

AMSER GUIDE TO APPLYING FOR RADIOLOGY RESIDENCY

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WITH HELP AND INPUT FROM OTHER AMSER MEMBERS

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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.

WHY RADIOLOGY?

Students rarely get exposure to radiology until their third or fourth year of medical school and so it can be hard to know if this is the specialty for you. Here are some very general guidelines about the specialty and the sort of personalities that tend to enjoy it as a profession.

These resources may help:

- Medical Specialty Preference Inventory, Revised Edition
 - Careers in Medicine® (CIM) - Four-Step Career-Planning Process
 - https://www.aamc.org/students/medstudents/cim/about/143180/cim_4step_process.html
 - AAMC Careers in Radiology
 - <https://services.aamc.org/careersinmedicine/index.cfm?fuseaction=myCIM.getHome>
1. You can be a general or a multispecialist radiologist, or specialize in one or more areas, e.g., neuroradiology, ultrasound, emergency radiology, body imaging, chest radiology, interventional radiology (IR), musculoskeletal radiology, breast imaging, women’s imaging, nuclear medicine, etc. Initial training in radiology is general – and area(s) of subspecialty training can be decided upon after several years in residency. In private practice, you will probably do general radiology, possibly with an emphasis, and in academic radiology, you will probably work in one area or only a few areas
 2. Subspecialties vary as to their level of patient contact - from very little to significant.
 3. Subspecialties vary as to how much procedural vs. interpretative skills are required.
 4. There are opportunities in even private practice for those who enjoy teaching and research, e.g., by being affiliated with or by volunteering at an academic center.
 5. Radiology is evolving as new and improved modalities become available.
 6. Radiologists are rarely bored – they deal with a wide variety of modalities and pathology.
 7. Vacation and salary packages in radiology tend to be good, and it is one of the higher-paid specialties. It is difficult to give a figure as it depends widely on the area of the country, years of service and private vs. academic practice. Vacation may range from 4-13 weeks.
 8. Teleradiology gives some radiologists the ability to work from home.
 9. Radiologists tend to be happier with their career choices than many other professionals.

What kinds of people enjoy radiology?

1. People who are “task-oriented” do well in radiology. Did you like to do problem sets in high school?
2. People who enjoy the consultative nature of the workday.
3. People who can make informed decisions and “move on” do well – we make many more “disease/not disease” decisions during a working day than most specialties.
4. People to whom the patient interaction is not their primary focus in medicine.
5. People who enjoy puzzles and mysteries, and the problem solving, analytical nature of the profession.
6. The stereotype of the “visual learner” (although that includes most people!), but those who love anatomy, and seeing disease processes “in life.”
7. People who like surgical procedures but don’t want to be a surgeon (especially IR).

8. Technical/computer whizzes love the “cool toys” part of the job and the ability to produce spectacular images...but many of us aren’t computer geeks!
9. People who want to be able to work part-time, as radiologists generally do not have their own patients.
10. People who don’t mind that other physicians “get the credit” for the diagnosis or treatment, especially from the patients; you know and your clinical colleagues know.

WHY NOT RADIOLOGY?

We know that radiology is not everyone’s cup of tea! Some aspects to consider:

1. Longer residency compared to primary care specialties. Almost all radiologists do a fellowship, which also adds training time.
2. More study time required than in clinical specialties, where you learn "on the job" by direct patient interaction.
3. More study time required due to the breadth of knowledge required, i.e., all organ systems and diseases.
4. More study time required throughout career to keep up with new technologies and trends. (Are we seeing a pattern?)
5. Not a great specialty if you hated math and physics or are not interested in advances in technology.
6. Less patient interaction and follow up.
BUT: specialties such as Women’s Imaging and IR have significant patient contact.
7. More physician consultation time – you may be interrupted often.
8. Need focused attention over extended periods of time to be able to read 50 head CTs or 100 chest x-rays.
9. Imaging is a large part of the cost of healthcare, so there may be decreases in reimbursement in future years, i.e., salary support.
10. Competition with other specialties regarding imaging.
BUT: this tends to fluctuate over time and may change with new health care regulation.

TIMELINE

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 4th year of medical school that you wish to apply to a radiology residency program, it is not “too late.”

FIRST YEAR OF MEDICAL SCHOOL

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 will 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 a particular specialty just by checking it out.
 - Check into the availability of a Radiology Interest Group at your medical school. If there isn’t an interest group, think about starting one.

- Get involved with one volunteer/charity organization.
- Join professional societies from different specialties:
 - Many societies are free or have only a small membership fee for students.
 - Literature may help you decide on a 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 1st year of medical school.” e.g., Radiological Society of North America (RSNA), Association of University Radiologists (AUR)
- Get to know the field of radiology: (see “WHY NOT RADIOLOGY?” section)
 - 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.

SPRING

- If you’re not involved in a research project already, begin to look for a project for the summer. Programs like to see that you have the discipline and interest to do research – and it does not have to be in the field you finally decide on. You also have a chance at the end of 3rd year to do research in the specialty you choose. A research project will:
 - Broaden your experience.
 - Present possible opportunities to present at a conference or submit research for publication.
 - Help you work closely with a faculty member, who can write you a strong letter of recommendation. (see “LETTERS OF REFERENCE” section)
- 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.
 - ◆ It may help to confirm that the attending you picked has been productive.
 - ◆ 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 – try to set a goal with your mentor, such as an exhibit or presentation at a national conference, rather than vague “research.”
 - ◆ Consider doing several projects, with different mentors, as you may not know which ones will be fruitful.

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., RSNA, AUR, AMSER, Society Nuclear Medicine, 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.
For additional information on what to do over the summer, please read the following article from the October 2009 *Choices* Newsletter: [What to do on your summer vacation](#)

SECOND YEAR OF MEDICAL SCHOOL

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 take early or you don’t have a 3rd year radiology rotation at your school.
 - If radiology is a 4th 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.

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?”
 - Doing well on Step 1 lays a solid foundation for your clinical years.
 - 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.
 - Take a few full exams – e.g., December of your 2nd year, after your 2nd year exams, a few weeks before the exams, etc., to assess where you are and what you should concentrate on.
 - For at least 3 weeks before the exam, go to bed early (e.g., 10p), wake up at 6a, take a 1 or 1 ½ hr mini-exam before you start studying – so you simulate the exam day.
- **What to use for studying:**
Pick a few resources and stick to them.
Use these while studying for the 1st & 2nd year exams.
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 3rd year:
 - Work and study hard to get honors, especially in medicine and surgery, if you can.
 - The grading system for 3rd 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 “Letters of Reference” section):
 - 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 4th year schedule**
 - Ask current 4th year students at your school how, where and why they scheduled their 4th year and what they would have done again or changed.
 - If Radiology is not a 3rd year rotation at your school, apply early for 4th 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?” section)
 - Consider taking **Subinternship** or **Acting Internship** in medicine or surgery early during 4th 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 4th year (if it is a required 4th year rotation)
 - **Interview season:** late October -early February, with the peak in late November to mid-January
 - ◆ Schedule flexible rotations, e.g., online course, research, self-study, flexible clerkships.
 - ◆ Consider vacation in December, January, or both months.

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. e.g., babewbigones@gmail.com is not optimal.
- Schedule a 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.
- Get a letter that you are in good academic standing from academic affairs.
- Update your CV: make it professional-looking and 1 page, longer only if multiple publications. Summarize 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. Don’t give anyone the chance to say “what was he/she thinking....” No weird stuff. No Pets. No significant others.
 - The photograph will be used during ranking to help remember who is who, so make sure it looks like what you will look like on the day of your interview (clothes, hairstyle, facial hair etc.)

