Becoming a Pediatrician

Your Guide to Exploring Pediatrics, Matching for Residency, and Starting Intern Year
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# Table of Contents

- **Pediatrics: An Attractive Career**
  
  David Tayloe III, MD and Daniel Schumacher, MD, MEd

  4-7

- **The Pediatrician’s Role in Advocacy**
  
  Gilbert C. Liu, MD, MS; Nancy L. Swigonski, MD, MPH; Jennifer Wollford, DO, MPH; and Katherine Snyder, MD

  8-9

- **Pediatric Interest Groups: Explore (or Start!) Your Group Today!**
  
  Keith P. Pasichow, MD

  10-11

- **The First 3 Years of Medical School: Dive Right In!**
  
  Paola Dees, MD; Kristina Betters, MD; and Katherine Snyder, MD

  12-15

- **Research in Pediatrics During Medical School**
  
  Linda Tewksbury, MD and Janice Hanson, PhD

  16-19

- **Early in Fourth Year: Working Closely With Your Pediatrics Advisors**
  
  Lyuba Konopasek, MD and Sandra M. Sanguino, MD, MPH

  20-23

- **Applying for Residency: Weighing the Options**
  
  David Levine, MD

  24-27

- **Combined Pediatric Residency Programs**
  
  Mark Hormann, MD

  28-31

- **Letters of Recommendation**
  
  David Levine, MD

  32-35

- **The Personal Statement**
  
  James Stallworth, MD and Cynthia Christy, MD

  36-37

- **The Road to Residency: Application Timeline**
  
  Pradip Patel, MD

  38-41

- **The Interview**
  
  Renee B. Staggio, MD

  42-45

- **The Residency Match**
  
  Angela Mihalic, MD; Robert Drucker, MD; and Michael Barone, MD, MPH

  46-51

- **Surviving and Thriving During Intern Year**
  
  E. Ann Thyssen, DO and Paola Dees, MD

  52-59

- **Work/Life Balance**
  
  Shale Wong, MD, MSPH and Angela Sharkey, MD

  60-63

- **American Academy of Pediatrics: Join Us, Get Involved!**
  
  Jennifer Linebarger, MD and Sara Slovin, MD, MSPH

  64-66
Pediatrics: An Attractive Career
David Tayloe III, MD and Daniel Schumacher, MD, MEd
It is no surprise that general pediatricians report greater satisfaction with patient relationships than any other specialists. Children make you smile; they create an ideal work environment when they walk in the door.

Pediatrics offers excellent job satisfaction, ample employment opportunities, and a great deal of flexibility. General pediatricians are less likely than any other specialist to have concerns about a lack of personal time and more likely than other physicians to recommend their specialty to a student seeking advice.1

According to the 2015 AAP Third-Year Graduating Resident Survey, 93% of graduating pediatric residents report that they would choose pediatrics again and 98% were employed by their residency graduation date.

Pediatrics offers flexible work-hour arrangements. Among those who accepted a general pediatrics or hospitalist position after residency (excluding those who accepted fellowship, chief residency, and other positions), 11% accepted part-time jobs.2

Pediatricians Are THE Specialists for Children

Pediatricians complete 3 to 6 years of comprehensive training in the care of children after completing medical school. All pediatricians complete a 3-year pediatric residency, after which they are eligible to take the board examination for certification in general pediatrics. To become a pediatric subspecialist, pediatricians must complete additional fellowship training (3 years for most subspecialties), then pass a subspecialty board examination. This extensive and intensive training in healthcare for children and adolescents is unique to pediatrics. As a result, every other specialty, from family medicine to neurosurgery, looks to pediatricians for expertise in child health.

General Pediatrics Is More Than Just “Well-Child Checks”

Children are impressionable; early environments and experiences influence fundamental life choices. The patient education that pediatricians offer is potentially life-changing.

As specialists in child development, general pediatricians conduct complex assessments during well-child visits. A typical check-up includes the following meaningful and necessary features:

- The opportunity to form deep and lasting relationships with patients and families as the nucleus of a team-based approach to child health
- The joy in helping children grow healthy from birth through adolescence
- The responsibilities of health supervision, including those of the first physician to make diagnoses that signal a need for immediate attention and further investigation
- The privilege of counseling families during difficult times or medical crisis
- The satisfaction of managing many pediatric illnesses without the assistance of subspecialists

This is in addition to the opportunities for pediatrician to participate in nursery care, hospital inpatient management, procedures, behavioral health, and the vast array of conditions that fall in the general category of the “sick visit.”

Pediatrics Is More Than General Pediatrics

For many pediatricians, the 3-year general pediatric residency is the portal to further training in one of the many pediatric subspecialties. Pediatricians must complete a fellowship, 3-years for most, to become pediatric subspecialists. The pediatric subspecialties include:

- Adolescent Medicine
- Allergy and Immunology
- Cardiology
- Child Abuse and Neglect
- Critical Care (Pediatric ICU)
- Dermatology
- Developmental and Behavioral Pediatrics
- Emergency Medicine
- Endocrinology
- Gastroenterology and Nutrition
- Genetics
Many pediatric subspecialties are currently experiencing workforce shortages or will likely experience such shortages in the near future, making the need for more pediatric subspecialists greater than ever.

Unparalleled Ability to Advocate for Your Patients

Opportunities in public health, international health, health policy, and administrative leadership continue to grow. In addition, administrators, educators, and policy makers need reliable advice about the needs of children, and pediatricians are the experts who can provide that guidance. From leading grassroots efforts to testifying before Congress and meeting with lawmakers, pediatricians identify the important problems facing children, and work to protect and promote the health of children in a meaningful way.

Bottom Lines

Pediatrics is a rewarding, engaging, and flexible specialty. Both general and subspecialty pediatrics accommodate a variety of practice settings and styles. Hospital-based medicine is increasingly popular among general pediatricians, although many continue to pursue rewarding careers as office-based physicians. Many pediatric subspecialties offer a mix of inpatient and outpatient practice models, while others allow a focus in one of these settings.

As more children are cared for by pediatricians rather than physicians from other specialties, opportunities for pediatric generalists and subspecialists continue to grow. Pediatricians are needed in direct patient care and also to serve as educators, mentors, and researchers. If these opportunities sound appealing, consider the extraordinary rewards and satisfactions of a career in pediatrics.

References

The Pediatrician’s Role in Advocacy
Gilbert C. Liu, MD, MS; Nancy L. Swigonski, MD, MPH; Jennifer Wolford, DO, MPH; and Katherine Snyder, MD
Abraham Jacobi, MD, a physician who immigrated to the United States from Germany in 1853, is given credit for establishing departments of pediatric medicine in the nation's hospitals. Dr. Jacobi believed that most clinical issues confronted had their roots in some aspect of community health. Pediatricians have a responsibility to address these social determinants for the health of all children.

Today, pediatricians and pediatric organizations must be effective advocates for child health and well-being. Pediatricians advocate at many levels, including direct patient care, the community (local or national), and the legislative arena. Advocacy in the direct patient care context occurs every time a pediatrician accesses services for or educates children and families about health and safety. Pediatricians can also work to achieve systems-level change by collaborating with the greater community to lead organizational change that promotes health and safety. Some examples of pediatric public health advocacy include the AAP Back to Sleep campaign to end Sudden Infant Death Syndrome, initiatives to discourage cigarette advertising targeting adolescents, and efforts to persuade local school boards to remove sodas from school cafeterias. Successful legislative efforts have included the 2010 Patient Protection and Affordable Care Act, the State Children’s Health Insurance Program (SCHIP), Project Head Start, the Flammable Fabrics Act Amendments, the Vaccines for Children Program, and the Poison Prevention Packaging Act, which decreased aspirin deaths in children by 65%.

Pediatricians have a responsibility to participate in initiatives that promote healthy growth and development for children.

Advocacy work in pediatrics can begin during medical school. Medical students can testify at legislative hearings, help to run clinics for underserved children, write op-eds to their local newspapers on a topic they are passionate about, and/or work with pediatric interest groups to identify and engage in meaningful advocacy initiatives. The AAP Section on Pediatric Trainees implements an annual advocacy campaign centered around critical child health issues. Visit our [website](#) for more information on how to get involved with the campaigns.

**Bottom Lines**

A pediatrician understands that an individual’s health depends upon a wide array of influences. These include community-level factors that may be best addressed through education and policies that target entire populations. A pediatrician must look to the future with the perspective that today’s advocacy builds a better tomorrow for children. The AAP offers resources for medical students interested in advocacy because medical students have always been vital contributors to successful child health advocacy.
Pediatric Interest Groups: Explore (or Start!) Your Group Today!
Keith P. Pasichow, MD
During medical school, students experience a wide variety of interesting fields, study for innumerable exams, and help to treat hundreds of patients. For some students, these experiences help to narrow career choices; for others, they only exacerbate the dilemma of having to choose which field of medicine to pursue. For those in the latter category, specialty interest groups may help.

**Pediatric Interest Groups**¹ (PIGs) provide the opportunity to learn about and experience the field of pediatrics starting in the first year of medical school. PIGs sponsor talks and networking events, facilitate mentoring relationships with pediatric residents and faculty, and create opportunities to interact with pediatric patients and explore research interests. By introducing students to the pediatric community and enabling them to learn about the field from a variety of perspectives, PIGs can help students decide whether a career in pediatrics is the right fit for them.

PIGs sponsor talks and networking events, facilitate mentoring relationships with pediatric residents and faculty, and create opportunities to interact with pediatric patients and explore research interests.

The AAP has developed a series of resources, available on our [Medical Student Webpage](https://www.aap.org/en-us/about-the-aap/committees-councils-sections/medical-students/pages/pediatric-interest-groups.aspx) to help guide the development and funding of PIG events. Students, residents, and faculty around the country who would like to create new PIGs have found the [AAP Pediatric Interest Group Resource Guide](https://www.aap.org/en-us/about-the-aap/committees-councils-sections/medical-students/documents/PIGResourceGuide.pdf) to be particularly helpful. Materials in the guide are continuously updated with opportunities and ideas that anticipate questions, concerns, and interests of students exploring a career in pediatrics.

**Bottom Lines**

One of the most exciting (and daunting!) tasks facing medical students is choosing a specialty. PIGs provide a warm welcome to the pediatric community, where students will find opportunities to explore their interest in pediatrics and gain reliable insights into all that the field has to offer for them.

**References**

The First 3 Years of Medical School: Dive Right In!
Paola Dees, MD; Kristina Betters, MD; and Katherine Snyder, MD
While your responsibilities and priorities will shift throughout medical school, certain themes persist. One of those is the importance of engagement in your profession, your specialty, and your training program.

The First 2 Years of Medical School

Time is at a premium during medical school, especially at the start. Finding the time to gain clinical experience and solidify specialty interests is among the biggest challenges. The key is to capitalize on existing opportunities to get involved within your school or community, and when opportunities to suit your specific interests are not available, partner with faculty that will support you in pursuing these interests.

