like
  - Why don't more residents go into (Peds Rads, IR, etc)?
  - Tell me about a decision you've made in the last year.
  - Tell me about a bad decision you've made.
  - What was your biggest mistake?
  - What was your worst hospital experience?
  - Describe a challenge you have surmounted.
  - What was your one defining moment? What are you most proud of?
  - Have you ever lost your temper in a clinical setting?
  - What does it take to get you angry? Ever been in a fist fight?
  - What are your strengths and weaknesses (very cliché, but you will definitely get this question; prepare an answer and give an example of each; for your weakness, discuss how you are trying to improve it)?
  - What seminal papers has your letter writer written?
- 
- Tell me about a patient encounter... (be prepared to talk about a specific patient you interacted with and something you learned about this interaction; it does not have to be about a radiology patient).
  - Favorite organ system? Discuss imaging of that system
- 
- What do you think about the healthcare system?
  - What are the challenges ahead for Radiology?
  - Read the papers during interview season – be aware of what's going on.
- 
- Tell me a joke(!). Be careful.
  - What was the last museum (theatre, movie, public park) you saw?
  - What was the last book you read/movie you've seen?" (And be familiar with the claimed book.)
  - If you were an animal, which would you be?
  - If you were a plant, what kind would you be?

- Or to show you a paper, coin, or toothpick mind-teaser (“using only these 3 pennies build a model of the Spaceship Enterprise..”) or ask you to solve an odd puzzle question; simply no way to anticipate or prepare.
- And occasionally an Interviewer just sits there, silent, to see your reaction...try not to babble.
- Should you freeze and flail, practice saying “Interviews paralyze that part of my brain.”
- Where are we on your rank list?” (ILLEGAL!!! Be tactful and elusive)
- And of course that great conversation-stopper: "Do you have any questions for me?"
  - BE READY FOR THIS ONE- see below

### **Questions for the attending interviewer**

It is crucial that you know about the program and have specific questions to ask.

Research the program before you go and write a list of questions that you can ask.

Don't let interviewers feel that you are just going through the motions or using them as a 'safety' program.

Don't be afraid to ask more than one person the same questions (but not all!).

- Has your new Chair person changed the department significantly? Are more changes to come?
- You have an animal MR research lab. Can residents become involved in projects?
- With such a small program, how are you dealing with the new on-call regulations?
- How many of the didactic lectures are given by staff rather than residents?
- How much didactics are there? Is this time protected for the residents?
- Patient population? Not if this is obvious from the website or situation – VA hospital, County hospital.
- Do residents rotate at other hospitals?
- I see that you have 6 IR fellows, how does this affect resident opportunities for hands-on training?
- Teaching responsibilities for the residents?
- Research opportunities? Is there protected time for research?
- What kind of attending backup is there on call?
- Any changes in the program in the future?
- I have 2 school age children, what are the schools like in the area?
- Real estate is very expensive locally, so where do the residents live?

### **Questions for the residents (interviewers and other)**

You may have resident interviews, and in between interviews you will have the chance to ask the residents about the program. Many programs hold dinners or lunches with the residents. They are your best source of information. Talk to younger residents as well because they are closest to where you will be and some of them will even be there when you start.

Really try to get a feel for the level of morale and general resident satisfaction with the program.

- What is call like? Night float or overnight call? How is the backup during call?
- What is the patient load like?
- Who gives the lectures? How do you like the didactics and teaching? Ability to attend conferences?
- What is the interaction like between the residents and attendings? How do you read out with the attendings? Faculty/resident ratio Is there a lot of staff/resident turnover? Staff support?
- Do they get good hands-on experience?
- Wide variety of cases?
- Boards pass rates?
- Opportunities for fellowship? But you can go to another, more academic program for fellowship.
- What do you like about working here?
- What do you dislike?

- What are the social/family opportunities outside work?
- Housing costs? Where do residents live? Cost of living? What is the parking situation?
- Spouse work opportunities?
- Benefits like meals, health insurance, vacation, pay, etc.?
- Is moonlighting available (be careful, sometimes this is a don't ask don't tell issue)?

## INTERVIEWERS LIKES AND DISLIKES

The following are direct quotes from interviewers

### Dislikes

- Having no questions to ask me.
- Asking me what are the strengths and weaknesses of my program (Who is interviewing who? Too standard a question.)
- Having no knowledge of program
- I'm not a big fan of saying that the program looked good on the website as a reason for coming here. I think that specific reasons for choosing programs (size, location, heard about from somebody that works here) is advantageous.
- Inability to back up something they put on the application (eg. concert level pianist who has only played at school concerts)
- I don't like it when a medical student has already chosen their fellowship before they have done radiology
- Don't overuse casual phrases – dude, man, like, awesome, totally
- Don't make a statement sound like a question; "I'm from California?"
- One word, dead end answers to questions
- Hedging.
- Weak handshake
- Nervous fiddling, playing with face or hair. Jiggling knees.
- Chewing gum
- Very short skirts
- Do the interview, and don't come back to talk to me again, unless there is a reason. I'm busy.
- If you follow up with me in some way, try to do it in a way that does not require me to respond. I don't want 50 new pen-pals.

### Likes

- Questions that show the student has prepared: looked at the website, talked to someone, thought about it e.g.,
  - Location/geography – how does it affect case mix and potential experience
  - "The ----- program looks interesting", ask specific questions about it, not just "Tell me about it", while I sit here and try to stay awake
- Know something about the program, a few specific strengths even if from the program's web site, can show that you did your homework and are motivated to be a resident there
- Just tell me about the issue/problem in Medical school, the gap, the foreign school, the unusual employment history - I'll find out anyway. It's better to own up and tell me what it taught you.
- Show enthusiasm both for radiology and for the program specifically; BUT don't overdue it;
- What I look for most is a genuine enthusiasm for Radiology.