- Pleasant smile – reshoot if needed.
- Head-and-shoulders only.
- B&W image & not too dark – so it will transmit and photocopy well.
- Send as jpeg, not too low or high resolution so it prints as ~ 3x4 cm.

Away rotations: (see “AWAY ROTATIONS” 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 3rd year students with the matched 4th year students (they are the REAL experts in this!) for an information exchange session. If this does not occur at your school, start one by contacting the Radiology faculty advisor (also a great thing to add to CV, in addition to being valuable for you and your classmates). Students who have participated in these get-togethers have found them incredibly useful. Make it informal, e.g., over pizza.

Remember: You are being evaluated at all times at these activities so don’t criticize other people or places, gossip or get drunk.

Also remember: you have something to sell - yourself - so be quietly confident.

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

SUMMER

- Do a Radiology Clerkship/Selective/Elective if you have not done so 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.
- Proofread 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. Don’t let that HONOR you earned get transcribed as a PASS. If you are missing grades, contact the department secretary and use gentle encouragement: “Is there any additional information I can provide to help my evaluator complete this?”

Plan to take Step 2

- See “WHEN SHOULD I TAKE STEP 2” below

SEPTEMBER/OCTOBER

Diagnostic Radiology is a regular match.

SUBMIT APPLICATIONS AS SOON AS POSSIBLE ON OR AFTER SEPTEMBER 15th

It shows how motivated and enthusiastic you are about applying to residency.

- Some programs only consider a certain first number of applications. The earlier you apply, the greater the chance you have of being considered for interviews.
- 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 (or wait for a % of their interview slots) until they receive the MSPE (October 1).

NOVEMBER

- MSPEs are released October 1st.
- Be strong! You may feel crushed when those rejections start to come (often in the 1st two weeks of November)... and then the interview invitations start rolling in.
- Interview offers will come in more steadily until the end of November/beginning of December
- Schedule as many interviews in November as your schedule allows, to enable 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. Always be available to take an interview offer.
(See “WHEN YOU CAN CONTACT A PROGRAM DIRECTLY” section)

DECEMBER/JANUARY

Take vacation or a rotation where you can miss A LOT of time off for interviews, especially at the last minute. Consider an online course, research, self-study, and flexible electives where *it is understood* that you can take time off at the last minute and make up requirements without penalty.

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 (See “WHEN YOU CAN CONTACT A PROGRAM DIRECTLY” section).

FEBRUARY-APRIL

- Consider taking 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).

MARCH-MAY

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

SUMMARY TIMELINE (VARIES WITH SCHOOL)

Contact radiology faculty advisor	As soon as possible, or by March of Year 3
“Meet the Experts” Dinner/Meeting	March/April, Year 3
Group Meeting with radiology faculty advisor	April-July, Year 3
Mock Interviews (can arrange if not offered)	May-October, Year 3
Radiology Clerkship/Selective/Elective	If not in the 3 rd year, take early in 4 th year May-August, Year 4
Draft personal statement	June/July, Year 4 (send to advisors/friends)
Final personal statement	July/August, Year 4
Develop program lists	August, Year 4
ERAS applications open (Radiology is not an early match)	September 15, Year 4 – STRONGLY RECOMMENDED on day 1
ERAS applications close	Variable
Deans letters arrive	October 1, Year 4
Interviews	November-January, Year 4
Rank list entry open	Mid January
Rank list entry close	Mid February
Unmatched candidates listed	Mid March, Monday
Match day	Mid March, Friday

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 1st or 2nd year of medical school, the advisor can direct you to a PGY2 radiology resident to discuss the field (and the application process) 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

Types of radiology programs

- Advanced programs: most common - PGY 2-5
 - Advanced programs start at PGY 2 (PGY 1 intern year is applied to separately)
- Categorical programs: less common - PGY 1-5
 - PGY 1 intern year and the radiology residency are combined, and applied to as one
- 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 National Residency Matching Program (NRMP) match, and some (e.g., Holman Pathway) are applied to after starting at a radiology program. Information will be on the specific program websites.
 - DIRECT Pathway: Diagnostic and Interventional Radiology Enhanced Clinical Training Pathway
 - ◆ For list, see <http://theabr.org/ic-vir-direct>
 - ◆ IR/DR Dual Certificate – for 2015
 - Informatics: Check on program websites.
 - Research
 - ◆ 5 year research track: Several institutions have offered this option including Mallinckrodt, U of Virginia, U of Texas, UCSD, Penn, UCSF, Brigham & Women’s, Emory, UW, Utah. Contact your school of interest to see if they offer this track, as options do change.
 - ◆ Holman Research Pathway – apply as a PGY2 (<http://www.theabr.org/ic-holman>)
 - PEDRAP: Pediatric Emphasis Diagnostic Radiology Alternative Pathway – DISCONTINUED
<http://www.theabr.org/ic-ped-pedrap>
- Diagnostic Radiology Fellowships – 1-3 years
 - Most radiology residents complete at least a year of fellowship training.
 - Abdominal imaging, musculoskeletal imaging, interventional radiology, neuroradiology, pediatric radiology, women’s imaging, nuclear medicine, PET, etc
- Other imaging training programs/pathways
 - Nuclear medicine residency: Currently this option should be very carefully evaluated by each applicant 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 are for advanced positions (start as PGY2) and do not include the intern year. You would 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 group the interviews on 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/elective is critically important. This can help to confirm your interest in the field.
- Take it as early as possible. If it is not a required 3rd year clerkship in your school, especially if you are not certain about radiology, schedule your rotation as early as possible in your fourth year, i.e., 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, but you may consider doing one to:

- Help confirm or deny interest if you 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
 - You have more personal interaction and will get to know the radiologists better (good for letters of reference – see “LETTERS OF REFERENCE” section).
 - It reads better on your transcript.
- 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” section) 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.

AWAY ROTATIONS

Away radiology 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 have been offered one based only on your application.
- **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 professionally; 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 to do the away rotation:

- In an area of the country in which you must match.
You can consider getting a letter from the program to send to that particular geographic area.
- At an institution you're particularly interested in. This should be a high "target" program where you are likely to get an interview anyway and you want to maximize your potential at matching at the program - not at a "reach" program that you are unlikely to get into.

What - Do your homework:

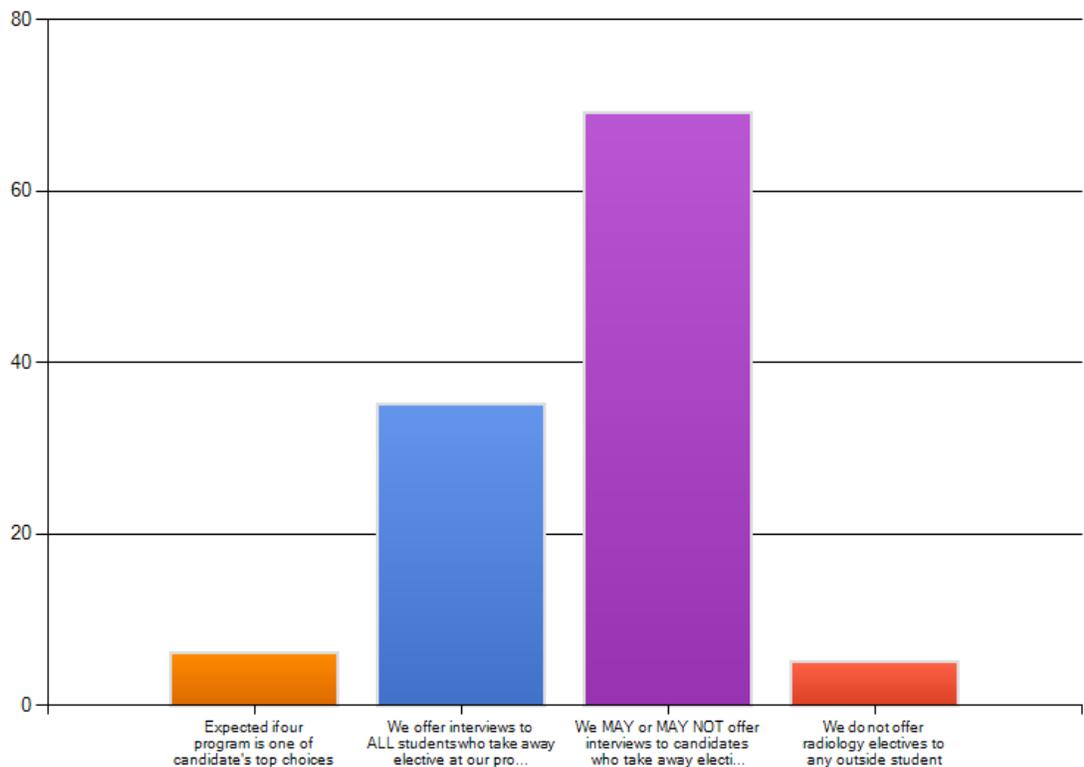
- Talk to students or residents with ties to the program; look online to identify appropriate entrance points.
- Identify your area of interest/ability, and also an area which will expose you to the residents, Program Director, or other people vital to the selection process.
- If you are planning to do research there, set it up ahead of time so you'll hit the ground running.
- Consider a specialty away elective. If you join their general radiology elective, you will 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 Year 4. You might be offered an interview if you are there in November or December but don't count on it. And consider what it would look like if you leave an away elective to interview at another program.

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)

AWAY ROTATION, NOT RADIOLOGY

If you plan to do an Away Rotation that is not in radiology – e.g., your Subinternship or other electives - you can introduce yourself to the radiology program coordinator, program director, head of residency selection, and/or other radiologists at that away institution.

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 reference, a solid personal statement, your overall personality and how you present yourself at the interview are all important. According to table DR-1, Summary Statistics, Diagnostic Radiology, from NRMP Charting Outcomes (<http://www.nrmp.org/data/chartingoutcomes2011.pdf>, p 49), the average of matched candidates: Step 1 score 240, 3.9 abstracts/presentations/publications.
- Doing things you enjoy is important - if you are an interesting person, happy and self-confident, and feel good about yourself, this will show when you work on the wards and when you interview.

WHAT PROGRAM DIRECTORS ARE LOOKING FOR

The 2012 NRMP survey of Diagnostic Radiology program directors show that program directors, for *invitations for interview*, give importance to your personal statement, class ranking, consistency of grades, the Medical Student Performance Evaluation, USMLE Step 1 score, and letters of recommendation from physicians outside radiology and from radiologists, among other criteria.

For *ranking* of the candidate for the Match, the interview itself is near the top in importance.

<http://www.nrmp.org/data/programresultsbyspecialty2012.pdf>, pages 165-172

HOW COMPETITIVE IS RADIOLOGY?

- Radiology is one of the **more** competitive residencies. The average for USMLE Step 1 score in 2011 was 240 and for Step 2 was 245, which is above the average of most of the other specialties.
- In 2012 there were 976 PGY 2 & 135 PGY1 positions in the match in diagnostic radiology. Refer to the NRMP match results for an idea of how it lies in relation to the other specialties, in terms of board scores. Refer to Charts 6 & 7, USMLE Scores of Matched Applicants NRMP Charting Outcomes <http://www.nrmp.org/data/chartingoutcomes2011.pdf>, p13 & 14
- Refer to NRMP Charting Outcomes data to see where you fit into the applicant pool. <http://www.nrmp.org/data/chartingoutcomes2011.pdf>, August 2011

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 as a threshold to screen applicants for an interview. Many programs use a cutoff of 220, and some as high as 240. However, programs generally will not tell you their cutoff scores and they are often “floating,” depending on the candidate pool and the candidate.

NRMP Charting Outcomes <http://www.nrmp.org/data/chartingoutcomes2011.pdf>, p 49, shows that most of the candidates scoring above 230 match into radiology – and there are students who score below 230 who also match.

- This threshold is useful to programs as it 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.

- 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 CANDIDATE” section).

WHEN SHOULD I TAKE USMLE STEP 2?

- The average **Step 2 score was a 245** in 2011 for a matched Radiology applicant with *known scores*. (Chart DR-4, <http://www.nrmp.org/data/chartingoutcomes2011.pdf>, p 49).
- 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. Some programs require Step 2 to be completed before ranking applicants
- Most people do 10-20 points better than on Step 1 and 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.
- It takes about 6 weeks to get the score.
 - 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 15, you are not obligated to release these scores, but if you can, do so if you score well.

So...

- If you have a **weak Step 1 score <220** take **Step 2 EARLY**, in July or August, and send score if you do better.
- If you did well or average on Step 1, consider taking Step 2 in September or October. But take it only when prepared.

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. (See “TIMELINE” First Year of Medical School section)

- The average number of research experiences of matched senior applicants in 2011 was 3 with an average of 4 abstracts, presentations, and publications (<http://www.nrmp.org/data/chartingoutcomes2011.pdf>, page 49.)
- 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 year 4 – 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.
- 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” section)

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.

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 relative disadvantage compared to allopathic students.
- Programs vary widely as to whether they take osteopathic students: some do not, or rarely, interview DO candidates, others welcome them. Students should look at the "track record" of a program (how many DO students have been matched in the last few years) and may consider taking an elective at programs of interest, particularly at allopathic institutions which may not know their osteopathic school well.
- They should get involved in research to be competitive with their allopathic colleagues.
- Programs with osteopathic students may “know” the conversion of COMLEX performance to USMLE scores. However, having a (strong) USMLE score may give you more options. Consider taking USMLE Step 1 and 2 exams as well as COMPLEX. Students who achieved an excellent score on USMLE Step 1 are likely to be favored over those who took only the COMPLEX exam. As a guideline for COMPLEX scores: >550 = Good; >600 = Very good; >650 = Excellent.

WHAT ABOUT APPLICANTS WHO ARE IN OTHER SPECIALTIES?

In the past, applicants from other specialties who have decided to go into radiology have successfully matched into radiology. It is understood that a career choice made as a third year student sometimes does not work out. Programs do vary as to their interest in these candidates. Experience in another field can be an advantage to some programs.

The applicant’s personal statement should definitely talk about the reason(s) for this change of heart. Also, it will help if their current program is supportive and writes strong letters of reference. The student MUST have at least one current LOR. However, this is a double-edged sword if the program is not supportive.

Applicants who change specialties more than once are at a disadvantage.

For additional information on changing specialties, please review the following article from *Choices* newsletter: [Switching specialties during residency](#)

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 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.
 - Letters of reference: Can be from different people.
- You may rank programs according to field & hospital according to your likes:
 - e.g., radiology at “A,” “B,” and “C” first, then alternative at “D,” radiology at “E,” etc.

PITFALL #1: Letters or PS to the alternative specialty shouldn't say that you would make a great radiologist, and letters or PS to radiology shouldn't refer to the alternative specialty.

PITFALL #2: This can be a dangerous approach. Some Program Directors may not like anything that smells of “lack of commitment to radiology.” If you decide to not mention that you are applying to different specialties, consider not interviewing at the same institution in different specialties. Program directors talk to each other.....