Pediatric Interest Groups (PIGs) can be a great way to learn more about the field of pediatrics during medical school. If the school does not yet have a PIG, the student might approach their faculty or administration about forming one. (Please see previous chapter for more details in regards to PIGs).

Pediatric faculty, residents, and fellows are fantastic resources. Most physicians at teaching institutions, including clerkship directors and residency program directors, are delighted to talk with medical students and willing to be shadowed. Inquire about attending pediatric grand rounds to learn more about the field and hear notable speakers from outside institutions.

The pediatric chief resident often works closely with medical students; he or she can be a great liaison to the faculty. Chief residents can also advise about other opportunities, including volunteer options within the community. If a consistent time commitment is not realistic due to scheduling constraints, consider volunteering for a school health fair or educational event for local children. If none exist, recruit some students and hold your own event for local children!

Finally, upperclassmen can serve as great resources. Seek out third- and fourth-year students who have declared their interest in pediatrics and discuss the ways they explored pediatrics in their first 2 years of medical school.

The Third Year of Medical School: Tips for Successful Clerkships

Before beginning your third year, find a few trusted senior students and discuss their thoughts on how to succeed at your medical school during your clinical rotations. They will likely focus on the importance of professionalism, medical knowledge, and communication.

Professionalism

- Professionalism is key to your success during your third year. Arrive early, dress appropriately, work hard, and act professionally at all times.
- Treat every member of the health care team with kindness and respect. You can learn something valuable from every member of the healthcare team, including nursing, the respiratory therapist, etc.
- Be compassionate. Empathize with your patients and their families. Try to think about things from their perspective. You don’t have to be a parent to imagine how frightening it can be to have a sick child. Spending a few extra minutes actively listening can provide an enormous amount of comfort to an anxious family.
Be enthusiastic. Go above and beyond! Residents and attendings can identify disinterest and negativity, as well as genuine enthusiasm. Their observations will be reflected in the final evaluations. Those who invest time and effort to learn more find that their residents and attendings invest more time to teach and mentor in return.

Be a team player. Offer to help others.

If people around you make inappropriate comments, jokes, or gestures, do not follow their example. Be a model of humanism and respect for others.

Medical Knowledge and Patient Care

Take ownership of your patients’ care and show initiative. Go beyond reporting facts: become an investigator, interpreter of data, and an advocate. Make an active effort to anticipate and solve problems. Research possible management plans and present them to the team.

Read about your patients and their conditions, come up with a differential diagnosis, follow up on consults and labs, and check in on patients during your downtime. Use each patient encounter as a learning opportunity. What would be your next step if you were solely responsible for their care?

Speak up and show what you know! Don’t be afraid to answer questions confidently and contribute. At the same time, be careful not to think — or act — like a “know-it-all,” always remain open to other’s ideas and open to learning new things.

Document precisely, thoroughly, and accurately. If you did not check it, don’t write it in your note. It is better to omit information than to include false information.

Study! Use resources recommended by your clerkship directors and be proactive about studying. Do not wait until the last week of the rotation to begin reading. Set aside time every day to cover core curriculum topics and review practice questions.

Challenge yourself. Third year students often have more free time than fourth year students, interns or senior residents during the day. This is your chance to shine! Find the answer to a clinical question raised on rounds, look up an evidence based guideline that addresses optimal management of a condition you are facing, help expand a complex differential. You can directly impact patient care, even as a novel clinician, if you put in the extra effort.

You may be a student, but you can also be a teacher. Incorporate what you’re reading and learning into your presentations on rounds. You will elevate your own performance, as well as the performance of your entire team.

Communication and Feedback

Know the expectations of your clerkship director, attendings, and residents. Ask for guidance at the beginning and midway through the rotation. Knowing expectations at the outset of your rotation will ensure a smooth transition. By checking in at the midpoint, you will show that you’re genuinely interested in meeting and exceeding their expectations. It will also allow you time to proactively remedy your performance prior to your final evaluation being submitted.
When asking for feedback from your team, ask for tangible examples of your perceived strengths as well as areas for improvement. The best way to learn is to get constructive advice and to challenge yourself to integrate what you’ve learned into your repertoire. This is how you will become a better clinician. Communicate openly and honestly with patients and their families. Explain your role and offer to help them. However, do not answer questions if you are not certain of the answer. If you do not know something, simply state that you will help them find the answer. Always circle back with the family to close the communication loop once you have identified their concerns.

Communicate proactively. Check in with the supervising resident before rounds in the morning, throughout your shift, and again before you leave at the end of the day to exchange information and ensure that all outstanding issues are addressed.

Don’t be shy to ask for help. Residents and attendings are often distracted with their own clinical responsibilities. They may take for granted that your silence equates to self-reliance. You’re a third year student; you’re not expected to know everything! Even a few minutes of coaching may prove tremendously helpful with workflow efficiency, documentation, presentations, or even core concepts you’re struggling with.

Make your rotation what you want it to be. If there are certain experiences you’re interested in—whether it’s watching a lumbar puncture, going to the OR to follow your patient, or mastering certain curriculum—make it happen! Discuss your objectives with your supervising residents and attending to ensure they can help you achieve your goals.

Bottom Lines

The first 3 years of medical school reveal the extent to which medicine is a team endeavor. An effort to communicate, document, show respect, and seek out advice will both ease and enrich the learning process.
Research in Pediatrics During Medical School
Linda Tewksbury, MD and Janice Hanson, PhD
Pediatrics offers many exciting opportunities in research, including basic science research, epidemiology, translational research, clinical research, quality improvement, and pediatric health services research. Pediatric clinician scientists are growing in numbers and funding, with the National Institutes of Health (NIH) funding for research in pediatrics totaling about $3.6 billion in 2015. If you are considering a career in academic pediatrics, you may have questions about doing research, such as the following:

**How Might Research During Medical School Help Me Excel in a Career in Pediatrics?**

While pediatric residencies do not require applicants to have research experience, such experience in medical school can be very valuable to the student considering a career as a clinician scientist or as an academic pediatrician.

You may have the opportunity or even be expected to do some research in residency, thus having the experience as a student can give you a head start on a clear idea for a pediatric research project, or at least provide insight toward a general research topic of interest. Furthermore, it may even position you to be competitive for research funding. If you are interested in a career in subspecialty pediatrics, most fellowships require their trainees to complete a research requirement to become board certified in that subspecialty. For those interested in general academic pediatrics, there are fellowships available that will further assist you in refining research skills. Even for students who ultimately choose not to pursue a career in research, research experience provides an important perspective to the practicing clinician, such as expanding one’s knowledge about evidence based medicine and ability to critically evaluate current healthcare practices. While a meaningful research experience can certainly enhance a student’s application for residency in pediatrics, it is not essential and you should only pursue a research opportunity that sincerely interests you.

**When During Medical School Could I Participate in Research?**

Many medical schools have time in the curriculum for students to pursue research during the summer between the first and second year. While it can be challenging to start a new research project during the academic year, many students who start a project during the summer between first and second year are able to continue into their second year and beyond. Opportunities for research electives are generally provided in the third or fourth years. Some medical schools provide the option for an additional fifth year, with opportunities (and sometimes an expectation) that students will get involved in research in some way. Some medical schools have support available for student-led community-based research or a student research day for you to present your findings. Other schools have complete research tracks in which you can focus your study.

**How Can I Find Research Opportunities?**

The best way to begin your search for research opportunities is to think about questions that interest you. Have you always been intrigued by new lab techniques and questions about biology, chemistry, or physiology? Then basic science research holds opportunities for you. Do you want to explore how health policy affects the provision of care for large numbers of children and families? Health services research may hold the key. Do you wonder about the connections between science and clinical practice? The growing field of translational research may help you build this bridge. Once you have an area of curiosity, or even when you’re trying to decide what intrigues you most, you may want to seek out a mentor or advisor in the department of pediatrics, network about research opportunities at a pediatric interest group at your school, visit your school’s department of research, or make an appointment with an advisor in the office of student affairs.
What Sources of Funding Are Available to Support Medical Students Who Do Research?

Some professional groups offer small grants or funding for students to present research at professional meetings. For example, the American Pediatric Society and the Society for Pediatric Research offer a medical student research program that provides 8 to 12 weeks of funding for medical students who want to extend their education by working in research laboratories. Some medical schools offer small intramural grants for medical student research, available through a research office. The AAP provides grant support for community-based research for residents through the Community Access to Child Health (CATCH) grant program, and students may be able to collaborate with a resident on a project funded through this program, or obtain research experience that will position them well to apply for their own grant support when they are residents. The Society for Teachers of Family Medicine also provides some support for medical students to attend meetings to present their work, and students interested in pediatrics may find rewarding collaborations with students interested in family medicine. Finally, faculty who have research funding for their own work often seek students to assist, and the faculty grants sometimes provide some funding support for students’ participation in the research.

What About Other Extramural Funded Programs?

Most offices of student affairs or research at medical schools provide lists of extramural grant funded initiatives that aim to increase student participation and careers in research. The Centers for Disease Control and Prevention and the National Institutes of Health have summer fellowships available, for example. These are competitive programs, so you should investigate early and give yourself plenty of time to complete the application and obtain letters of support from your faculty, offices of student affairs, or past research mentors.

What If I Didn’t Do Any Research and Now I Am a Third- or Fourth-Year Student?

Don’t panic! Many candidates for residency training have not done significant research. Many other relevant extracurricular activities, such as participation in community service projects, student government or medical school committee service, will support and enhance your application to residency training in pediatrics.

Bottom Lines

Research during medical school is a highly valuable but optional part of the overall education of a physician. Pediatricians that have experience with research gain skills that can help them critically analyze and apply the medical literature. Research skills offer one important way to express a commitment to medicine and to improving the health of the children we serve. Finally, experience obtained through meaningful research in medical school may spark a passion for a career as a clinician scientist or academic pediatrician, laying an important foundation for residency and fellowship training and beyond.

References

Early in Fourth Year: Working Closely With Your Pediatrics Advisor
Lyuba Konopasek, MD and Sandra M. Sanguino, MD, MPH
Everyone who is starting down the path to residency application needs a guide. By the end of the third year of medical school, it is important to identify a pediatric faculty member who will serve as your residency application advisor. It is the student’s responsibility to work effectively with this advisor to forge a successful working relationship. Essential elements of success as an advisee include preparing for each meeting, identifying tasks to be accomplished and deadlines, asking the right questions, and listening carefully. Topics to be discussed include those listed below.