- I want to see that they are excited by the practice of Radiology not the life style, money or even that their primary interest is the technology itself. I want to sense that what really turns them on is trying to figure out what is wrong or not wrong with the patient i.e., making the diagnosis.
- Ability to carry on a conversation
- I like when I can have an interesting conversation with the applicant and get to know them as a person. They already made the cut academically, or they wouldn't be interviewing.
- Have something interesting to talk about from your application
- I love it when I learn something in the interview
- I like good eye contact and students that are genuine and straightforward, comfortable being themselves, not trying to play some role in interview mode.
- Firm handshake
- Eye contact

## LIST OF THINGS TO CONSIDER AT THE PROGRAMS WHEN INTERVIEWING AND RANKING

### Board pass rates

- Physics, diagnostic, orals
- Overall pass rate of seniors

### Conference

- Quality
- Number
- Topics
- Cancellations

### Is there a department library

- Teaching files
- (i.e.) ACR discs
- AFIP
- Funding

### Opportunity to do cases

- Do the fellows stand in the way
- Procedure log numbers
- Pick a particular procedure
- i.e. Hysterosalpingograms-How many do residents do

### What are the elective opportunities?

- Legal rotation
- Practice management

### Ultrasound scanning opportunities

- Vascular radiology

### How are the core competencies incorporated with the program

### Do the residents evaluate the faculty

### Is research available

- Required or encouraged

### Is transitional year included

- Benefits of one move
- Relationship established with colleagues

### Fellowship Opportunities

### Size of Program

- Number of residents
- Number of fellows
- Number of staff
- Is it small, medium or large

### Geographic considerations

### Is there diversity in the program

- Ethnic
- Gender

### Camaraderie

- Between residents
- Between residents & staff
- Between residents & ancillary personnel

### Stability of the staff

- Are the numbers going up or down
- Where have the staff all trained
- Is there any section of the department that is particularly strong or weak

### Is the Program Director approachable?

- Is s/he a resident advocate

### PACs

- Which type
- Future plans

### Volume of cases at the hospital

- Admissions
- Surgeries
- ER visits

### Facility

- Physical plant
- Day Care service
- Cafeteria
- Equipment
- Future expansion

### Relationship of Radiology and the rest of the hospital

- Cardiology
- Vascular Surgery
- OB
- Ultrasound
- Neurosurgery, etc
- ED

### What are the benefits provided

- Salary & How does it compare to others
- Insurance
- Optical, dental, etc
- How much time off
- Are the residents funded to go to meeting
- if they present a paper or poster
- How does the hospital treat its employees

### Accreditation

- How many years

### Surrounding Area

- Childcare
- Schooling
- Shopping
- Housing availability
- Safety
- Social activities
- Sports
- Cultural activities

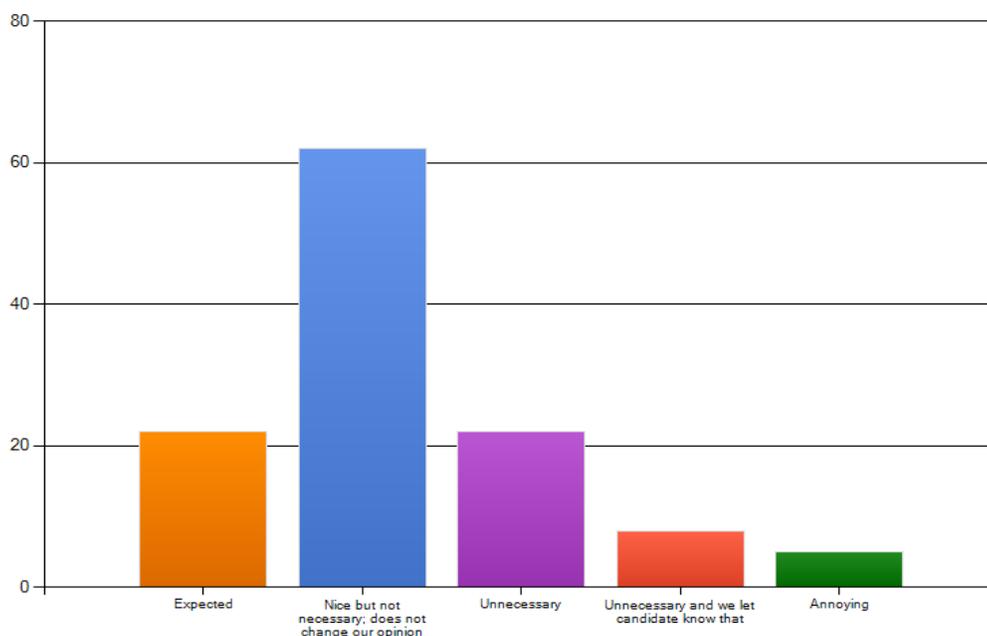
## SHOULD I SEND THANK YOU NOTES AFTER INTERVIEWING?

- No easy answer.
- It is not going to make a poor candidate a viable one, and if you are a good candidate then it probably won't make much difference to your ranking.
- See data below regarding thank you notes from the program directors' perspective below.  
Don't waste your time, or send to the program coordinator and a few selected people in a timely way. Ask upfront for PD preferences – some will ask you not to.
- Between the interview and the Match students should exercise common sense and good taste, and bottom line: avoid irritating or causing more work for the PD
- Make notes right after finishing the interview day, to help when you write these notes
- Brief, professional, personal - one that states something specific about the program or the interview day
  - Humor helps when in good taste.
  - Grammar and spelling - all names should be correctly spelled
- **IF IT IS TRUE**, espouse your enthusiasm and allude to your hopes. A thank you note is as dangerous as any statement of intent in writing.  
A cagey "I will rank you at the top of my list" or "in the top cohort" clearly tells the PD that their program doesn't merit the "gold medal." This may hurt the student.  
A student ought not state "you are my number one" unless they are certain of their choice. Wait until January to write that you are ranking them first – to **ONE program only**. Radiology is a small world and it will haunt you if you do this to 2 programs.