HOW TO APPLY FOR A RADIOLOGY RESIDENCY

PERSONAL STATEMENT

These resources may help:

- Interview Season
 - www.interviewseason.com
- Resident Swap
 - www.residentswap.org

These are as painful for programs to read as for 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 the first couple sentences good in case it does. Not all programs read them at the initial ERAS review stage.
- It can be based on one or more stories that illustrate your life. You want to 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 – i.e., 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 – be 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? Make this short - the readers already know the “pros” of radiology!
- What you intend to do in radiology
- What you can you 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 (e.g., if you choose to talk about a tragedy)
- Sound pompous or tactless

NEVER LIE!

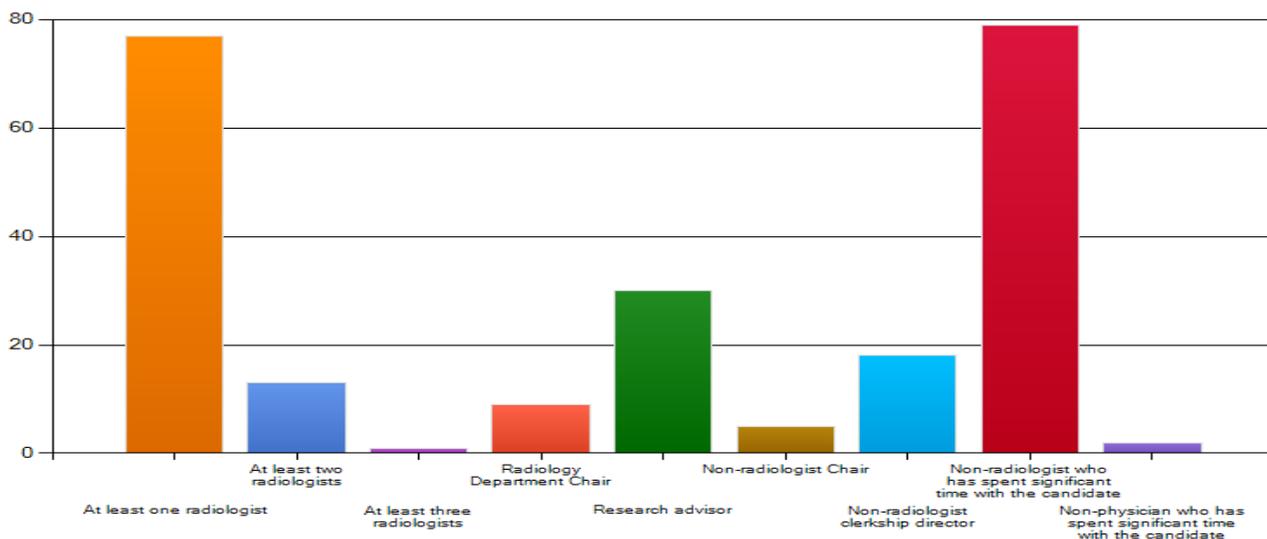
Can a personal statement be too short?

Although we say that you should keep your essay short, this is an example of (real but anonymized) personal statement that is a tad too short:

“When I was trying to decide which specialty to apply to, I asked various physicians how they had chosen their medical specialty. Some described having an initial interest in several specialties, then deducing the best fit for their personality. Others related a personal experience that had directed them toward a specialty. A single respondent stated, “It wasn’t a choice. I just knew.” Like the latter respondent, I just know. I know who I am. I know what I do well. I know what I do poorly. And I know that I am a radiologist.”

- Plan to get 4-5 letters of reference.
 - You can submit up to 4 letters/program.
Plan on 4 so if one writer doesn't get it done, 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 (at least 1, and 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 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. For example, if they write glowing comments on evaluations such as "I wish the candidate were going into my specialty," it's likely they'll write you a strong letter.
 - 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 will 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 are ideally ready to submit at the same time as your application, on September 15 of 4th year. Also, asking at the last minute 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 15.
- 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 around Labor Day.
 Do not misrepresent anything in your information packet. Your packet should include:
 - Clearly-labeled manila envelope or folder containing your materials.
 - Resume, Personal Statement, Transcripts, ERAS # and instructions, other requested information.
 - 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 15 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 15 but your letters do not have to be in by that date. You will indicate on your applications from whom they will be getting letters.
- Ask your student affairs office to double-check for mistakes on the letters, including your name/sex and that the correct residency program is stated – that is, radiology, not e.g., orthopedic surgery.

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.
 - Include undergraduate work only if outstanding/relevant.
- Suggested headings:
 - Education: board scores, grades, (rank) if outstanding
 - Honors in Basic Sciences or Clerkships - AOA
 - Honors/awards
 - Grants
 - Research: List all and go over the one page limit if needed.
 - 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
 - ◆ Limit the detail - the complete menu is not required from the café you worked as a waiter for 2 months while in college, delicious though it sounds
 - Leadership/Volunteer/Community service – define role
 The following should not be included as they are "padding:"
 - ◆ Running one 5K race even if for charity

- ◆ Working for one afternoon handing out water at the 5K race
- ◆ Being on the bone marrow donor list
- ◆ Being on your school soccer or basketball team
- Other: professional organizations, skills, languages, personal information
- Activities:
 - ◆ Details may spark conversation at interviews, especially if unusual or interesting.
 - ◆ They may indicate if you might be interested in coming to an area (e.g. interest in skiing or hiking for a program near mountains)
 - ◆ 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. The following are NOT hobbies (but have appeared in recent applications!):
 - Playing peekaboo with your kids
 - Drinking coffee
 - Watching TV (and then listing all the shows you watch)
 - Dreaming about sailing (as opposed to sailing)
 - Contemplating the universe (as opposed to astronomy)
 - ◆ Strange hobbies like “Competitive eating” - might be a hobby but may result in lots of strange questions...over and over and over again. And might make you sound odd, not interesting.

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. (see “WHEN YOU CAN CONTACT A PROGRAM DIRECTLY” section)
- 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

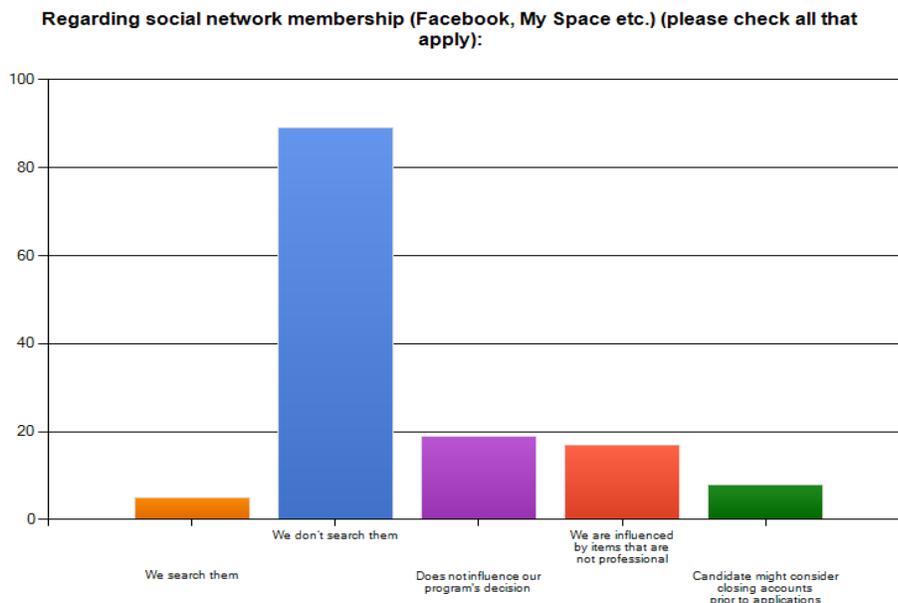
Class of 20XX"

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....we do not need to see those parts of your anatomy!