1. Grades and Board scores
2. Any “red flags” in your academic record (e.g., unexplained gaps in education)
3. Anticipated problems with interviewing
4. Couples matching
5. Geographic preferences/restrictions
6. Deadlines
7. Career decision (rationale for your choice or reasons for uncertainty)
8. Curriculum for your fourth year
9. Content of your personal statement
10. Your curriculum vitae (CV)
11. Letters of recommendation
12. Potential programs
13. Managing the interview schedule
14. Creating a program rank list for the National Resident Matching Program
15. Practice interviews
16. Advisor available for general counseling/advice

Specific Questions for Advisors

Fourth-year Schedule

1. How many pediatrics electives should I do?
2. What kinds of pediatrics electives should I do? (e.g., subspecialty consult service, sub-internship (sub-I)/acting internship (AI), general pediatrics, ambulatory pediatrics, emergency room (ER), pediatric intensive care unit (PICU)/neonatal intensive care unit (NICU), or others?)
3. Should electives be 2 weeks or 4 weeks long?
4. When should I schedule away electives?
5. Should I schedule a sub-I? During what part of the year should I do a sub-I?
6. When should I take United States Medical Licensing Examination (USMLE) Step 2 clinical knowledge (CK) and clinical skills (CS) tests?
7. Should I do research?
8. When is the best time to participate in international electives?
9. Should I do electives in areas of medicine which interest me but to which I may have limited exposure in the future?

Program Selection

1. What kind of program is a good match for me?
   Consider the following:
   - Program size
   - Children's hospital vs. general hospital
   - Community-based vs. academic medical center
   - Geography (restriction or preference)
2. Lifestyle and call schedule
3. At which programs will I be competitive? What is a reach (long-shot program)? What is a good back-up (safety program)?
4. How many programs should I apply to?
5. How should I balance the number of competitive programs vs. backups? How many of each should I apply to?
Away Electives

1. Should I do an away elective? Where?
   - Is this a reach program?
   - Is this a program that could be my first choice?
   - Will they learn more about me? Will I learn more about them?
   - Does this program offer an area of clinical expertise not available at my own institution?
2. When should I do the elective?
   - What is the last date to influence a program’s assessment of my application before the Match?
   - Is it advantageous to do it earlier or later?
3. What kind of away elective should I do?
   - Consult service in subspecialty (which one?), Sub-I, general pediatrics or other ambulatory experience, ER, PICU/NICU, or other?
   - Where will I learn the most?
   - Where can I shine the most?
   - Where will my work be observed?
   - Will my performance be communicated to the residency program director?
4. Should I make an appointment to speak with the residency program director while doing an away elective?
5. Can I schedule other interviews while doing an away elective?
6. How long should an away elective be?
7. Can I drop away electives? How does that reflect on me?

Letters of recommendation

1. Who will write my letters of recommendation?
2. Should all of my letters of recommendation be from pediatricians?
3. Should I get a letter from an away elective?

Personal statements

1. How long should it be?
2. What is the usual structure?
3. Are there any topics that should be included?
4. Are there any topics that should be avoided?
5. Should “red flag” areas be addressed in the personal statement?

Interviewing

1. What is the optimal timing for interviews? (October/November vs. January)
2. When should I expect to hear whether I have been granted an interview?
3. What kinds of questions will be asked? Will I be asked medical knowledge questions?
4. If there are red flags in my record, how shall I prepare to address them?
5. What should I wear?
6. Should I attend the “optional” social event with the residents?
7. What is the best way to prepare for each interview? What do I need to know about the program?
8. Should I write thank-you letters to each interviewer? Is an e-mail acceptable?
9. Should I tell the program that they are my first choice?
10. What kind of questions should I prepare to ask the interviewer?
11. What questions should I be prepared to answer?
12. Should I expect to hear back from the program if they liked me?
13. At what point is it too late to cancel an interview?
14. How many interviews should I schedule in a week?
15. Do informal conversations with residents during the course of the day influence the Match?
16. Should I go for a second look?

Preparing a Rank Order List for the Main Residency Match

1. How many programs should I rank?
2. How many back-up programs should I rank?
3. Am I at risk for not matching?
4. If I do not match, what happens?
5. Should I send a “first choice” letter or e-mail?
6. Should I send an “I am ranking you highly” letter or e-mail?
7. What should I do if the program director contacts me?

Bottom Lines

The early part of the fourth year of medical school will feature intense demands on your ability to organize and focus, not only in your clinical work but also in the residency application process. Building a successful advising relationship by preparing for meetings with your advisor, taking responsibility for keeping in touch with him or her, and carefully considering the advice you receive, will help to optimize Match results.
Applying for Residency: Weighing the Options
David Levine, MD
The number and variety of residency programs complicate the daunting business of deciding where to apply. It is important to give some thought to personal preferences and priorities before attempting to assess programs. Any accredited pediatric training program can lead to fellowship training in subspecialty pediatrics or a career in general pediatrics, which underscores the importance of choosing a program based on the best personal fit. This section will examine characteristics to be weighed and discussed with your clinical advisor to identify potential programs.

This section describes “regular” (or categorical) residency programs, which offer 3 years of training in pediatrics. Combined training programs, which will be discussed in the next section, provide training in pediatrics and another specialty, such as internal medicine. Factors to consider in evaluating a program are listed below.

**Number of trainees**

Programs may range from 4 to more than 50 residents per year. Smaller programs often offer more individualized attention and perhaps closer relationships with more faculty members. Larger programs often offer more options for clinical training venues, such as continuity and subspecialty clinics, electives, and hospitals. They also tend to have a larger body of faculty with more diverse clinical specialties.

**University-affiliated vs. Stand-alone Programs**

Most residency programs are affiliated with medical schools. In general, university-affiliated programs may offer an advantage in applying for fellowship training, especially for the more competitive fellowship programs. The few existing programs that are not directly associated with medical schools may be excellent choices for students due to location, desired features, innovative rotations, or even direct training in managed care.

**Children’s Hospital or General Hospital**

Training in a stand-alone children’s hospital has advantages and disadvantages, as does training in a general hospital with pediatric areas or floors. Children’s hospitals tend to provide more comprehensive care for children as they are completely equipped for pediatric medicine. Procedures and ancillary services are developed with pediatric care as the centerpiece (child and family friendly), which affects laboratory and radiology services as well as informatics and chart note templates. Also, children’s hospitals tend to have a broader, systems-based understanding of the care of children and their families because they coordinate multiple medical services with a common focus and expertise in the care of pediatric patients.

General hospitals with pediatric units also offer unique advantages. In general hospitals, residents often have more contact with residents from other specialties. A multidisciplinary resident staff in a general hospital facilitates broader cross-specialty resident events, such as a general medicine review for all residents preparing for Step 3 of the USMLE, where internal medicine residents can learn from pediatric residents and vice-versa. Some pediatric areas within general hospitals are also quite robust and developed, thereby minimizing many of the differences between these care settings and those that are found in stand-alone children’s hospitals.
An Institution With or Without Fellowship Programs?

Opportunities to work with fellows during residency are excellent ways to evaluate subspecialty options. Programs with many fellows are also programs that have more teachers for each specialty area because both the faculty and fellows serve as sources of your education. That said, institutions without fellowship programs often allow more direct contact between residents and subspecialty attendings, which can translate to more autonomy for resident decision-making, compared to fellow decision-making, in the care of the patients.

Many residents develop ties to the communities/hospitals in which they do residency and would prefer to complete their fellowships in the same institution. If the training institution has a desirable fellowship program, graduating residents, who are well known to the faculty, may have an advantage in the selection process.

Residency “Tracks”

Certain residency programs have been approved to identify one or more tracks that allow the resident to explore more options relevant to what they wish to do after residency training. Common tracks focus on primary care, community pediatrics, research, international child health, and public health.

The Pediatric Residency Review Committee (RRC) of the Accreditation Council for Graduate Medical Education (ACGME) has requirements for most accredited programs. For example, all programs must offer a block of developmental pediatrics and a block of adolescent medicine rotations. While about two-thirds of resident rotations are stipulated by ACGME, a program’s choices for the remaining one-third will vary according to local staffing (subspecialty rotations) and the orientation of the program towards accomplishing local goals. When considering programs, review the options for elective rotations and those for being part of a track. Does the program use this time to maximize your learning opportunities?

A primary care track often offers extra clinical preceptorship months for residents to explore the various settings for general pediatrics — private practice, managed care, or community neighborhood clinics for the underserved. Others offer more specialized rotations to enhance communication skills. These might include opportunities in child psychiatry or working with parents who are in treatment for addiction. International tracks offer a gateway to an important and expanding field of global health with opportunities to work in a clinical site abroad. Community or advocacy based tracks offer continuity clinics and preceptorships in community health centers. They also often require that students design, implement, and evaluate an advocacy related project or a research project focused on community health. Often, students with a combined interest in public health and pediatrics enter tracks such as this if a separate public health track is not offered. Pediatricians are often leaders in public health in the United States (in the last 20 years alone, 3 pediatricians - Joycelyn Elders, MD, Julius Richmond, MD, and Antonia Novella, MD - have served as US Surgeon Generals!).

Research tracks appeal to candidates with a combined MD/PhD, as well as those with an interest in bench, clinical, or other research. They also provide useful experience for those planning to pursue subspecialty fellowships, which have research requirements.

It is important to remember that residency is a time for exploration. Choosing a program on the basis of certain tracks does not restrict exploration of other types of pediatric practice. Any accredited residency program can lead to fellowship training. Many residents enter general pediatrics tracks and then discover an interest in a subspecialty. Also, every residency program allows elective months, when residents can explore subspecialty or other rotations.

Bottom Lines

The relative importance that an applicant gives to training program features and benefits will reflect his or her individual preferences and priorities. (For example, when an applicant must stay in a given location due to spouse/partner commitments, geography will be critical.) Many residency candidates are relatively unclear about what is most important to them until they actually visit programs during the interview process. This is normal. It is also one of many situations in which a clinical advisor can offer invaluable insight.

References

1. Accreditation Council for Graduate Medical Education: http://www.acgme.org/acgmeweb/
Combined Pediatric Residency Programs
Mark Hormann, MD
Several combined programs are available to medical students interested in training to be board certified in both pediatrics and an adult specialty or pediatric subspecialty. Graduates of combined programs are able to sit for 2 (or in one case, 3) examinations.

The primary advantage to completing a combined residency program is fewer years of training; a combined program can be completed in 1 or 2 fewer years than individual residencies and fellowships taken in sequence. All combined programs truly combine the general pediatric training with training in another area, completing rotations in the respective components of the training program within each year of residency.

The primary advantage to completing a combined residency program is fewer years of training; a combined program can be completed in 1 or 2 fewer years than individual residencies and fellowships taken in sequence.

The most established of these programs combines a pediatric residency and an internal medicine residency for a 4-year medicine-pediatrics (med-peds) training program. Practicing med-peds physicians see patients in clinics and in hospitals. There are 78 such programs in the United States. Residents in this combined program split their time between adults and children, completing 2 years of rotations in each specialty. Some programs have combined ward services and continuity clinics that allow residents to care for both adults and children on the same day, while other programs split the residents’ time between internal medicine rotations and pediatrics rotations. Graduates are able to take both the internal medicine and pediatrics certifying exams.