### Email or handwritten letter or computer written?

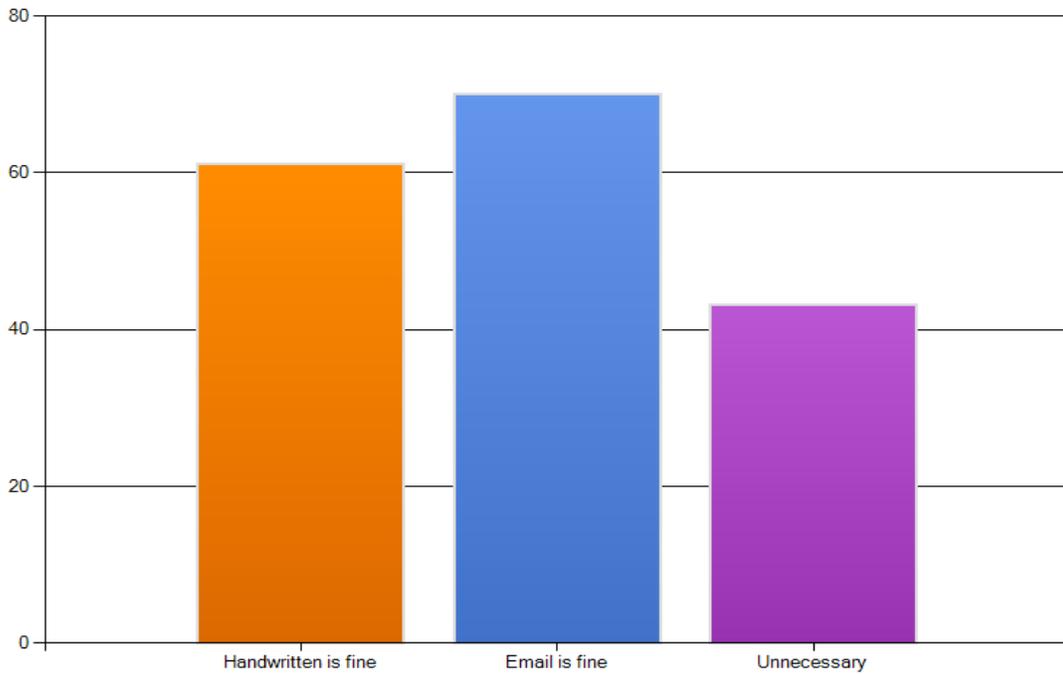
- Emails - Everyone checks email regularly and can reply easily. This is probably preferable.
- Computer-written printed is preferable to hand-written.  
Get some good paper stock and envelopes, and add your own letterhead. Some people add their head shot, most important if for some reason the program failed to receive yours.
- Handwritten - Time consuming, costly, and penmanship may be an issue. Probably not a good idea. Commercial stationery; notes should be simple, classy, professional ; no white-outs or cross-outs.

Need for thank you notes after interview (please check all that apply):



AMSER Program Director survey (Neutze J, 2010)

**Format of thank you notes after interview (please check all that apply):**

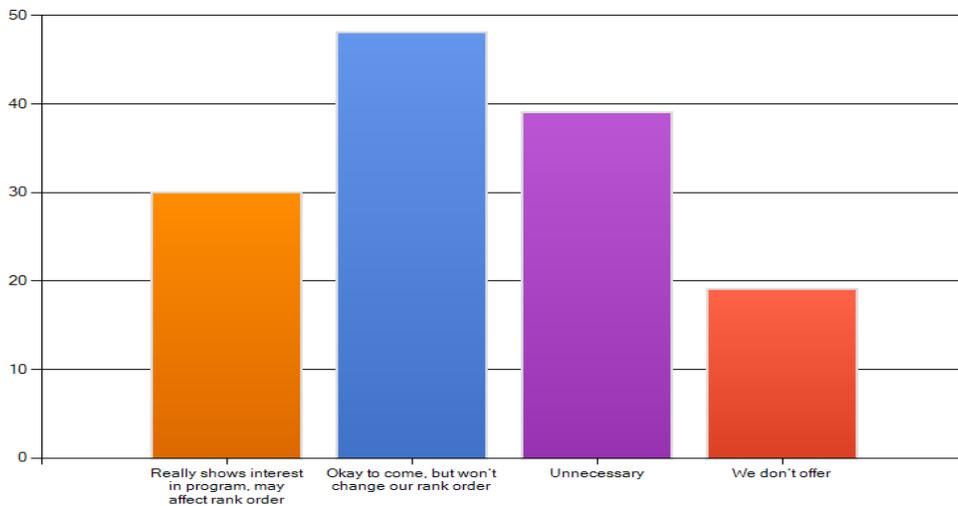


AMSER Program Director survey (Neutze J, 2010)

**SECOND LOOKS**

This is an opportunity to check out a program once again after your interview. It may help if you are having difficulty remembering what a program was like or it can help to show your interest in the program. See the data below for the program director's perspective. Danger here is that you might have an unpleasant interaction and prejudice the program against you, but mostly it is a waste of another medical school day.