AMSER Program Director survey (Neutze J, 2010)

AUNT MINNIE

DO NOT use chat rooms/forums such as 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)/ NATIONAL RESIDENT MATCHING PROGRAM (NRMP)

HOW DO I APPLY?

- The **Electronic Residency Application system (ERAS)** is the central application for residency. <http://www.aamc.org/programs/eras/>
- 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. Think of this as an investment.
- Complete your application by the September 15 opening date to maximize your chances.
- Programs start reviewing applications as soon as they arrive so you have the best chance of an interview if you apply early.
- 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)
- You will start hearing from programs via email in October or even earlier, with the majority responding in mid and late November, into February. (see "TIMELINE" Fourth year of Medical School section)

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?

- The recent opening 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?"
<http://www.nrmp.org/data/resultsanddata2011.pdf>
- It is a numbers game and you want to maximize your chances of matching.
 - According to the 2011 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.
<http://www.nrmp.org/data/chartingoutcomes2011.pdf> P 47
 - Said another way, the average US senior who matched ranked 13.3 programs whereas the average US senior who did not match ranked 6.3 programs.
Table DR-1, Summary Statistics, Diagnostic Radiology, from NRMP Charting Outcomes (<http://www.nrmp.org/data/chartingoutcomes2011.pdf>, p 45)
- 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.** Unfortunately, geography counts, so students from more competitive regions should apply to more places. *For some people it may be 20 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 open spots in the past, but don't count on it. (see "MATCH WEEK!" section)

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" experience 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.
- That said, **there are wonderful programs, world-class teachers and mentors, and gratifyingly affordable life-styles waiting in unexpected places.**
Also, remember, that even with only 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 target, less competitive) and spread your nets wide geographically and apply off the beaten trail.
- It's best to apply to a broad range of programs in a limited number of geographic locations that you like. 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 knows why you are applying to some place unexpected - "Always lived in New Jersey but my whole family has now moved to North Dakota and I'd like to be near them."

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 your interview, you can ask for the ranking on radiology board scores.
- Talk to prior students from your medical school at the programs about their impressions.
- ACGME: check accreditation.
- NRMP: check for match violations.
- Aunt Minnie: Buyer beware (see "AUNT MINNIE" section).

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

- The Midwest, rural areas – give a reason why you want to be there.

For additional information, please review the following article from the August 2011 *Choices* Newsletter: [How to choose residency programs that best fit](#)

COUPLES MATCH

- Couples matching makes the process much more difficult.
- You both must apply to more programs than you would as an individual. Again, it is a numbers game.
- Shoot for regions where there is a lot of overlap and where there are a lot of programs.
- If one of you gets an interview at an institution or area and the other does not, communicate with those programs to let them know about your situation.
- Both people are regular NRMP matches: Make paired rank lists.
- One of the couple is an early match (ophthalmology, urology, etc.)
 - The good news is the early match results come out before the regular match rank deadline.

- The key is once again communication with the programs in the area. Let them know the situation instantly – i.e., that you are ranking them number 1 (if you are) or that you will be ranking the programs in the area highly.
- For additional information, please review the article in the Winter 2012 *Choices* Newsletter: [Navigating the Match as a Couple](#)

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 "SHOULD I SEND THANK YOU NOTES AFTER INTERVIEWING?" section)
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. e.g., "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 Program Coordinators by first name.
- Use an appropriate, identifiable email name.
- Make sure your contact information is there like email and telephone(s) - have a signature block

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.

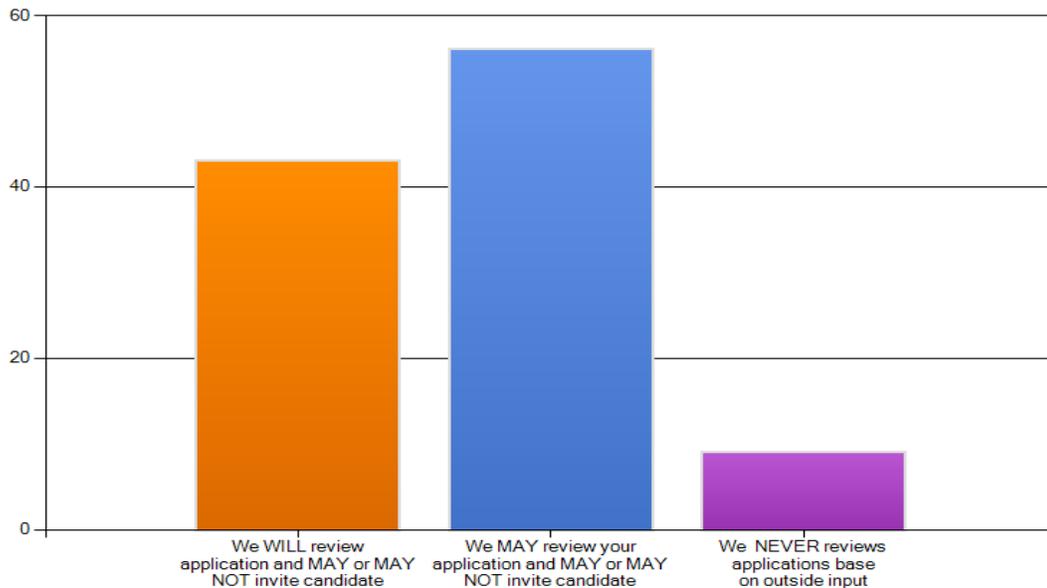
- They are looking for reasons NOT to interview, and these may be fairly superficial, especially towards the end of the application season.

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.

Regarding candidates contacting your program for an interview if candidate has not heard from your program (please check all that apply):



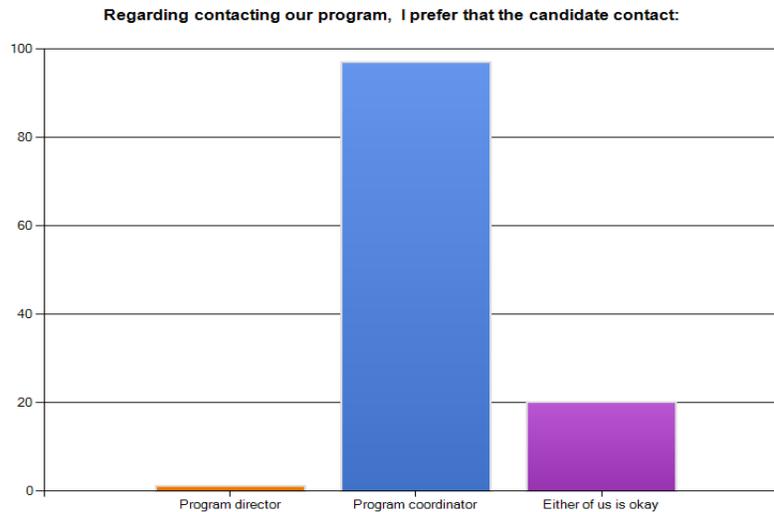
AMSER Program Director survey (Neutze J, 2010)

Which programs to contact:

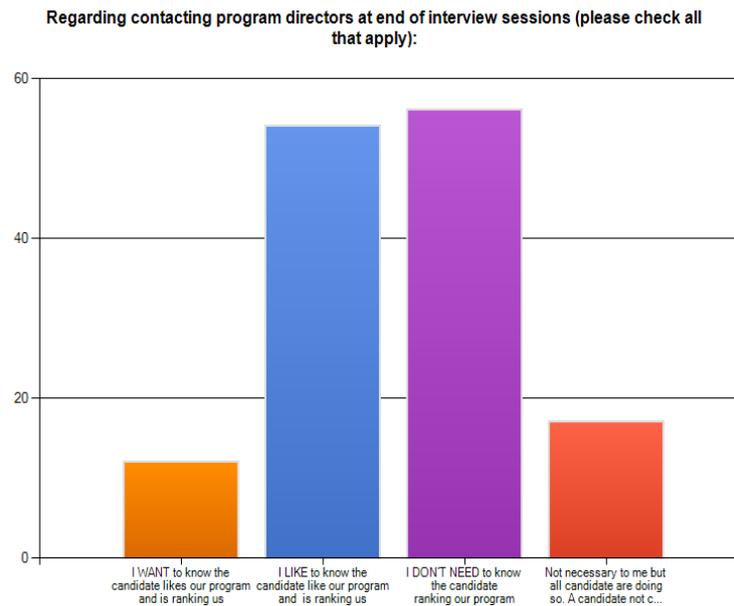
- Choose your top programs - e.g., your top 10.
- Programs you haven't heard from.
- Programs that have sent you a rejection.
 - Try these **only if you are realistically competitive at and obsessed with a particular program/locale** - some initially-excluded students have gotten interviews and matched at programs this way.

Who to contact:

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



AMSER Program Director survey (Neutze J, 2010)



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 have more control - it is more difficult to mess up.
- Phone call - a pleasant call to a coordinator can be more personal, but...
 - You may have to rehearse what you will say.
 - If you call when he or she is busy, it could be annoying.
 - Cell phone calls may be hard to hear. Consider land lines.
 - The call may be forgotten/the program director may never get notice of your inquiry.
 - 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, but keep it VERY BRIEF, just enough to catch their interest. e.g., your medical school, grades, board scores, AOA/awards, publications, updates, etc.

NOTE: Don’t be offended if the program directors do not reply - 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

Good professional email address

Reliable phone number

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

- Variable - 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 may be a hard year, but less competitive.

- It may be an advantage for radiology – as you learn anatomy and procedures.
- Try a less busy program that has less “scut” and more hands-on work to learn the “what & how.”
- Since these may be less competitive, 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, with at least one “safety” program.
- However, if you want to have options for a prelim year then take that application seriously as well.
- Don’t count on unfilled positions to scramble into as they are becoming less common. (see “MATCH WEEK!” section)
- The majority of programs you interview at for radiology are for advanced positions and do not include the intern year.
- Some programs do include the intern year, which you do not need to interview for separately.
- Some radiology programs offer an intern year at the same institution (with same day interview) but you have to rank and match them separately.
- Other programs let you rank them for both 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?
- Do you want to get intense training?
- Do you want to be in Hawaii for a year?

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 times a day, or have someone else 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. They may fill your spot while you are delaying.
- 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 may be preventing another student from an interview.
- But 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.

It is a small world - not acting professionally gets around!

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.

Get there 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.
- Try websites such as <http://www.betterbidding.com/>

Planes:

- Plan on paying a lot for your tickets because the priority is getting to your interviews. Try to use one airline, and a flexible one, so you can change reservations at the last minute without paying a premium, e.g., Southwest.
- Carry on everything you need for the interview (interview garb, professional portfolio pad, pen). 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 may be a cheap way).
- Most programs will validate your parking so bring you parking ticket into the interview.

PREPARATION

- Practice interviewing:
 - If there are workshops at school, attend these.
 - Arrange for a dress-rehearsal mock interview with a faculty member you don't know.
- Find out **exactly where** and **what time** your interview day begins.
- You can 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).
- 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. During the interview you can refer to the questions, and also show the preparations you've made.
- You can send **new information/updates** and/or bring it to the interview: New research, AOA election, brilliant Step 2 scores (see "When you can contact a program directly" section)
If you have updates after the interview, send them also.
- Carry with you:
 - Copies of your CV in a nice folder /binder to hand to the interviewers, and consider the following:
 - i. On nice paper
 - ii. In color
 - iii. With color photo printed in corner: same as that on ERAS (that looks like you at the interview – hair, clothes)
 - Copies of publications/abstracts printed out to hand to interviewers if needed.
- Know everything on your application, including exactly what research project was.
- Have a nice pen to write with at the interview – no pharmaceutical "freebies" of any kind.
- Dress neatly & conservatively (hopefully the same on your picture)
They should think you know the unwritten rules.
 - Clothing doesn't have to be all black: a little color is okay – e.g., interesting blouse or tie.
 - Avoid trendy fashions.
 - 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 want an allergic reaction.
 - Limit external ornamentation.
 - Comfortable shoes that you can walk long distances in.

For additional information, please review the following article from the November 2010 *Choices* Newsletter: [Prepping for 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/not come here?

DINNER THE NIGHT BEFORE

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

- Programs may host 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 at the dinner
- **Most programs listen carefully to resident opinions about candidates.**
- Be kind and considerate to your fellow candidates – programs are interested in team players.
- Let them know ahead of time if you have special dietary needs.

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 resident who may be rude to technologists, nurses and secretaries in future.
 - Coordinators also have the power to help you, so treat them well.
 - YOU ARE NEVER “OFF THE RECORD.” Sorry, but it’s true.
- 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 gods, or letting on how much you hate snow when interviewing in the snowbelt.
- Don’t fall asleep during the Chairman's presentation (yes, it’s happened!).

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.

SMILE ☺!

Write notes right away to help you write thank you notes (if you do so) and especially during ranking the programs. Otherwise the details of the programs will run together.

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.
 - Most of the questions you will get are phrased like this:
"I see on your application..." or "Tell me more about ..."
- Why did you apply here (second most common)?
- Tell me about yourself- have a nice 4-5 sentence synopsis about YOU. 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
- 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?
- What seminal papers has your letter writer written?
- What was your worst hospital experience?
- 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.
- Where do you see yourself in 10 years?
- Tell me about your research.
- Why don't more residents go into (Peds Rads, IR, etc)?
- I notice you play...insert name of sport, instrument.
- What do you like to do for fun? You can say something that is not on your application. e.g., "I like to go fishing" but don't stop there.
- What was your biggest mistake?
- 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? Cliché, but you will definitely get this question. Prepare an example of each, and for your weakness, discuss how you are trying to improve it.
- 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.
- Tell me about a decision you've made in the last year.
- Tell me about a bad decision you've made.

- Tell me a joke (!!). Be careful.
 - What was the last museum (theatre, movie, public park) you saw?
 - What was the last/favorite book you read/movie you've seen? 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.
- And occasionally an interviewer just sits there, silent, to see your reaction...try not to babble.

There is simply no way to anticipate or prepare for some things. Should you freeze and flail, practice saying "I am sorry, I've never thought about that question. Let me think and then start talking again." And smile a lot.

- Where are we on your rank list?" (ILLEGAL!!! Be tactful and evasive e.g., "I am still putting a lot of thought into my list and I haven't finished interviewing yet")
- And of course that great conversation-stopper: "Do you have any questions for me?" Make sure you do! 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!). Don't ask questions that were answered at general sessions unless you want clarification; it makes you look like you were not paying attention.

Write questions down, it's ok to look at your notes.