The pediatrics and medical genetics residency is a 4-year program that combines 2 years of general pediatrics and 2 years of genetics training. (The alternative for those interested in both disciplines is a 3-year fellowship in medical genetics following pediatric residency.) As of this writing, there are 16 such programs in the United States that qualify graduates to sit for both the pediatrics and neurology boards. The 2 years of pediatrics residency must be designed to include all of the core rotations required by the American Board of Pediatrics; residents cannot simply start a pediatrics residency and leave after 2 years to join a neurology residency. Passing the neurology boards results in certification in neurology with “special qualifications in child neurology.” An alternative path is to take 2 years of a pediatric residency followed by 4 years in a program in neurodevelopmental disabilities. As they are not truly “combined” programs, application is a bit different. Some residency programs will coordinate the first 2 years of pediatrics with the last 3 or 4 years of neurology at the same institution, but others do not.

Three programs offer a combined residency in pediatrics and physical medicine and rehabilitation (PM&R). Completion of this 5-year program allows graduates to sit for both the pediatrics and PM&R board examinations. Individuals wanting subspecialty certification in pediatric PM&R will need to complete an extra year of fellowship (and take a third exam) in addition to the combined program. For those who do not elect a combined program, pediatric PM&R training is a 3-year fellowship following either a pediatric or a PM&R residency.

A combined residency in pediatrics and emergency medicine is available through 4 programs in the United States. Five years’ training qualifies graduates to sit for both the pediatrics and the emergency medicine boards. Individuals wishing further subspecialty certification in pediatric emergency medicine require further training. For those who do not choose a combined program, pediatric emergency medicine training involves a 3-year fellowship after pediatric residency or 2- to 3-year fellowship after emergency medicine residency.

In 2010, the American Board of Pediatrics and the American Board of Anesthesiology announced a combined program in pediatrics and anesthesiology. This five year training is available at 7 programs in the United States and can lead to certification in both fields.

Although medical graduates interested in child neurology and neurodevelopmental disorders have an option that condenses training by 1 year, this is not a “combined program” in the same sense as those discussed above. Pediatric neurology programs admit residents who have completed 2 years of a pediatrics residency; after 3 years in the neurology residency, graduates are able to sit for both the pediatrics and neurology boards. The 2 years of pediatrics residency must be designed to include all of the core rotations required by the American Board of Pediatrics; residents cannot simply start a pediatrics residency and leave after 2 years to join a neurology residency. Passing the neurology boards results in certification in neurology with “special qualifications in child neurology.” An alternative path is to take 2 years of a pediatric residency followed by 4 years in a program in neurodevelopmental disabilities. As they are not truly “combined” programs, application is a bit different. Some residency programs will coordinate the first 2 years of pediatrics with the last 3 or 4 years of neurology at the same institution, but others do not.

Graduates of a 5-year combined program in pediatrics/psychiatry/child psychiatry are eligible to test for board certification in all 3 disciplines. Ten programs currently offer this “triple board” residency.

Section 8 - Combined Pediatric Residency Programs
Bottom Lines

Combined programs are longer than a 3-year general pediatrics residency but may be a good choice for students interested in a specific subspecialty pediatric practice or interested in both adult and pediatric medicine. As new programs are added annually, and some centers close their programs, it is important to look up the most current information before applying. The Accreditation Council for Graduate Medical Education website has the most current listing of all programs and sites.

References

1. Accreditation Council for Graduate Medical Education: http://www.acgme.org/
Letters of Recommendation
David Levine, MD
Medical students are often in a quandary about whom they should ask for letters of recommendation. Letters are an important part of the residency application and give program directors the opportunity to see how the applicant is regarded by faculty members that have worked with the applicant in clinical and research settings.

Medical students often ask how many letters they should have from pediatric faculty and preceptors. Most pediatric residency training programs require three letters of recommendation. At least one letter should be from a pediatric faculty member. Other letters should be from faculty members who have directly observed your clinical work and can favorably write about your clinical skills. These letters may come from other pediatric faculty members or faculty from any other clinical department. For students who have done additional community work or research, a fourth letter documenting those activities enhances the application. The core three letters, however, should come from faculty who can relate personal experience with the candidate’s clinical work.

At least one letter should be from a pediatric faculty member. Other letters should be from faculty members who have directly observed your clinical work and can favorably write about your clinical skills.

Residency candidates should have an established relationship with an advisor who is a core member of his or her pediatric faculty. It is important to choose someone who is very experienced in the application process. Advisors can guide the process of obtaining letters of recommendation; they are sometimes familiar with other students’ experiences and may have a sense of the quality of letters offered by their faculty colleagues. This can be a huge benefit.

Good letters of recommendation are important to program directors. Data from the 2014 National Resident Matching Program® (NRMP®) Program Director Survey indicate that 77% of Pediatric program directors who responded to the Survey cited letters of recommendation as a factor used to determine which applicants to interview. Pediatric program directors also assigned a mean importance rating of 3.8/5.0 to letters of recommendation as a factor considered when deciding how to rank applicants. Table 1 compares the importance of letters of recommendation to other factors deemed crucial to the residency application process.
## Table 1

<table>
<thead>
<tr>
<th>Residency Applicant Factor</th>
<th>% of Programs Utilizing the Factor when Deciding Whether to Invite the Applicant to Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>N/A</td>
</tr>
<tr>
<td>Grades in Required Clerkships</td>
<td>69</td>
</tr>
<tr>
<td>USMLE Step 1 Score</td>
<td>98</td>
</tr>
<tr>
<td>USMLE Step 2 Score</td>
<td>81</td>
</tr>
<tr>
<td>Class Rank</td>
<td>75</td>
</tr>
<tr>
<td>Dean’s Letter</td>
<td>87</td>
</tr>
<tr>
<td>Letters of Recommendation</td>
<td>77</td>
</tr>
<tr>
<td>Leadership Qualities</td>
<td>57</td>
</tr>
<tr>
<td>Alpha Omega Alpha membership</td>
<td>62</td>
</tr>
<tr>
<td>Audition/Elective Rotation</td>
<td>65</td>
</tr>
<tr>
<td>Volunteer/Extracurricular Activities</td>
<td>55</td>
</tr>
<tr>
<td>Research Experience</td>
<td>23</td>
</tr>
</tbody>
</table>

Table 2 demonstrates the quality of the letters as indicated by the source or letter writer through the use of a 5-point scale. On this scale, a rating of one indicates the letter as being “not at all” relevant and 5 being “very highly” relevant. The source of this information is a platform presentation at the 2003 Pediatric Academic Societies Meeting entitled “Letters of Recommendation for Residency: Can We Do Better?”

## Table 2

<table>
<thead>
<tr>
<th>Letter Writer</th>
<th>Relevance Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric chair who has worked directly with student</td>
<td>4.40</td>
</tr>
<tr>
<td>Pediatric attending on inpatient 4th year Sub-I</td>
<td>4.38</td>
</tr>
<tr>
<td>Pediatric attending on clerkship</td>
<td>4.15</td>
</tr>
<tr>
<td>Pediatric clerkship director</td>
<td>3.93</td>
</tr>
<tr>
<td>Pediatric attending on outpatient 4th Year Sub-I</td>
<td>3.90</td>
</tr>
<tr>
<td>Pediatric community preceptor</td>
<td>3.20</td>
</tr>
<tr>
<td>Research mentor</td>
<td>2.91</td>
</tr>
<tr>
<td>Pediatric chair who has not worked directly with student</td>
<td>2.57</td>
</tr>
</tbody>
</table>
Further data from the same 2003 presentation indicated reasons for ranking letters as less relevant included lack of honesty in describing weaker students, grade inflation, inadequate personal contact between the letter writer and the student, and a lack of detail about the student performance. Inconsistent use of performance descriptors was also observed. Given the absence of an agreed vocabulary for letters of recommendation, they found, the writer’s use of such terms as “average,” “outstanding,” or “solid,” is subject to interpretation.

When students and letter writers were asked to rank the relevance of letters of recommendation, the researchers found a direct working relationship between the letter writer and student was important, as was the nature of the letter writer’s role in the student’s training.

Asking for a Letter

Many students have difficulty requesting letters from faculty; but there are a specific set of principles and steps in the guide below that students can utilize to make it a positive experience for both the student and faculty member.

A Step-by-Step Guide

1. Be respectful at all times.
2. Make a face-to-face request or call the faculty member. If there is no answer, leave a voicemail or a message detailing your request and advising that an e-mail request will follow.
3. Send a follow-up e-mail. The first line should state that you tried to contact the faculty member and left a detailed message.
4. It is important to ask the faculty member if the person can write you a strong letter based on clinical skills. If the faculty member says that he or she can only write a somewhat strong letter, ask someone else. Of course, if that is still your best evaluation, stay with that person.
5. You must provide your letter writer with all necessary information, e.g., the Electronic Residency Application Service (ERAS) face sheet (which has an alphanumeric code that must be used to upload your letter to ERAS), your CV, and your personal statement, even if they are still in draft form.
6. Some faculty members will want to sit down with you in order to learn something about your interests. This will enable him or her to address your short- and long-term goals in the letter. Accept this opportunity.
7. Medical students have the option of waiving access to their letters. While you have the right to read your letters, this is generally not recommended. The ERAS “face sheet” has a selection marked “waived” or “did not waive” the right to read the letter before submission. Persons reading that letter who see that a candidate did not waive access may put less faith in the letter. Some faculty members may share a copy or discuss the details even if you have waived access. This is, of course, quite individualized.

Bottom Lines

Request your pediatric letters from core faculty members who have observed your direct clinical work with patients.

Pediatric department chairs may be very helpful in the application process; many have detailed understanding of other schools and their training programs. However, unless the residency program absolutely requires a chairperson’s letter, it is not wise to request a letter from the chair if he or she has not directly observed your clinical work.

Strong letters can distinguish an application that otherwise would not stand out. Letters from clinicians, preferably pediatricians who have seen you in action and can detail your clinical work, are best. And finally, discussing your potential future plans with your letter writers is a great way to help your letter writer support you in achieving your goals.

References

The personal statement needs to be personal, positive, and honest. The content should reflect individual qualities, experiences, and special interests that enable the reader to assess, to some degree, the likelihood of a mutually successful Match outcome.

The residency programs have the applicant’s transcript, along with a dean’s letter (Medical Student Performance Evaluation or MSPE) and letters of recommendation. The personal statement enables the applicant to add a new dimension to the application, to persuade those who read it that the applicant will be an asset to the program and a desirable house officer who will “fit in,” and reflects special qualities and interests that separate the applicant from his/her peers.