**Regarding a second look visit (please check all that apply):**



AMSER Program Director survey (Neutze J, 2010)

## RANKING PROGRAMS

- A computer with a mathematical algorithm determines your fate.
- Submit early – you can change it - don't wait until the final hours to certify it the first time.
- The radiology faculty advisor is YOUR advocate, and you should feel free to discuss your rank list with her. She/he will not divulge this to the ranking committee unless at any point it seems to YOUR detriment not to.
- There is no 'one size fits all' answer to this. Refer to your detailed notes, but trust your gut: You must find the one thing that matters most to you in a program. Is a significant other there? Family there? Research or IR experience? Happy residents?  
(see "List of things to consider at the programs when Interviewing and ranking" above.)
- Rank all that you interviewed at, unless you really hated a particular place - but would you rather not do radiology than match there? Be realistic, keep a reasonable range of programs in your list. Don't get emotionally committed to any program.
- Rank based on where YOU want to go. The applicant's rank list has priority over the programs' rank lists!
  - Take the 3 you like best and put them in order of where you want to live
  - Rank the bottom 3
  - No advice about the middle ranks
- For Radiology, you must rank both your radiology PGY 2 year and your PGY 1 intern year. You must enter the intern year as a "supplemental list." So, if you match at program X, then the computer goes into the supplemental list you listed for program X and it tries to place you as high as it can, once again.
- Consider including a preliminary program not hitched to a residency in case you fail to match into radiology.

### **Corresponding with your top programs once more before they rank.** (see "When you can contact a Program Directly" )

- Students feel that they will not be ranked well unless they tell the program that they are ranking that program number 1, or at least in the top 3. This isn't true – you will be ranked on your merits, although it helps to know if you are interested.
  - Pick your top 3-5 programs and let them know after you make your rank list that you are ranking them "very high" or "number 1" for your number 1. DO NOT tell more than 1 program that they are number 1; Program directors communicate and this information may be found out even before ranking.
  - Programs rank at all different times, and if you contact them, it should be before they rank. Find out their last interview day and email them shortly after this date.
  -
- It is **within Match Rules** to tell a program 'You are my first choice'.

*"Having wrapped up my interviews, I wanted to take this chance to tell you how impressed I was with your program. I am ranking you number one, and would be honored to join you in 2009. I hope you will keep me strongly in mind".*

*"As the season winds down I wanted to reiterate how very impressed I was with my day at -----, and how highly I intend to rank you..."*

- **Match violations:** programs **SHOULD NOT** ask you how you are ranking them (nor can you ask them).
- If a program calls and tells you that you are being ranked highly, unless you are called by your Number 1 (in which case you may say Yes!), you need not answer directly.
  - Have handy a verbal shield or two – something positive, appreciative, but noncommittal  
e.g., *"Thank you, I am so flattered and thrilled-this whole Match is so confusing, but I know you will be very high on my list, it just seems bad luck to discuss it before I finalize it."*
- Along the same lines, don't believe what they say about where they are placing you on the rank list.

## WILL THE RADIOLOGY STAFF CONTACT PROGRAMS FOR ME?

- It depends on the school.
- Talk to your mentor in radiology
- Don't lie to the caller! There are significant repercussions to both to your program and the caller.

## WAITING

Relax. The hard part is over.

You have probably seen areas of the country on interviews you never knew existed. Pay off your credit card bills. Apply for that residency interview loan. Make sure you have done everything you need to graduate and get excited!

## MATCH WEEK!

### Monday:

- Email from the NRMP at 12noon EST
  - "Yes, you matched" or "No, you did not match."
- Contains both PGY 1 and PGY 2-5 matches. No information about where you matched.

### Tuesday Scramble Day :

- Unmatched applicants contact unfilled programs and send them their information to try to secure a position.
- Friends and the medical school helps the applicant.
- It is a stressful, chaotic day that you wish to avoid, if at all possible. In coming years the NRMP will start a separate matching and ranking process for the scramble.

### Thursday Match Day:

- Depends on the medical school
  - May be a breakfast or lunch, where the applicants receive the envelopes containing their match
  - Private or public.

## FINAL ADVICE

In conclusion, this is not a black and white process. Opinions vary and you will hear many different ways of attacking the residency application process. Follow your gut and do what you think is right. Be your own advocate - applying to residency is not a passive process.

## ON-LINE RESOURCES

These contain data on the applicants applying to most of the fields of medicine and give you an idea of who you are competing with. They show average USMLE scores, number of research projects applicants have, etc.

- **[Results and Data: 2010 Main Residency Match](http://www.nrmp.org/data/resultsanddata2010.pdf)** (PDF, 97 PAGES) This report contains statistical tables and graphs for the Main Residency Match and lists by state and teaching hospital every participating program, the number of positions offered, and the number filled.  
<http://www.nrmp.org/data/resultsanddata2010.pdf>
- **[Charting Outcomes in the Match](http://www.nrmp.org/data/chartingoutcomes2009v3.pdf)**: Characteristics of Applicants Who Matched to Their Preferred Specialty in the 2009 NRMP Main Residency Match (3rd edition)  
This report documents how applicant qualifications affect match success.  
<http://www.nrmp.org/data/chartingoutcomes2009v3.pdf>  
  
<http://www.nrmp.org/>  
<http://www.nrmp.org/data/advancedatatables2010.pdf>  
<http://www.nrmp.org/data/programresultsbyspecialty.pdf>
- APDR surveys: The Association of Program Directors in Radiology performs annual surveys on its members. Some of these contain useful information for students applying to radiology including how programs screen ERAS applications, select interviewees and perform interviews, e.g., <http://www.apdr.org/directors/upload/2005SurveyResults.pdf>
- [Information for ERAS applications](#) from the main AAMC/ERAS site
- [Links for radiology residency program information](#) from the RSNA
- [Main Frieda website at AAMC](#) for finding programs in any speciality including internships

## UPCOMING CHANGES TO RADIOLOGY RESIDENCY

Affects entry class of 2010 with first Core Exam 2013, and Certifying Exam in 2015