- Has your new Chairman changed the department significantly? Are more changes to come?
- You have an animal MRI research lab. Can residents become involved in projects?
- What kind of equipment do you have? (but do the research first about what is available and what it means - and what they have on the website already)
- Research opportunities? Is there protected time for research?
- How much didactic/case conference lectures are there? Is this time protected for the residents?
- Teaching responsibilities for the residents?
- I see that you have 6 IR fellows, how does this affect resident opportunities for hands-on training?
- What kind of attending backup is there on call?
- Any changes to the program in the future?
- Patient population? Not if this is obvious from the website or situation – VA hospital, County hospital.
- Do residents rotate at other hospitals?
- 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.

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?
- Benefits like meals, health insurance, vacation, pay, etc.?
- 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?
- Is moonlighting available (be careful, sometimes this is a “don’t ask, don’t tell” issue)?

For additional information, please review the following article from the October 2011 *Choices* Newsletter: [Interviewing residency programs](#)

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 general and 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. Makes it seem like you liked their pretty website-only! 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 (e.g., concert level pianist who has only played at school concerts).
- 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,” and then asking 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 overdo it.
- 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.
- 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.

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/facility library?

- Teaching files, ACR discs
- AFIP funding

Opportunity to do cases

- Do the fellows stand in the way?
- Procedure log numbers
- Pick a particular procedure:
e.g., Nephrotomies - 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 into 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 has the staff trained?
- Is there a section of the department that is particularly strong or weak?

Is the Program Director approachable?

- Is s/he a resident advocate?

PACS/RIS/HIS

- Which type?
- Future plans?

Volume/types of cases at the hospital(s)

- Admissions
- Surgeries
- ED visits – Trauma Center?

Facility

- Radiology equipment
- Physical plant
- Day Care service
- Cafeteria
- Future expansion

Relationship of Radiology and the rest of the hospital

- Medicine/Specialties
- Pediatrics
- General Surgery/Other surgery specialties
- OB
- 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 a 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 and cultural activities
- Sports

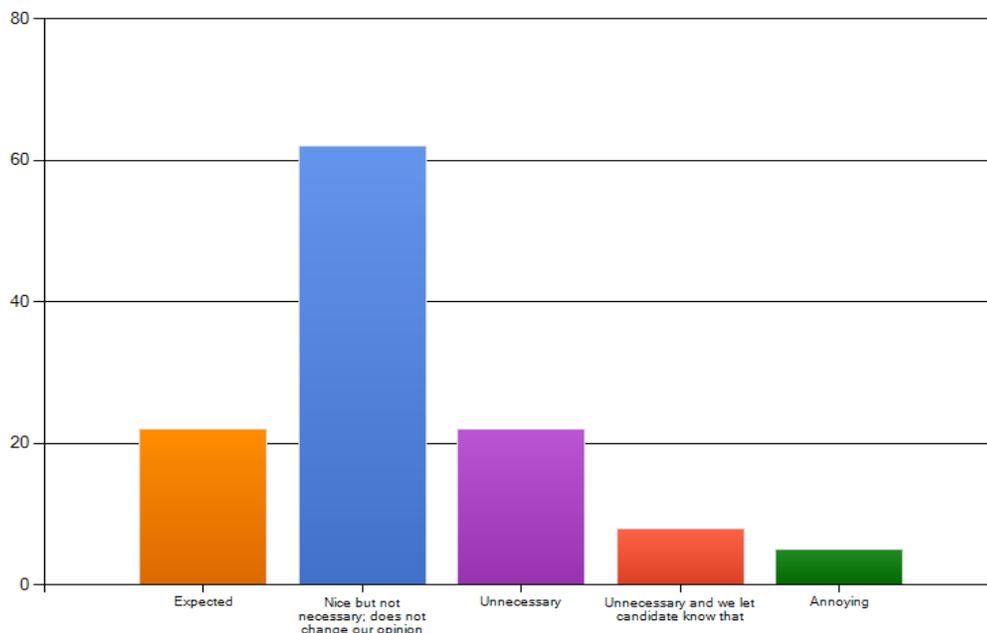
SHOULD I SEND THANK YOU NOTES AFTER INTERVIEWING?

- No easy answer as you can see from the survey responses below.
- 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 manner. Ask up front for PD preferences – some will ask you not to.
- Between the time of 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.
 - "I will rank you at the top of my list" tells the PD that their program doesn't merit the "gold medal." This may hurt the student.
 - Write "you are my number one choice" to **ONE program only**. Radiology is a small world and it will haunt you if you do this to 2 programs. Wait until January to write this.

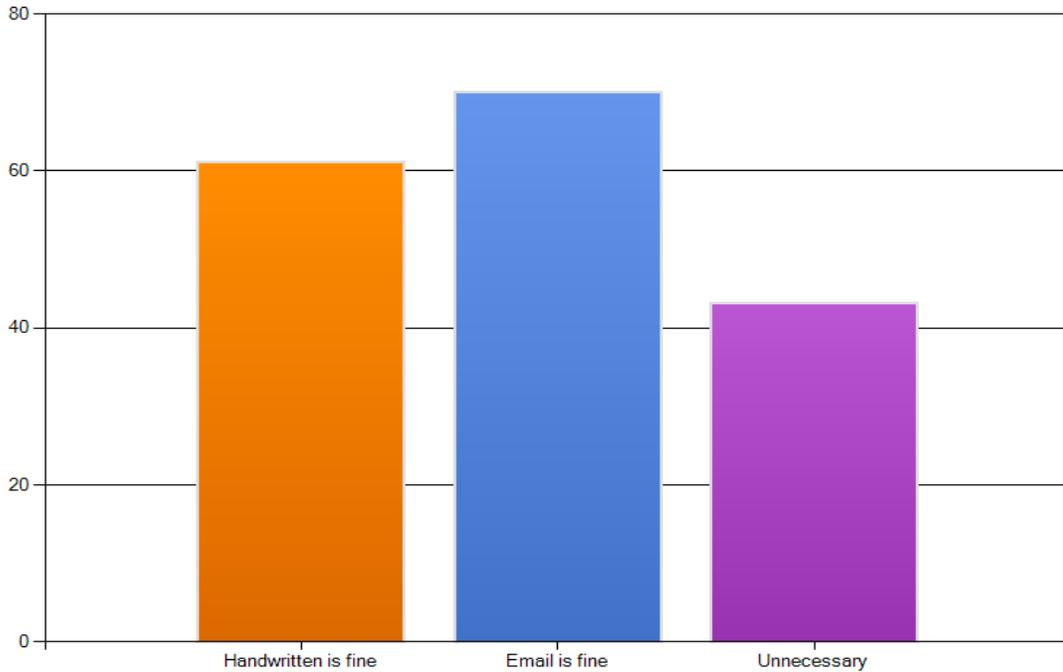
Email or handwritten letter or computer written?

- **Email:** Everyone checks email regularly and can reply easily. This is probably preferable. (see survey below)
- 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 your picture.
- Handwritten - Time consuming and costly, and penmanship may be an issue... although some program directors said it showed true interest.
On professional-looking stationery only – nothing cutesy. No white-outs or cross-outs.