To save time and improve the quality of the piece, consider starting with an outline. The statement should flow well. It should be organized -- with a beginning, a middle, and an end. It should be grammatically correct and spell-checked or proofread by multiple individuals, perhaps even those outside the field of medicine. However, the essay should always reflect the character and personality of the writer. Typically, if possible, you should try to limit your statement to one page. The following list suggests points to be considered in the personal statement:

- Interest in the field of pediatrics
- Personal credentials and strengths that the applicant brings to the field of pediatrics
- Experiences that demonstrate relevant personal qualities (e.g., motivation, leadership, reliability, integrity)
- Distinguishing traits
- Volunteer experiences
- If there is a transgression on the medical school record, consider commenting on what was learned from the experience rather than offering excuses for it. How has the writer corrected any deficiencies? You will want to discuss this issue with your advisor prior to including it.
- Professional plans after residency
- Unique experience in medical school (or in pediatrics) that cemented the desire to pursue the field (e.g., an experiential vignette that describes a patient interaction).
- Interests outside of medicine that lend insight into the applicant’s personality
- Content that is highly personal (e.g., discussions of a divorce), may be “too much information.” Stories of family medical challenges, however, can be quite influential and instructive.
- Evidence of flexibility and openness to new ideas
- Narratives relating experiences or attitudinal shifts that reflect personal growth during medical school. How have you grown?
- Values
- An interesting life experience or accomplishment (were you an Eagle Scout, a competitive athlete, a musician, a bone marrow donor?)

Curriculum Vitae (CV)

Your CV should reflect your activities and accomplishments related to your chosen career path (in this case – pediatrics). Highlight your experiences during undergraduate and medical school with brief descriptions if space allows. These experiences that often cannot be reiterated on the personal statement often will provide fruitful conversation at residency interview days, so be prepared to speak about them in detail. Seek the advice of a mentor/advisor and/or Student Affairs Office (or comparable) at your medical school to help establish and review CVs. You can include items from college or before medical school such as past research experiences or activities in which you have strong demonstration of leadership.

A wonderful resource for both CVs and personal statements is located here: med.unc.edu/ome/studentaffairs/residency-and-the-match/residency-application-process/cv-personal-statements.

Bottom Lines

A personal statement should present a clear, honest, and concise summary of the applicant’s innate qualities. It should lend insight into one’s personality, experiences and passions. A well written statement will take time. Ask for honest feedback from friends, advisors, and at least one person who has strong editing skills. The same approach should be taken with the CV.
The Road to Residency: Application Timeline
Pradip Patel, MD
Each year, as soon as the graduating seniors complete their Match, the next class begins to prepare for fourth year by taking the required exams and applying to residency. The deadline dates change from year to year, but the template for successful pursuit of residency training in pediatrics is relatively stable. Yearly deadlines from the ERAS, the NRMP, and the San Francisco (or early) Match are available at their respective websites.

Important Note About the Military Match

The timelines in this section are for the nonmilitary Match. Military scholarship students are encouraged to communicate with their specific branch to find out when applications are due and to check in early with their student affairs office to ensure that all requirements are met on time in order to prepare properly. The Military Match also ends sooner and the results are released in mid-December.

Spring Forward!

The spring of your third year is the time to plan away rotations for fourth year. If you want to be at a particular institution or in a specific geographic location, consider doing a month-long “audition” away rotation; a daily 110% effort allows a program to get to know you and your abilities.

The summer before your fourth year will be a busy time. A short list of tasks to accomplish beforehand includes:

- Prepare your CV/resume and ask an advisor to review it.
- Prepare your personal statement and ask someone with great writing or editing skills (perhaps a former English major) to critique your first draft for grammar and content.
- Ask a friend to review your personal statement. Does it truly reflect your personality and character?
- Ask your advisor to review it from the residency perspective.
- Consider whom to ask for letters of recommendation and make those requests early. Most programs will want at least three letters.
- Meet often with your advisor at this time.
- Request meetings with the pediatrics director of medical student education, residency program director, and chair at your institution. If a chair’s letter is required (not typically the case) or if you worked with the chair directly, ask him or her for a letter of recommendation.
- Assess your past and present online digital identity—“Google yourself”—search for your name online and verify that all information publicly available about you is professionally appropriate.
- Resolve any outstanding third-year clinical grade disputes.

Month-to-Month Timeline

**June**

Update your email and mailing addresses and obtain your Electronic Residency Application Service (ERAS) “token” ID that is provided through your student affairs office.

**July**

ERAS goes live and is available to students. Begin completing your application online and determine the number of programs to which you will apply. Start approaching your letter writers to secure letters of recommendation. DO applicants begin applying to American Osteopathic Association (AOA) residency programs only.

**August**

Ensure that your Medical Student Performance Evaluation (MSPE) will be submitted to the ERAS PostOffice in a timely manner in order to be released to programs on October 1st. International medical schools and graduates should strive to submit MSPEs early to ECFMG in order to ensure that it is processed and transmitted to the ERAS PostOffice before October 1st.

**September 15**

NRMP Registration opens at 12:00 p.m. eastern time for applicants, institutional officials, program directors, and medical school officials.

Some programs begin to offer interviews early but others may wait until they receive your MSPE. Do not be alarmed if you are not offered interviews in September.

Medical schools begin to issue medical school transcripts to residency programs and residency programs begin to download candidate applications. Apply early—interviews can be scheduled before all materials are uploaded. Don’t delay scheduling interviews. Consider a mock interview at your home institution.
October 1
MSPE letters are released by all US medical schools by the ERAS PostOffice.

November 30
NRMP early registration deadline. Note: Applicants may register for $75 until 11:59 p.m. eastern time. Applicants who register after November 30 must pay an additional $50 late registration fee ($125 total fee), until registration closes on the Rank Order List Deadline in February.

October – January
The bulk of residency program interviews begin. Meet with advisor during interview season as needed.

December
Military Match for students participating in the Armed Forces Health Professions Scholarship Program. Students not matching will continue with the regular civilian match.

January

Early Match - San Francisco Match
For pediatric neurology and pediatric neurodevelopmental disorders

January
Urology Match results are released

January 15 – February
Ranking opens at 12:00 p.m. eastern time for the NRMP Main Residency Match. Your rank order list (ROL) should reflect a mix of more and less competitive programs. You may want to ask your advisor to review your ROL. Ranking for the Main Residency Match closes the third Wednesday in February. Do not plan to rely on the Match Week Supplemental Offer and Acceptance Program (SOAP) to obtain a position (see p. 40).

February – mid month
AOA Match results released

Third Wednesday in February
NRMP Match registration and Rank Order List Certification Deadlines is 9:00 p.m. eastern time.

Match Week (third week of March)

Monday of Match Week
Applicant match status is sent by email posted to each applicant's home page in the NRMP Registration, Ranking, and Results® (R3®) system. Program fill status also is posted to the R3 system.

Monday of Match Week
The NRMP Supplemental Offer and Acceptance Program (SOAP) begins. SOAP concludes at 11:00 a.m. eastern time on Thursday of Match Week.

Friday of Match Week
U.S. Medical School Match Day ceremonies at 12:00 p.m. eastern time. Match results sent by email and posted to the R3 system at 1:00 p.m. eastern time.

May 1
List of Unfilled Programs closes on the NRMP Website

Bottom Lines

Each year, third-year students feel quite overwhelmed on the senior class Match Day. Many juniors wonder how they will meet all of the requirements in time while maintaining their performance in their third-year rotations. While the process may seem daunting, each graduate by and large finds a position that is acceptable through the Match, and many match into one of their top choices.

Enjoy the fourth year, exploring new hospitals and communities and meeting new faculty members, residents, and students from across the city, region, or nation. This is one of the most exciting years of your medical education! It need not be the most daunting.

Those who start early, stay on track with deadlines, work closely and consistently with their advisors, seek out constructive criticism about their applications and personal statements, and prepare for interviews do well in the Match.

Before you know it, it will be the class behind you that is saying, “How am I going to get this done in a year?”

References

The Interview
Renee B. Saggio, MD
Interviewing is a two-way street that calls for thoughtful preparation. Unlike most medical school interviews, residency interviews are not only a time for the program to evaluate you, but also a chance for you to evaluate them! Going into the interview season with thoughtful preparation will help you better assess programs and help you consider your rank list. The interview is also the most important factor (besides match violations) pediatric residency program directors utilize when they rank an applicant, as shown in Table 1 in Section 9. Therefore, it is of the utmost importance to heed the advice in this section.

Students preparing for interviews should think about what interests them about each program on their list especially now that individualized curricula are being mandated. This helps to prepare for the interview — and to ensure that it is reasonable to invest time and expense to visit. The important variables will be different for each student, but most students typically consider the size of the program, geography, competitiveness of matching into the program, characteristics that make the program unique, areas where it excels, and proximity to family. Please see the 2015 NRMP Applicant Survey if you are interested in learning more about why students applied to specific pediatric residency programs.

Before the interview, applicants should discuss the program with advisors and mentors, making an effort to examine its strengths and weaknesses. This facilitates another important step: preparing well thought-out and relevant questions. The more thorough the applicant’s research on the program, the better his or her questions will be. Develop a list of questions and review that list the night before the interview; it will make the interview go more smoothly.

Questions to ask and to avoid are not always intuitive. A systematic approach will begin with categories for inquiry. Suggested questions posed below are a place to start. Note that it is acceptable to ask the same question of multiple interviewers.

### Program/Department Environment

1. What makes the program special?
2. Why did you come here (or train here) — and why do you stay?
3. What do you like best about the program?
4. What are its strengths and weaknesses? Areas of improvement?
5. How well do the residents get along with each other and with the faculty?
6. Do you foresee any significant changes in the department or residency program over the next 4 years?
7. If given the choice, would you choose this program/department again?
8. If there were any one thing you would change about the program or department, what would it be?
Education/Learning Atmosphere

1. Are there any current problems and concerns that may affect resident education? How does the program plan to address them?
2. What are the academic successes of the pediatric residents, as compared to other programs within the institution?
3. Is there support for meetings or other educational opportunities?
4. Would I have the opportunity to teach students? How am I trained to do so?
5. How is research integrated into the program? Do I have a required research project? How are the residents involved with reviewing and improving the program?
6. Are there any opportunities to do international electives?
7. What qualities do you value most in your residents?
8. How do your residents interact with community physicians?
9. Tell me about your continuity program.
10. How would you describe the culture of the program?

Future Academics and Employment

1. What is the general theme or mission of the program (primary care, subspecialty or research-focused)?
2. What do your graduates do after they finish training?
3. Where have your residents matched for fellowship?
4. How would former residents rank this training program?
5. How are your chief residents selected?

Lifestyle

1. What is the community like?
2. What is there to do when not at work?
3. How expensive is it to live here?
4. What opportunities are there to do community service?
5. Where do many of the residents live?