[http://www.theabr.org/present/overview\\_changes\\_2.pdf](http://www.theabr.org/present/overview_changes_2.pdf)

### CORE EXAM:

- After **36 months of radiology residency training**
- Image-rich, computer-based exam, taken at regional testing centers
- Two-day exam
- Candidate must pass each of the 18 categories in the Core Exam to achieve a “Pass”.
  - Tests knowledge and comprehension of anatomy, pathophysiology, all aspects of diagnostic radiology, and physics in 18 categories:  
Breast, cardiac, gastrointestinal, musculoskeletal, neuroradiology, pediatric radiology, thoracic, reproductive/endocrine, urinary, vascular, computed tomography, interventional radiology, magnetic resonance, nuclear medicine, radiography/fluoroscopy, ultrasound, physics, and safety. Physics questions will be integrated into each category - no separate physics examination will be administered.
  - If a candidate fails one to five categories, he/she will have conditioned the examination and must take a repeat examination in the categories that were failed.
  - If a candidate fails more than five categories, the entire examination must be repeated.
  - The exam will be offered twice yearly.

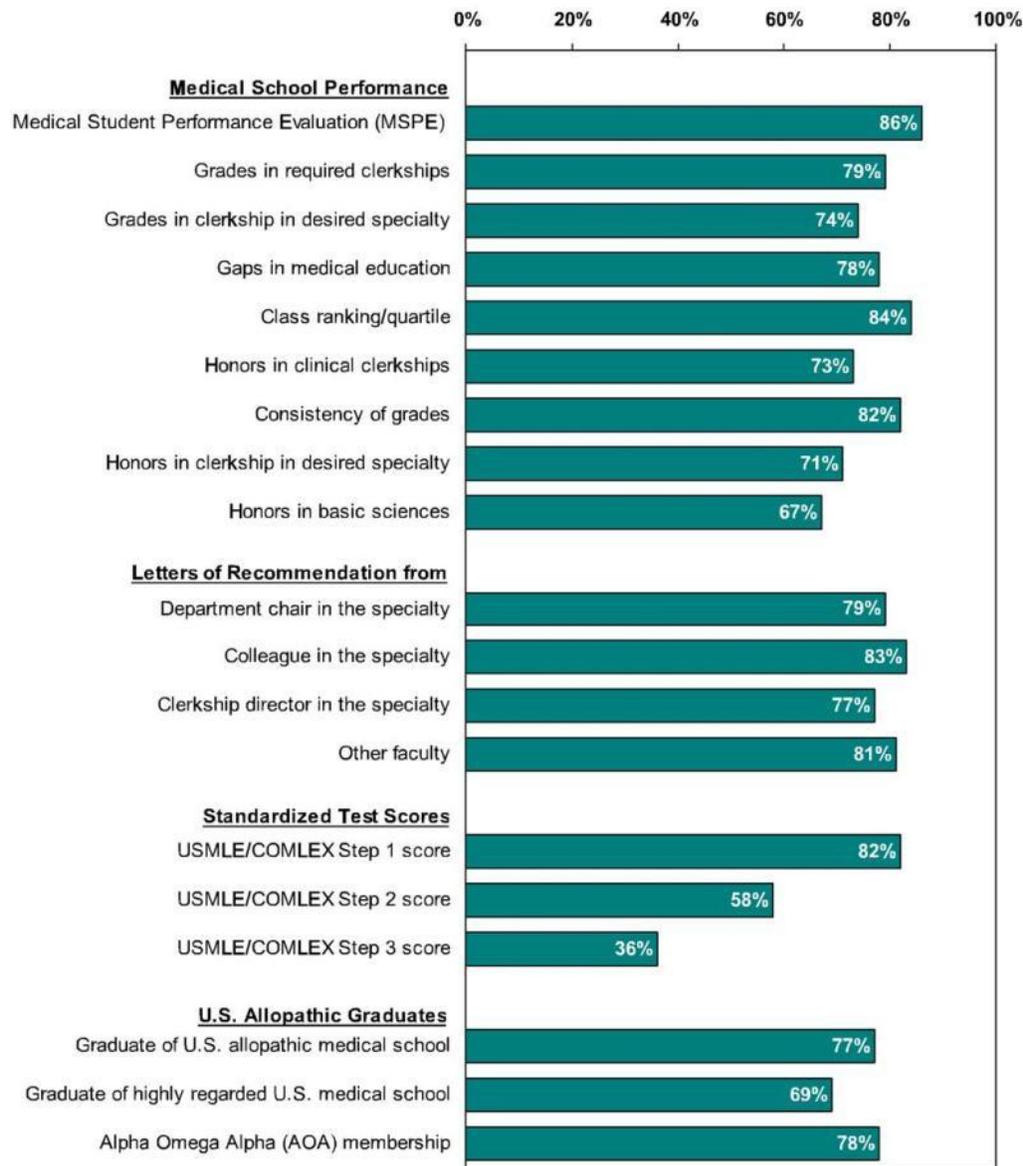
### CERTIFYING EXAM:

- Taken **15 months after completion of diagnostic radiology residency**
- Image rich, computer-based exam at regional testing centers
- ½ day
- There will be five modules on the exam
  - Two modules must be completed as designed by the ABR:
    - ◆ **Noninterpretive skills:** general topics of importance to the practice of radiology, such as radiation safety, recognition and management of contrast reactions, error prevention, communication skills, professionalism, ethics and other aspects of practice.
    - ◆ **Fundamentals of Diagnostic Radiology:** basic knowledge that every radiologist should know, such as recognizing child abuse, pneumothorax, shock bowel, subdural hematoma.
  - Three modules are selected by the individual and content is based on the training profile, experience and planned practice emphasis
    - ◆ The clinical practice areas are: general radiology, breast, cardiac, gastrointestinal, musculoskeletal, neuroradiology, nuclear radiology, pediatric radiology, reproductive/endocrinology, thoracic, ultrasound, urinary, and vascular and interventional radiology. Each of the clinical practice areas will include some items relevant to pediatric radiology.