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



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



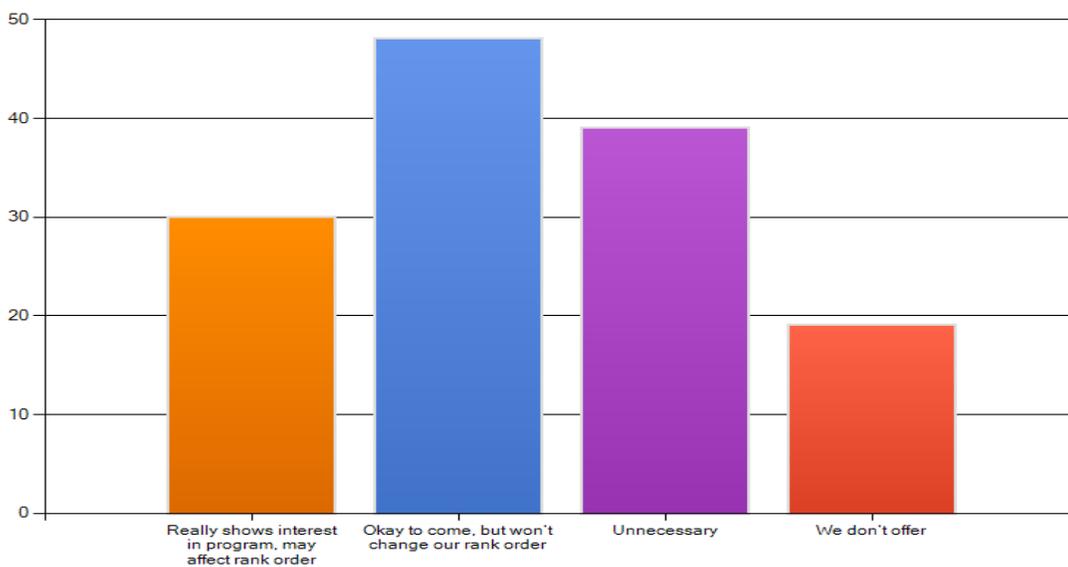
AMSER Program Director survey (Neutze J, 2010)

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.

The 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:
http://www.nrmp.org/res_match/about_res/algorithms.html
- 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 him or 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/family in the city? Research or IR experience? Happy residents?
(See "LIST OF THINGS TO CONSIDER AT THE PROGRAMS WHEN INTERVIEWING AND RANKING" section)
- Rank all programs that you interviewed at, unless you really hated a particular place - but consider whether you would rather not do radiology than match there. Be realistic. 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! The computer algorithm DOES favor the applicant.
Do NOT rank places you WOULD NOT go to.
 - 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.
 - Don't try and work in your interpretation of the likelihood of matching, you are likely to be wrong and it doesn't matter, list in the order you want.
- 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 on that list.
- Consider including a preliminary program not hitched to a residency in case you fail to match into radiology.

Correspond with your top programs once more before they rank. (See "WHEN YOU CAN CONTACT A PROGRAM DIRECTLY" section)

- 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 finished my interviews, I wanted to tell you how impressed I was with your program. I am ranking you number one, and would be honored to join you in 2---. I hope you will keep me strongly in mind."
- **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 a handy answer ready – something positive, appreciative, but noncommittal:
"Thank you, I am flattered and thrilled. You will be high on my list, but I haven't finalized it yet."
- 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/your advocate! There are significant repercussions 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 12 noon 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.

Supplemental Offer and Acceptance Program Days (SOAP)

- SOAP is the process through which positions offered by unfilled programs will be accepted by unmatched applicants during Match Week.
- SOAP replaces the "Scramble" and provides a standardized and uniform process for obtaining post-match appointments.
- All applications to programs are done via ERAS. Unmatched candidates select programs via ERAS starting on the Monday. Programs can contact candidates after reviewing applications. Candidates do NOT contact programs directly.
- Positions offered and accepted during SOAP establish a *binding commitment* enforced by the Match Participation Agreement.

Friday Match Day:

- Depends on the medical school:
 - Breakfast or lunch.
 - Applicants receive the envelopes containing their match, privately or publicly.

SOAP OVERVIEW:

For additional information, view the following article from August 2011 *Choices* Newsletter: [Cleaning up the Scramble with SOAP](#)

- Applicants must be unmatched or partially matched and must be able to enter GME on July 1 in the year of The Match.
- Your SOAP status will be sent to you the Friday before Match week. This does not mean you did not match. It only establishes that you can use the SOAP process if you need it.
- SOAP is a series of "rounds" that commences at 12:00 noon eastern time on Wednesday of Match Week.
- At 12:00 noon, the first SOAP offers are extended through the R3 System to the unmatched applicants listed at the top of programs' preference lists. Offers are extended to as many applicants on a program's preference list as there are unfilled positions in that program.
- Each "round" of SOAP lasts two hours, during which applicants can accept or reject any offers they receive.
- Offers are sent at 3:00 p.m. Wednesday, 9:00 a.m., 12:00 p.m., and 3:00 p.m. on Thursday and Friday. SOAP concludes at 5:00 p.m. eastern time on Friday of Match week.

SOAP Specifics:

- Beginning at 1:00 p.m. EDT on Monday, you can log into ERAS to create and designate applications for unfilled programs. ERAS will send your applications to programs beginning at 2:00 p.m. EDT.
- Between Monday at 12:00 noon EDT and Wednesday at 12:00 noon EDT, you can submit 30 applications to unfilled programs.
- Between Wednesday at 12:00 noon and Thursday at 12:00 noon, you can submit 10 applications to unfilled programs.
- Between Thursday at 12:00 noon and Friday at 12:00 noon, you can submit 5 applications to unfilled programs.
- You can initiate contact with unfilled programs only through ERAS. You cannot use phone, fax, email, or other services to contact unfilled programs, and you cannot have another individual or entity contact programs on your behalf until programs have initiated contact with you.
- You can accept positions only through SOAP during Match Week.
- The first SOAP round commences at 12:00 noon EDT on Wednesday of Match Week. Go directly to the R3 system to learn if you have been extended an offer during a round. You also can check your email for a notification from the NRMP regarding offers extended to you.
- Click "View Offer" on the SOAP Offers page to access information about a position offered. The "View SOAP Offer" page provides basic information about the program and links to accept the offer or reject the offer.
- In rejecting an offer, you acknowledge that you will not receive another offer from the program.
- For applicants who receive multiple offers in a SOAP round, the R3 system automatically lists any concurrent year offer as rejected once an offer has been accepted.
- If you do not accept or reject an offer, it will expire at the end of the SOAP round. Expired offers will not be extended again.
- You can confirm from your SOAP Offers page that you have accepted the offer. You also receive an email from the NRMP confirming your acceptance. The NRMP recommends that you keep copies of all SOAP-related emails.
- The R3 system captures in real time the offers accepted and rejected by applicants. Accordingly, once you accept a position, you are listed as *Unavailable* on other program preference lists so that subsequent offers are not extended to you for positions for which you now are ineligible.
 - If you accept a preliminary position, you no longer are listed as *Available* on other preliminary or categorical program preference lists, but you still would be listed as *Available* on advanced program preference lists in order to assist you in securing the full course of training.
 - This is especially important in Diagnostic Radiology because some programs are Categorical (encompass intern year and 4 years of radiology) and most are Advanced (do not include an intern year).

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.
- Be strong and positive-it IS better on the other side of medical school! Best wishes!!

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/chartingoutcomes2011.pdf): Characteristics of Applicants Who Matched to Their Preferred Specialty in the 2011 NRMP Main Residency Match
This report documents how applicant qualifications affect match success.
<http://www.nrmp.org/data/chartingoutcomes2011.pdf>

<http://www.nrmp.org/>
<http://www.nrmp.org/data/advancedatatables2010.pdf>
<http://www.nrmp.org/data/programresultsbyspecialty.pdf>
- [Information for ERAS applications](#) from the main AAMC/ERAS site
- How the Matching Algorithm Works:
http://www.nrmp.org/res_match/about_res/algorithms.html
- [Links for radiology residency program information](#) from the RSNA
- [Main Frieda website at AAMC](#) for finding programs in any specialty including internships

UPCOMING CHANGES TO RADIOLOGY RESIDENCY

Affects classes entering after 2010 with first Core Exam 2013, and Certifying Exam in 2015

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.
- Half 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.