Topics to Avoid in the Interview

Stay away from issues of salary, number of call nights, and perks, including book funds (these can easily be found out from the residents or the website). Avoid questions about any conflicts, problems and politics at any level (unless it directly impacts education). Steer clear of comparing or criticizing any program or institution — the pediatric graduate education world is smaller than it seems.
Bottom Lines

- Unlike interviews for medical school or employment, the interview for admission to a residency training program is a dynamic exercise. Candidates are interviewing program representatives to see if they warrant their ranking. Program representatives interview candidates to assess qualifications and to determine whether or not they are a fit for the program.
- As most graduating seniors wishing to match in pediatrics will match into pediatrics, the interview is an opportunity to select the program that fits their needs. This is unlike the typical interview for employment, where 20 applicants compete for one position.
- There is often an interview dinner or happy hour the night before the interview. Make every effort to attend these functions as it is a good way to assess the residents in a more casual, relaxed environment. Be yourself but act appropriately!
- Dress and act professionally on your interview. There is not a strict dress code, but use your judgement in what to wear. Women can bring flats to change into during the hospital tour portion of the interview.
- If you need to cancel an interview, do it in a timely fashion. To just not “show up” is unprofessional and sheds an unflattering light not only on you but your medical school as well.
- Thank you notes are very much appreciated and remember to acknowledge the residency coordinator in this regard. Most programs appreciate either a hand-written note or an e-mail, but there is no consensus on this, therefore it is difficult to provide a firm recommendation.
- This is a 3-year decision; keep this in mind while working through the options. Lifestyle and work/life balance are important to pediatricians and should be important in training.
Medical students apply to residency programs by participating in the Main Residency Match, which is managed by the NRMP. In the 2016 Main Residency Match, the NRMP provided services to 42,370 applicants, and a record number (27,860) of PGY-1 positions were offered.

Within that total were 2,689 categorical pediatrics positions offered by 199 programs. Of those, 2,675 positions were filled in the Match -- 68% by graduating US seniors. Overall, 10% of all applicants matched to categorical pediatrics first-year positions. These and other useful data on the most recent Match can be found in the NRMP’s Results and Data 2016 Main Residency Match.

It is important to understand the difference between the NRMP and ERAS. ERAS is a service through which applicants apply to residency programs, while the NRMP matches applicants to positions in residency and fellowship programs. Registering with ERAS does NOT also register an applicant with the NRMP.

The NRMP utilizes a mathematical algorithm that processes the preferences expressed on rank order lists (ROLs) submitted by applicants and programs. The algorithm in use was developed by Alvin Roth, co-recipient with Dr. Lloyd Shapley of the 2012 Nobel Prize in Economics for their work in market design and game theory, fields that examine strategic decision making in complex situations. It is important to understand that the algorithm is applicant-proposing, not program-proposing, meaning the algorithm begins with an attempt to place each applicant into his or her most-preferred program. If an applicant cannot be matched to the first-choice program, an attempt is made to place the applicant in the second-ranked program, and so on, until every option on the applicant’s rank order list has been considered.

An applicant is tentatively matched to a program if the applicant appears on the program’s ROL and the program has an unfilled position -- or the program does not have an unfilled position but the applicant is more preferred by the program than another applicant who had been tentatively matched. The process continues until all applicants have been considered, at which point the Match results become final.

More information on the match process and algorithm in complex situations is available on the NRMP website.

Couples in the Match

The NRMP also offers the opportunity for applicants applying in the same year and participating the same Match to link their ROLs and create pairs of program choices that are considered in rank order when the matching algorithm is processed. Applicants can attempt to match to programs in the same specialty or geographic region.

Partners register with the NRMP separately, and each pays an additional nominal fee to participate in the Match as a couple. Each partner ranks his or her interviewed programs in priority order, indicating the partner’s (Student Y) preference if the student (Student X) successfully matches at that program. Each partner must have the same number of ranked programs. This is a complex process, so talking with your advisor or student affairs dean is strongly recommended. Couples cannot participate as a pair when one partner is participating in an early Match.
Tips for Making Your Rank Order List

When all interviews are complete and the applicant has determined what features are most important, it is time to construct a ROL of most preferred down to least preferred residency programs. In creating a ROL, consider the following:

1. **Rank Programs Without Regard to Your Chances.** The mathematical algorithm always begins with the applicants’ lists; the programs’ lists are secondary. There is no disadvantage in ranking a highly competitive “dream” program first on your list rather than a program that feels like a safer bet or that has offered assurances. The ROL should always list programs where the candidate would most like to train, in decreasing preference.

2. **Base rankings on your personal assessments of programs.** Program directors often send complimentary notes and messages after interviews. These can create false impressions and misinterpretations about where program directors plan to place applicants on their ROLs. Complimentary comments and correspondence should not affect the ranking for a training program. It is very important that applicants construct their ROLs solely on the basis of their own opinions of programs. Your top choice should be the program that you believe would provide the best training experience.

3. **Include more and less competitive programs.** The pool of competitors widens dramatically with the Match because applicants compete with equally qualified graduating seniors from medical schools around the country and with international medical school students and graduates. For this reason, it is essential that each applicant’s ROL includes programs on a wide competitive spectrum.

4. **Avoid SOAP at all costs.** Unless you would rather take a year off and reapply, it is important to apply to an adequate number of programs, to interview at an adequate number of programs, and to rank all programs at which you would be willing to train -- not just where you would prefer to train. It is increasingly difficult to place in a residency program (especially in your preferred specialty) in the Match, and it is not realistic to count on the Supplemental Offer and Acceptance Program (SOAP) as a back-up method. Plan for the worst case by ranking several less competitive programs and/or consider applying to programs in a backup specialty (which would be placed at the end of your ROL).

5. **Continue to Seek Guidance.** It is a good idea to consult your specialty advisor when making your rank order list. The advisor can counsel you on the number of programs to include on the list, whether your list has enough depth and competitive range, and whether a back-up program or specialty is required to assure a match. For more objective data, consult the 2015 NRMP Applicant Survey, which reveals that US Senior pediatric applicants who matched applied to a median number of 25 programs, were invited to 15 interviews, attended 12 interviews, and ranked 11 programs. Unmatched pediatric applicants applied to a median of 35 programs, and were invited to 6 interviews, attended 5 interviews, and ranked 7 programs.

Applicants enter ROLs online via the NRMP’s Registration, Ranking, and Results (R3) system in one or more sessions between mid-January and mid-February. After entering their ROLs, applicants are asked to certify their lists. It is possible to change the list after it has been certified but it is important to recertify the ROL each time changes are made. Only the applicant can see his or her list, a copy of which can be printed out at any step during the process.

**Match Week**

On Monday of Match week at 11:00 a.m. Eastern Time (ET), the NRMP notifies applicants via email and through its R3 system whether they matched to a residency program. At the same time, residency programs learn whether they have any unfilled positions. Students who do not match are strongly encouraged to meet immediately with their student affairs deans and advisors to talk about why they did not achieve a successful match and to come up with good strategies for obtaining an unfilled position. A list of unfilled programs is made available to SOAP-eligible students who do not match. The SOAP process starts Monday afternoon (see below). Match Day is on Friday of Match Week.
Seniors from allopathic or osteopathic US medical schools match at substantially higher rates than U.S. citizen and non-U.S. citizen international medical school students and graduates (IMGs). In the 2016 Main Residency Match, approximately 94% of seniors from U.S. allopathic schools and 80% of osteopathic medical school students and graduates matched successfully to PGY-1 positions, compared to approximately 54% of U.S. citizen IMGs and 51% of non-U.S. citizen IMGs.

Results for Pediatrics Residency Match

In the 2016 Main Residency Match, there were 43 unmatched U.S. seniors and 328 unmatched independent applicants who ranked Pediatrics categorical positions as their only choice.

There were 87 unfilled categorical pediatric residency positions in 2008, 45 in 2010, and 14 in 2016. This trend, while positive for the pediatrics programs, should send a clear message to anyone who plans to match in the specialty: never count on finding a position in a pediatric residency program during SOAP!

Some advisors may recommend that a candidate select an additional specialty as an alternate plan, especially if there are any deficiencies in the medical school record. For example, family medicine programs have the largest number of unfilled 3-year positions after the Match and family physicians also care for children as part of their practices. Only preliminary surgery, a 1-year program that would necessitate reapplication for the following year for another program, typically has more unfilled positions than family medicine.

Supplemental Offer and Acceptance Program (SOAP)

In 2012, the NRMP started a new process to help unmatched students and unfilled residency programs find each other. When applicants learn on Monday of Match Week that they are unmatched or partially matched, they also have access to a list of unfilled residency programs. Applicants can then apply (or re-apply) to a limited number of unfilled programs through ERAS. Program directors, after receiving these applications, may then contact applicants for phone interviews or to gather additional information. Applicants may not contact programs, nor have anyone contact a program on their behalf until the program has contacted the applicant after receiving the ERAS application. Starting Wednesday at 12:00 p.m. eastern time (ET), programs extend offers to applicants through the NRMP’s R3 system, and applicants have two hours to decide whether or not to accept the offer. Programs that still have unfilled positions after that time are able to see which applicants are still available and can extend offers during the next round of the process, starting at 3:00 p.m. (ET). The process continues through Thursday at 11:00 a.m. EST.

The following are selected tables from the NRMP website that highlight this information for the 2016 Match:

Figure 1 Applicants and First Year Positions in the Match, 1952-2016.

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Figure 2  PGY-1 Match Rates by Applicant Type, 1982-2016

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Bottom Lines

1. Apply to, and interview with, an adequate number of programs. When interpreting published data, individual applicants should bear in mind that the number is a mean or median and does not account for variation in applicant credentials. It is imperative that applicants discuss the number of programs and the choice of programs on their ROLs with their specialty advisor, program director, or chair.

2. Don’t cancel interviews until you have a sufficient number completed. Graduating seniors may be tempted to cancel interviews toward the end of the season. If you are leaning this way, see point #1!

3. Make sure that at each stage (application, interview, and ranking) you have an appropriate range of competitiveness. Even students at the top of the class are at risk if they rank only the top ranked programs in the country.

4. Avoid “short listing,” unless you are willing to risk taking a year off, and include each and every program where you interviewed on your ROL. In other words, include less-preferred programs where you would be willing to train rather than risk being unmatched. Short-listing often results from overconfidence based on communications from programs, and geographical constraints on the applicant’s Match preference.

5. Always have a back-up plan — Once again: avoid SOAP — it is NOT a back-up! Your back-up plan might be to include a sufficient number of less competitive programs. It might be to apply to a less desired specialty for either a preliminary or categorical position. Include these programs at the bottom of your rank order list with your preferred pediatrics programs at the top.

References


Congratulations! You are about to embark on one of the most memorable years of your life. The next 12 months will undoubtedly be challenging, exhausting, and stressful. But fear not, those who take the information in this section to heart will have the knowledge they need to have an enriching and successful intern year.

**Survival Tips**

- **Attend to the fundamental courtesies.** Arrive early, dress professionally, and be polite. Treat all members of the health care team, including the support staff, with respect. Do not underestimate the power of kindness.

- **Stay organized.** Methods vary; find a system that works for you. Keeping an active “To Do” list will help you stay sane and maximize efficiency. Write everything down when it is suggested or ordered. You will inevitably get busy and distracted, and hoping you remember to review a lab or reassess a patient is an impractical strategy. Write down test results so that you can quickly recall the specifics when your senior resident or attending asks for them. Find a way to highlight priorities in your notes; some people find a checkbox system helpful; others use colored highlighters or pens. When there are multiple items for follow up during your shift, consider writing out a chronological timeline of time-sensitive action items. This strategy may be particularly helpful during months when you have labs to check throughout the night, such as in the NICU.