**Residency training (4th year of radiology):** The rotations in the final year in radiology residency will vary from program to program, and these proposals will likely change over the next few years.

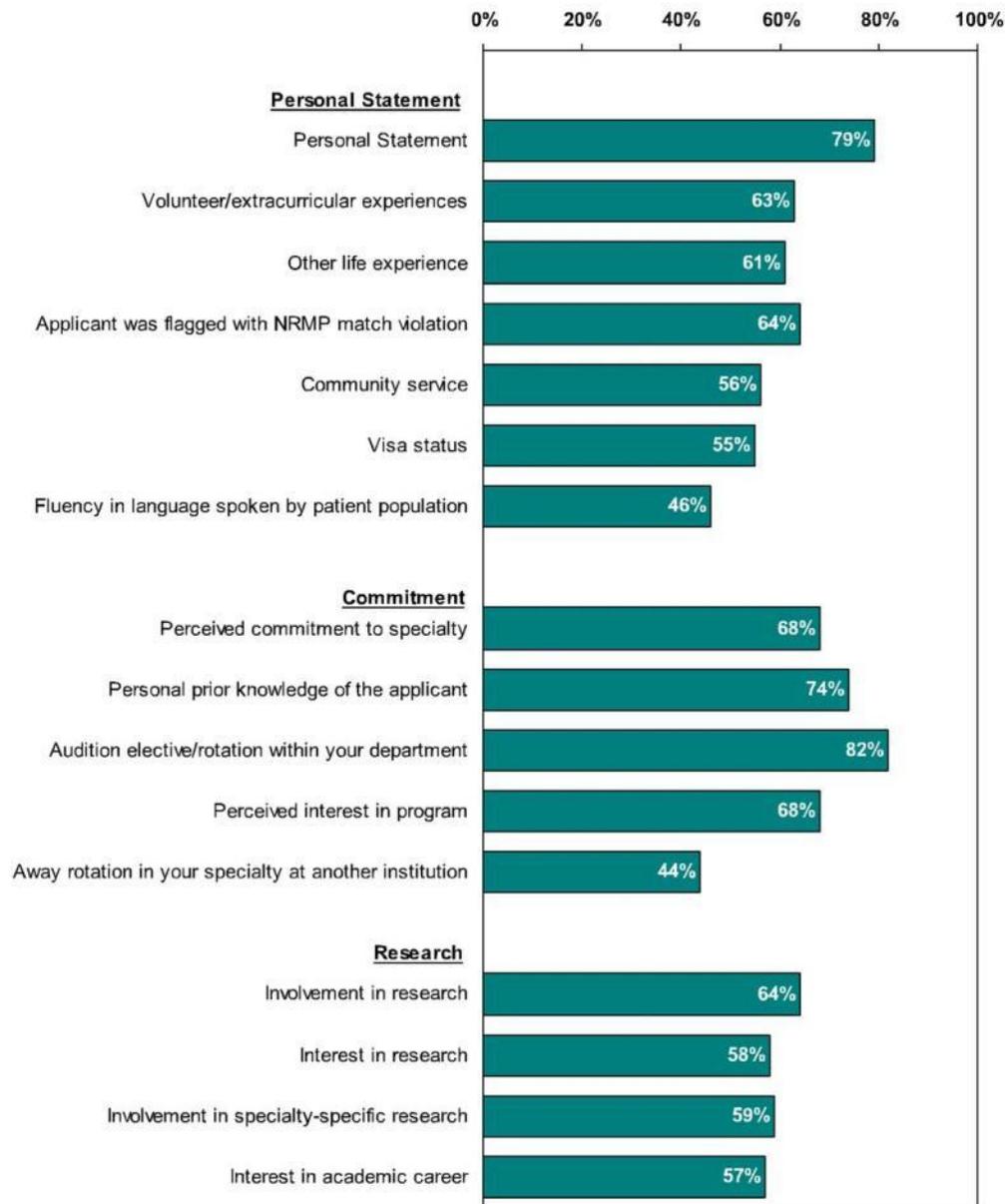
e.g., Residents can pick to have a general 4th year as we do now or dedicated time on up to 3 areas.

**Figure DR-1** **Diagnostic Radiology**  
**Percentage of Programs Citing Each Factor in Selecting Applicants to Interview**  
*Medical School Performance and Test Scores*



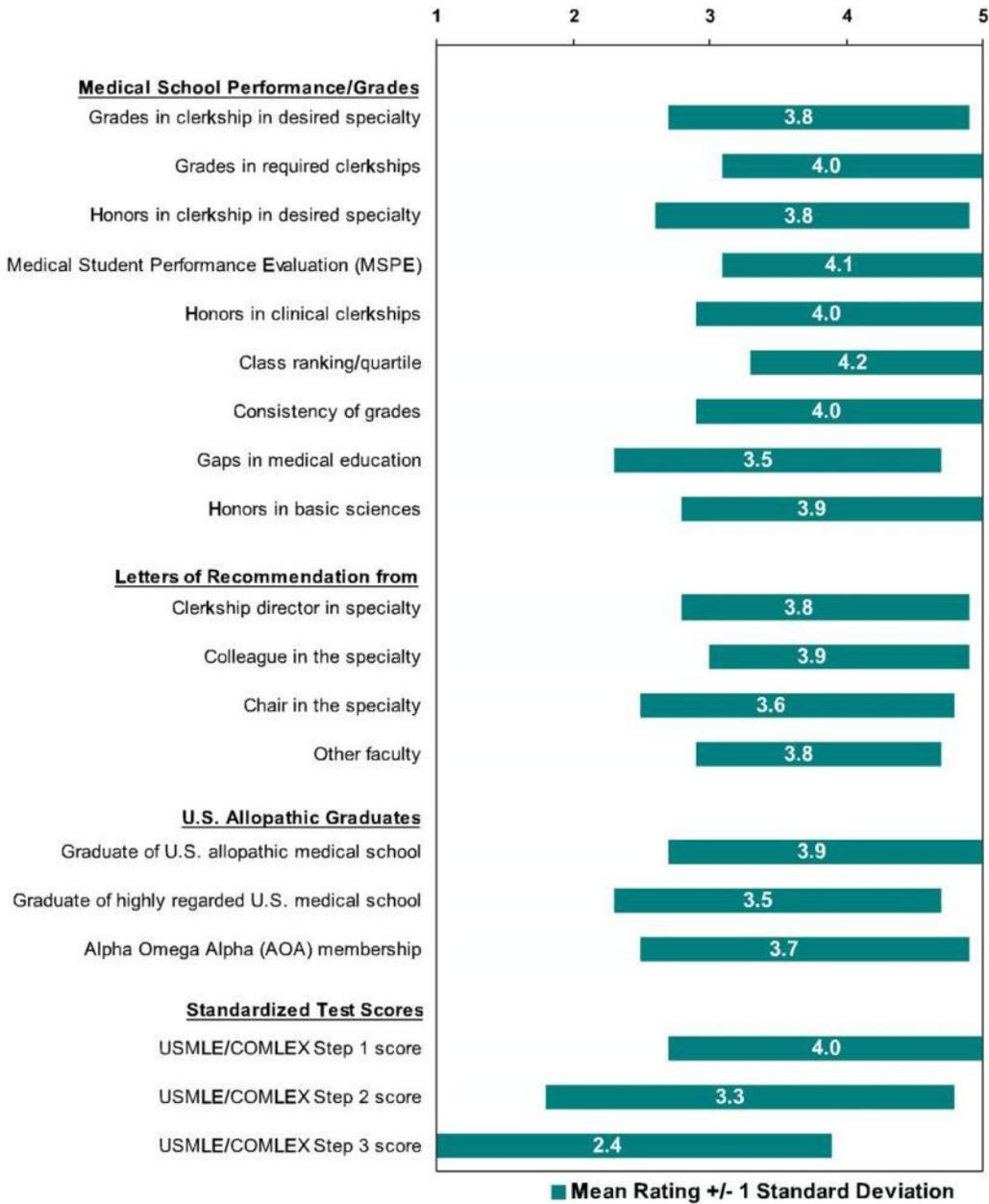
**Figure DR-1**  
*(continued)*

**Diagnostic Radiology**  
**Percentage of Programs Citing Each Factor in Selecting Applicants to Interview**  
*Other Factors*



**Figure DR-2**

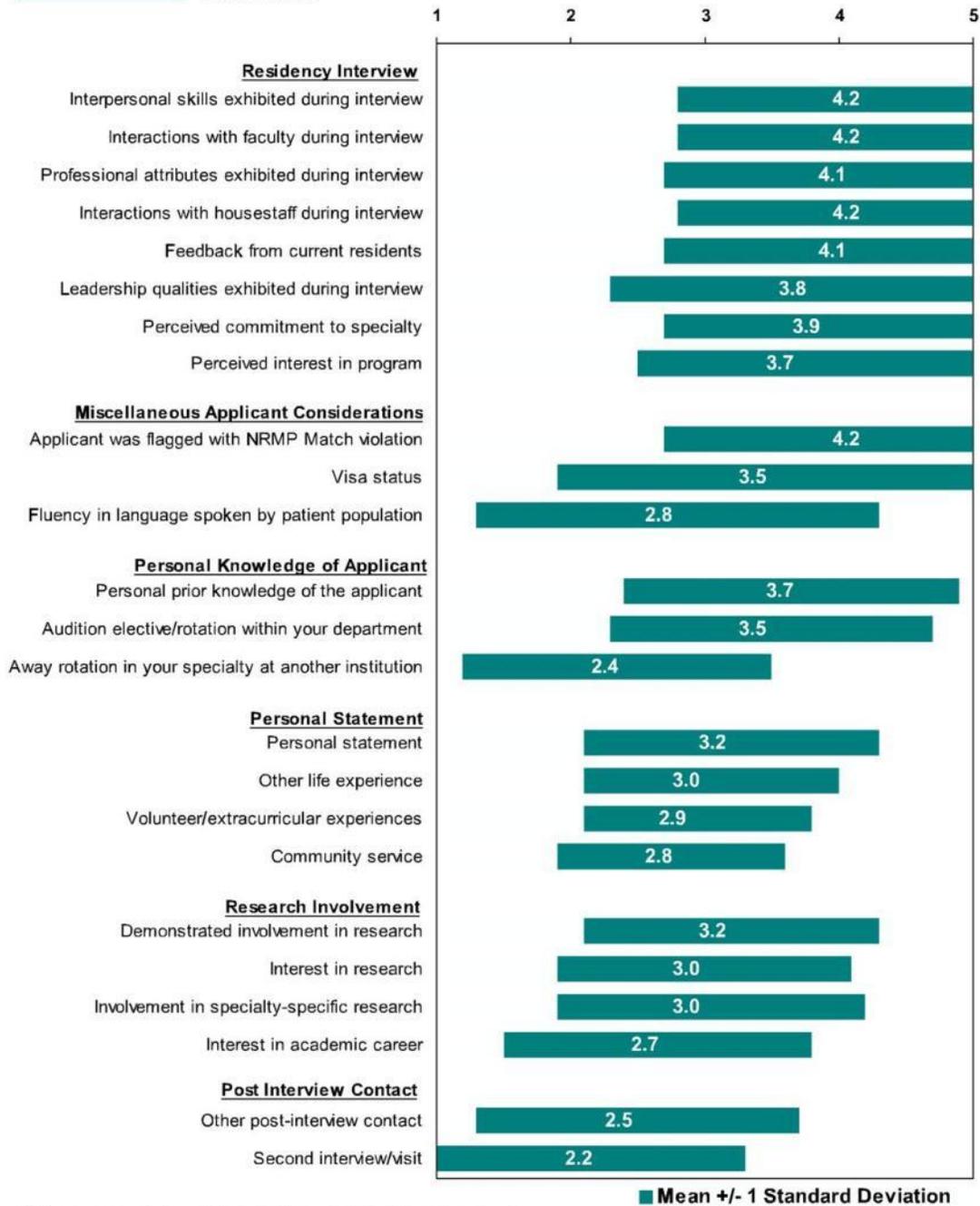
**Diagnostic Radiology**  
**Mean Importance Ratings\* of Factors in Applicant Ranking**  
*Medical School Performance and Test Scores*