- **Give (and request) thorough sign-out.** “Everyone is stable, there’s nothing to follow up” is not responsible sign-out. Give your cross-covering residents a concise snapshot of your patients’ history and current status. Know each patient’s status when transitioning care to the next team. If you are concerned about a patient’s condition, emphasize that to both your fellow intern and the senior resident. Tell the oncoming team about any worrisome developments that you have been tracking and offer a contingency plan for managing possible acute changes overnight. Similarly, when receiving sign-out, ask questions to ensure that you understand the patient’s status, active issues, and preferred course of action. Memory is less reliable when one is tired, such as at the end of a shift. For that reason, write down every issue that comes up when on call. Document all interventions or changes in management right away so it is clear who spiked a fever and whose medications were changed. Good notes contribute to a better sign-out when the primary residents return. More important, good records facilitate better patient care.

- **Communicate.** Sit down with your senior resident and attending at the beginning of each block to establish expectations and get off to a good start. Continue to touch base throughout the month, requesting interval assessments of your performance. Ask for specific examples of your strengths and the areas in which you need improvement. We learn much more from honest and constructive feedback than from a hollow pat on the back. Be sure to incorporate any suggestions as soon as possible.

- **Read about your patients.** Finding time to sit down and study for hours like you did in medical school will be difficult; therefore, take every possible opportunity to learn as you go. Even the most straightforward patient can be a learning opportunity. Challenge yourself to learn from each experience; even your 20th patient with asthma has something to teach you!

- **Utilize your resources.** The fact that you are now officially a doctor does not mean that you are supposed to know all the answers. Ask for help! If you are not comfortable making a decision or assessing a patient, lean on your senior resident, nurses, respiratory therapists, and other qualified staff. The biggest mistake you can make as an intern is to misjudge a situation and subsequently face an avoidable unfavorable outcome.

- **Embrace your role as a teacher.** Although you will likely be overwhelmed by the increased responsibility and patient care load, one of your most important duties as an intern is to help teach your medical students and fellow residents. Lead by example. Incorporate clinical pearls on rounds, bring evidence based articles to rounds to help guide patient care, pull students aside after rounds to review their documentation, or give a quick talk on some fundamental pediatric topics you’re comfortable with. Think of the best residents you worked with as a student, and emulate what made them so great to work with.

**Find a Good Mentor**

Many residency programs have a structured mentorship program built into their curriculum, but don’t let that limit you. Like patients, mentors come in many different shapes and sizes, and you can learn from all of them.
Formal mentoring is usually best provided by a seasoned faculty member. In general, the goal is to be paired with a mentor who shares your professional interests and has a wealth of knowledge in your desired field. However, many incoming residents have not yet finalized their future career plans. Experiences during intern year will largely influence the decisions to specialize, and if so, in what field. An experienced mentor in any specialty can be an invaluable resource, providing not only information but less tangible support through the challenges of residency. From academic to personal to career-oriented issues, a mentor can provide impartial and confidential advice. If your program does not offer an official mentoring program, be your own advocate and seek one yourself! Don’t be afraid to approach an attending you enjoy working with and ask him or her for advice and support. Also, senior residents, chief residents, and program directors are excellent sources of informal mentoring. Remember, knowledge is power! Being proactive and asking questions can help reduce a lot of the anxiety that accompanies all the “firsts” of intern year. Practical knowledge from a veteran is sometimes worth more than anything you read in a book!

Tips for That First Night On Call

Remember, you are not alone! Nurses can share a wealth of information and can help you prioritize what you need to do. Whether by phone or in person, you always have backup from a senior resident, fellow, and/or attending as well.

Get a good sign-out. Ask if there are any patients the team is particularly worried about and what issues they anticipate. Prompt the team signing out: Are there any patients in distress, requiring oxygen (how much?), or who may have concerns overnight? What is the “fever plan” should a patient develop a fever? Are there any labs or imaging studies that need to be followed up on? Try to see those patients that the previous team had concerns about briefly right after checkout to get a baseline on their clinical status. It may also be helpful to ask for a separate sign-out from a nurse manager on patients he/she is worried about. This may reveal other potential issues that could arise overnight.

Organize. You will have a lot to do, so create a system for keeping track of tasks. Keep a running list of things to do (e.g., things to follow-up on from admissions and calls you received on patients during the night) and check things off as you complete them.

Communicate with the nursing staff. When talking with nurses, don’t forget to ask about medical conditions, vital signs, weight, or allergies if you are unclear about how these could impact your decision-making. Nurses often have a wealth of information and experienced nurses can often help you to decide how best to proceed. Knowing the nursing assessment and plan can be quite valuable.
Communicate with families overnight. Update families overnight if there are changes in their child’s clinical status or new interventions being made. When appropriate, a sleeping parent should be awoken if there are major clinical concerns, new medications being given, or changes in management. Use your judgment when it comes to when to wake parents up to update them, and always air on the side of informing parents rather than not informing them.

Prioritize. When nurses call with a concern, ask them to clarify the urgency and whether the matter requires an immediate in-person assessment. If it is less urgent and you are in the middle of an admission or attending to something with higher acuity, be honest about when you will be able to address their concern. Ask them to page you back if things change or with further updates. Getting a set of vitals on a patient over the phone can be reassuring when you are busy and unable see the patient right away.

Assess all patients whom you are called about! If a nurse or parent is concerned, you should be too. Don’t just patch a symptom. Really think about what could be going on and what steps you should take. For example, perform a full physical assessment when a child develops a new fever instead of just ordering acetaminophen over the telephone.

Document. Because those on the next shift may wonder why you made specific interventions, include your reasoning in the patient’s chart. Also document assessments made throughout the night. These can be much abbreviated incident notes or SOAP (subjective/objective/assessment/plan) notes. (For example: S - Called to assess itchy rash in pt without facial swelling or difficulty breathing; O - VSS, HEENT exam reveals no rash or swelling, heart RRR, lungs CTAB, unlabored respirations, no wheezing, skin reveals diffuse 1-2 cm pruritic erythematous patches that blanch; Assessment: Urticaria; Plan: Diphenhydramine, will follow as needed.) Careful documentation promotes patient safety, is appreciated by your colleagues, and may prevent a post-call page to you.

Avoid mistakes. For example, when writing an order, especially a prescription, always double-check it. Focus on the task at hand.

Know when to ask for help. It is normal and appropriate to ask for help often at first. Seek help from the nurses, from your senior resident, your fellows, and from your attending. Remember, they are there to help you and help the patient. If a patient is getting worse, notify your team and others who are also responsible for the patient.

Be ready for a nonstop night! Consider having the following items in your white coat pocket or readily available: a good general pediatrics reference, a pediatric drug reference, your stethoscope, and anything else you may need that may not be kept in your patients’ rooms (e.g., tongue blades, ear specula, flashlight, otoscope, and ophthalmoscope). Strongly consider having a snack, gum, and a toothbrush as well! A snack break or quick freshening up might really help you reenergize. Finally, have your pediatric advance life support (PALS) algorithms readily available at all times.

Attend to the basics. Two hours of sleep and a quick shower make a world of difference when you have to stay sharp the next day, but you won’t always get them. If you end up with free time, sleep! Also, don’t forget to eat healthy snacks to keep your energy up!

Keep an open mind. It can be difficult to gracefully accept feedback in your sleepy post-call stupor. Listen, repeat the concern, ask how things can be better approached next time, and thank the person giving your feedback for the advice. Remember, people who give you feedback are trying to help you improve — you have that as a shared goal. Think of feedback as “formative” (helping form you into the doctor you want to be) rather than “summative” (an evaluation of the doctor you are or judgment of your weaknesses). You don’t have to agree with the feedback being given to use this method of handling feedback! To really be stellar, follow up with the individual who provided the advice at a later time to ask if they have seen improvement.

Remember, as they say “This too, shall pass.” Everyone has experienced a first call night with the same anxiety and uncertainty. Call nights can be overwhelming, but they get better! Residency is a marathon, not a sprint!

Thriving During Intern Year

The key word is anticipation. At every phase of care, from your initial assessment to discharge planning, always try to think a few steps ahead. This is one of the biggest differences between being a medical student and being a successful intern. Try to predict what questions your senior resident or attending will ask, what problems your patient could develop, and what treatment needs may arise. Don’t get tunnel vision and forget about follow-up plans, ancillary therapies, pharmacy issues, and family education. This applies to both inpatient and outpatient settings.
Reconcile your charts daily. Make sure you are aware of all standing lab orders, cultures, and medications. Scrutinize each one to ensure that only necessary and clinically relevant therapies are employed. Discontinue PRN medications that are not being used or could potentially interact with other medications. Realize that your patients do not enjoy needle sticks and look for opportunities to minimize their lab draws.

Scrutinize everything. Take nothing at face value; investigate everything yourself. When called because a patient’s status changes, go to assess the patient — even if it is the middle of the night. If a family is not sure of a medication dose for a newly admitted child, call the pharmacy or prescribing physician. Whenever possible, do not rely on hearsay or supposition. Be your own eyes and ears.

Have a plan. As discussed previously, there is nothing wrong with asking for help. When an issue arises, identify and gather data that is relevant to the problem, research potential answers, and present a proposed course of action to your supervising resident. For example, don’t simply say, “The nurse called me because the patient’s blood pressure is low, what should I do?” Go to the bedside, assess the patient, review the flow sheets, gather the blood pressure readings, anticipate possible questions from your senior resident (such as checking that an appropriately sized cuff is used, rechecking the blood pressure personally, assessing ins/outs, and determining what medications the patient is on), and make a suggestion (such as giving a fluid bolus).

Lead the way. Actively interact with your consultants and ancillary providers such as respiratory, speech, physical, and occupational therapists. Use all available resources to ensure that your patients are receiving the best possible care. Your job is to be the captain of your patient’s team, the person who assimilates and integrates information from all relevant sources. Keep everyone informed of the patient’s condition and promptly employ suggested recommendations. These steps can help decrease the length of hospital stay and improve outcomes. When caring for hospitalized patients, communicate with their primary care pediatricians.

Communicate with the patient and family. You should see your hospitalized patients multiple times each day. Keep in contact with the family, update them often, assess their needs, answer their questions, reassure them when appropriate, and provide them with education. Families will appreciate the extra time you spend to help guide them through what is probably a frightening experience. Try to place yourself in their position and let the insight from that perspective guide your interactions.

Patient Ownership
When you think about responsibly taking ownership of your patient, think about the relationship you expect to have with your doctors.

Remember to relate. Try to remember the experiences you or your loved ones have had in the past. Patients are anxious, feel crummy, and want to know what is wrong with them and what their medical team is going to do about it. They want to know the plan before it is executed. No one enjoys learning that labs are going to be drawn when the nurse arrives to draw them! They want cost effective care with minimal, or at least disclosed, side effects. They also want to be listened to and treated with compassion and dignity.