\*Ratings on a scale from 1 (not at all important) to 5 (very important).

**Figure DR-2**  
(continued)

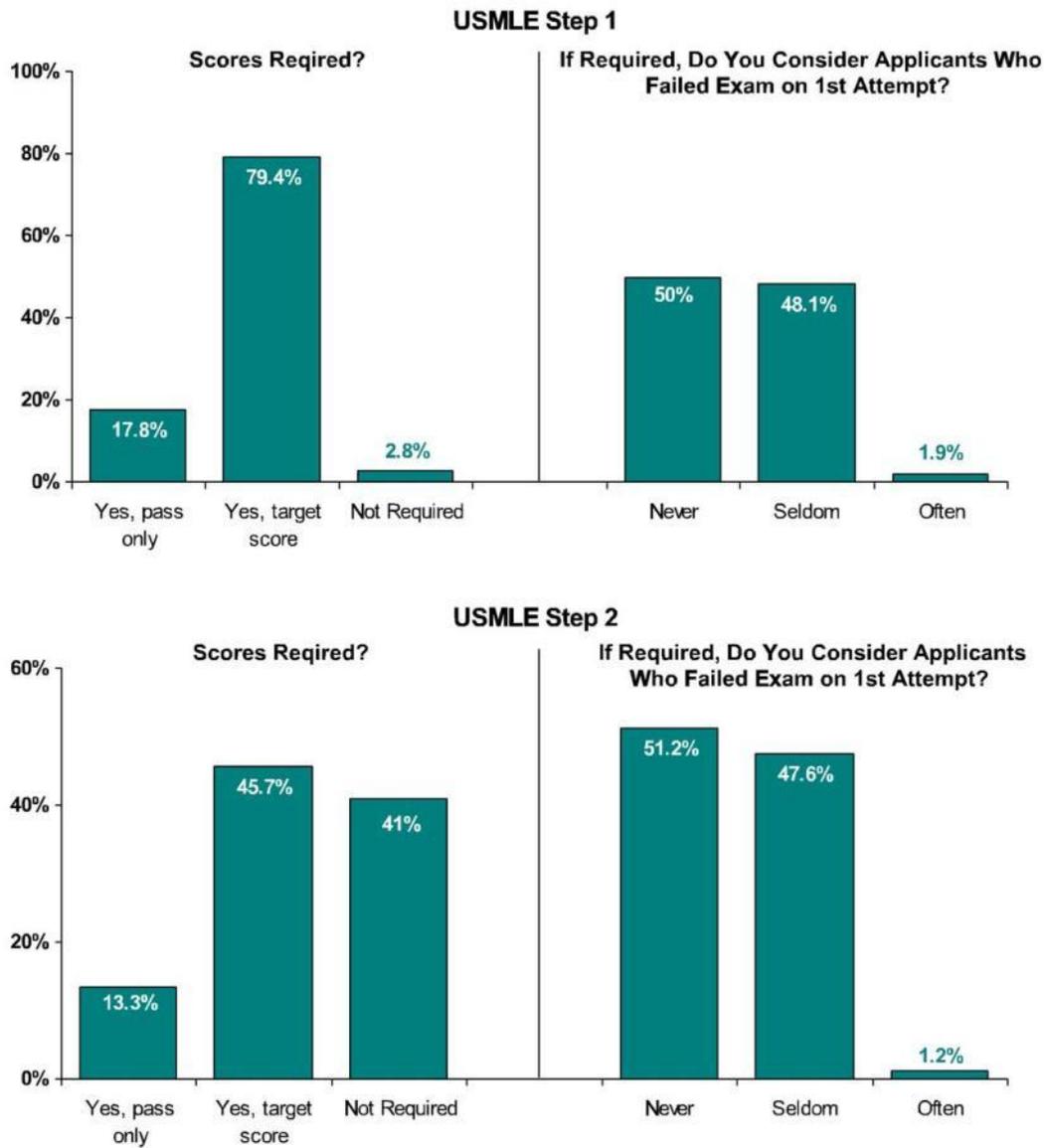
**Diagnostic Radiology**  
**Mean Importance Ratings\* of Factors in Applicant Ranking**  
*Other Factors*



\*Ratings on a scale from 1 (not at all important) to 5 (very important).

**Figure DR-3**

**Diagnostic Radiology**  
Percentage of Programs That Use USMLE Step 1 and Step 2 Scores When Considering Which Applicants to Interview



**Figure DR-4**

**Diagnostic Radiology**  
Percentage of Program's Interview Slots Offered Prior to the  
November 1st MSPE Release Date