Take ownership of your patients’ care. An attitude of ownership reflects a philosophy and an attitude about your role and responsibility to your patients. It takes practice and commitment. The reward for this commitment is the satisfaction found in caring for your patients, seeing their gratitude, and earning the respect of your senior residents and attendings, which will translate to more autonomy.

Know all there is to know about your patients. You should know more than all of the consultants and even the primary attending. It is difficult for interns to balance patient ownership with work demands and duty hour restrictions, but this is what your fellow interns, senior residents, attendings, patients, and families will expect! Have the facts readily on hand (if not memorized). Details can save patients from redundant, invasive, and expensive workups. When the clinical picture is not making sense, these details may be the clues that reveal the diagnosis.
Remember that you are the patient’s primary doctor, not a messenger or secretary to their attending. You are the one who coordinates the patient’s care! In fact, the more consulting attendings involved, the more the patient needs you to sort out the potentially conflicting messages. Take pride in caring for your patients and knowing them better than anyone else. Consult other physicians wisely. Even when you consult another service, challenge yourself to figure out what is going on before the consultant simply gives you the answer.

Keep the family updated. Explain evaluations and treatment in advance! Ask the family what questions they have and let them know you are available if they need you. Tell them about results promptly. After a lumbar puncture, let them know how it went. Share and explain the CSF findings right away. If you don’t know something, be honest with them. They will appreciate it. Most patients and families understand that you are learning. Let them know you will help them find the answers to their questions so you can learn together. Teaching directed at families and patients is at least as important as teaching medical students. If you bring the medical student with you to talk with families, you can even teach everyone at once!

Expedite patient care. Decreasing hospital length of stay is a worthy goal. Don’t keep that patient in the hospital for an extra day and $1,500 more because one test is not yet complete. Anticipate needs, manage, and coordinate care aggressively. Be the advocate for your patients and their families. Pull the old chart from medical records or have the patient’s family sign a release from the other institution. Advocating for your patients, mobilizing resources for them, and expediting their care may require a few telephone calls. Be creative and make things happen!

Be accountable and responsible for patient care. You are supervised and will have to report most of the things you do with senior residents and attendings. Discuss your diagnosis, differential, and plan for evaluating and treating the patient. It is fine to be unsure and ask for help, but start by disclosing what you are thinking. This will allow your senior residents and attendings to see your thoughtful investment and give you feedback. If you are concerned that a patient’s treatment may not meet the standard of care, respectfully discuss your concerns and reference evidence-based medicine guidelines, if they apply. Sharing your concerns openly will either achieve better care for your patient or be a great learning opportunity for you (or both!). Welcome feedback and let yourself be molded into an amazing pediatrician!

Be ready with a systematic approach when you call on your senior or attending in the middle of the night. Prior to calling, have the patient chart and flowchart of vital signs readily available, assess the patient, and think critically about what you think is going on, why, and what you would like to do. Present the concern or question in the SBARR format (describing the Situation, the Background information, your Assessment, and your Recommended action, then allowing time for a Read-back to insure both parties understand). Finally, process and document their response.

Signout: Be the Key to Your Patients’ Safety

At the end of your shift, tie up loose ends and ensure a smooth transition of your patient’s care. The residents coming in to replace you will likely be able to tell that you have been up all night and will have some mercy on you. It’s okay to be human at the end of a shift, but fatigue doesn’t excuse any team members from having foresight. Don’t leave that extensive discharge on your chronic patient for the cross-cover team to
complete. Get it ready in advance for the benefit of your patient and your colleagues. When you leave, ensure a good sign-out on your patients -- one that includes trouble shooting (“if this happens, do this”) for the on-call team. On the flipside, when you are cross-covering and on call, ensure that you are receiving enough information to provide exemplary patient care in the primary residents’ absence, because when you are on call or cross-covering, patient ownership continues. Remember, all of the patients are YOUR patients! Caring for each patient requires a team effort and good communication. When you write an order, make sure the appropriate people know about it (nurse, pharmacist, patient and family, etc.) and follow up to be sure it is completed. When it comes to your patient, lead the team!

Good Signs

- Nurses know you as someone who is complete, attentive, competent, dedicated to your patients, and certain to get things done!
- Patients know you as their doctor. When a consultant asks the family who their physician is, the family will give your name!
- Things are taken care of and everyone is updated when you leave. The on-call team will not be paged to explain everything to a family because you will have already taken care of it. Changing of the guard happens for families too. Many people recommend that families buy a notebook to keep track of things, or write their major questions on a whiteboard in the patient’s room. This can be helpful when different relatives come and go throughout the day and night.
- Discharges go smoothly, patients understand what happened during their hospital stay, and they can effectively follow their discharge instructions and relay them to their primary physician at their follow-up visit. Although patient understanding is important, call your patient’s primary outpatient doctor to be sure he or she knows what happened with the patient under your care and what the plan was at the time of discharge.

Studying During Intern Year

- Read about your patients’ conditions!
- Read journal articles relevant to your rotation and your patients.
- Attend conferences and lectures that are designed for you! These conferences are intended to enhance your learning, so don’t let the work of the day prevent you from attending. The work will still be there after the conference, so make sure to attend unless you have acute patient care needs.
- Pediatrics in Review is a great resource! As a resident member of the AAP, you will receive this online monthly. The review articles in this publication are high-yield, concise, easy to read, and written by content experts. Try to read every month’s edition. This is great general learning as well as board review because the topics of the Pediatrics in Review articles are based on the American Board of Pediatrics general pediatric boards content specifications.
In fact, 5 years of *Pediatrics in Review* covers the content specifications of the boards exam.

- The AAP publishes PREP® questions each year. These questions are written in pediatrics board style and cover the content specifications of the general pediatrics boards. You will have access to these questions online at PediaLink (the AAP online learning site). These questions are a great way to review pediatric topics. Answer a few questions per day or a block of questions during a slow shift and you will become one of the many residents who use these questions to help prepare for the in-training exam to be taken each July during residency.

- Talk to your program leadership or mentor near the start of residency to map out a plan for boards preparation. Much like the other learning that occurs during residency, preparing for boards is a marathon, not a sprint! There is no need to stress about boards during the first week, but it is smart to develop a plan early on to review routinely throughout your years as a resident.

**Bottom Lines**

The intern year is meant to be challenging. Taking ownership of patients will be difficult at first. However, with organization, focus, consistent documentation, and a willingness to ask for help, the intern year can be extremely rewarding as well.
Work/Life Integration
Shale Wong, MD, MSPH and Angela Sharkey, MD
Work/life balance is a term which lacks a translation to reality. Rather, your life will be a juggling of competing priorities. That juggle is a moving target, fluid and dynamic, requiring both attention and intention. Career choice is personal and requires that you know yourself first to best assess how a medical specialty aligns with your lifelong goals.

As part of the process of selecting your career path, you have likely reflected on your personal priorities, your passions and your temperament. If you have not taken time to outline your career goals, do so now, outlining your 3-5 year personal and professional goals. Use these goals as a guide to defining the priorities which you will strive to balance. Achieving successful work/life integration is a matter of understanding that the choices we make will impact the paths we take. Each of us has unique needs, goals and values; no single career or specialty can meet everyone’s priorities in the same way. The key is to recognize that career demands will interplay with other life priorities, and to ensure that your choices sustain those things that support personal well-being.

Medicine is a high-stakes career with complex responsibilities that require a commitment to others and presents tremendous opportunity, intellectual and emotional challenge, satisfaction, and stress. Those who choose a career in medicine do well to understand this. It is wise to make sure that your support network understands this too.

When contemplating a career specialty, it is useful to consider what brings you satisfaction and what drains your energy. With that in mind, consider, too, that there are many ways to practice pediatrics: as a hospital-based, office-based, or community-based generalist or subspecialist; in academia as an educator, researcher, and/or clinician. Many of these options offer an option for full-time or part-time work. Each physician’s practice evolves throughout his or her career. And as in any field, physicians may change jobs in order to advance their career, develop further skills, or to pursue new interests.

Personal needs ebb and flow. Sometimes work needs you more; sometimes you need more work; sometimes your personal life needs special attention and time. It is this ebb and flow that results in the juggle to balance priorities as they exist at any given time in your life. Making deliberate choices, communicating your needs and the basis upon which you are making decisions to shift priorities and anticipating a timeline all enhance your relationships with colleagues, partners and significant others. Try to identify leaders, champions, mentors, or colleagues who can help you to articulate goals, track your objectives and celebrate successes. Physician burnout is at an all-time high. Making career decisions that are aligned with your self-knowledge will allow you to stay on track, nurture your happiness and further your success.

**Be honest about your priorities and values**

- How do you feel day today? During a clinical rotation, what is your overall level of energy? Some experiences are remarkably doable. Others will require the same hours but will be purely exhausting. It is important to be motivated to get up and go each day. Your energy and passion for your work is reflected in your career choice. This choice should accommodate your personal values and lifestyle and not conflict with your priorities.

**Define Your Boundaries**

- Defining your personal boundaries, and living within them, could be the hardest part of personal balance to achieve. We all have values that should guide and drive our decisions. As a physician, you have committed to caring for others. Maintaining this goal requires self-care. In addition, you have other values and priorities that will compete with these priorities. Those who value family above all else will need to prioritize their responsibilities accordingly. Those who value exercise and personal fitness will need to structure
a systematic routine. If it is among your values to provide the highest quality of care that you can, you may choose to study further, spend another hour in the hospital, or devote more time to an individual patient. The conflicts that develop can be challenging but those who maintain an awareness of what is important to them can maintain focus on both career and life outside of work. We are all subject to pressures that push away from personal values to meet the needs of others. Establish limits to prevent overdoing and establish achievable goals that align with your personal goals and priorities. Making choices are consistent with your values will move you closer to your goals.

Never Lose Sight of Your Dreams

Were you defined your goals and values? Can you articulate a 1-year, 5-year or 10-year dream? It can be easier to describe dreams than define plans. Dreaming allows us to aim high and consider what makes us happy without being encumbered by the means to achieve it. Knowing yourself well enough to define your goals is critical to personal success because progress cannot be measured without recognizing the objectives and accomplishments along the way. Defining priorities as stepping-stones to our goals brings us closer and closer to our dreams.

Reflect and Revisit

Reflection may be the most powerful step in moving forward. It is very useful to take note of what gives us pause and inspiration. Whether it’s creating an ever-growing document on your laptop or writing in a bound journal in your backpack, create a system to make note of compelling or intriguing experiences and insights. It may be weeks before you have time to analyze it, but that record of the event will resurrect the moment. Upon reflection, we generally look a bit deeper and decide whether the action, activity, or event warrants further thought.

Bottom Lines

Pediatricians tend to value work/life integration, perhaps because we work with families every day. Maintaining the juggle is difficult when new challenges and responsibilities are added to the mix, but we strive to enjoy the journey. While coping with stress is a personal endeavor, the freedom to focus and prioritize time spent as spouses, parents, friends, sports fans, artists, advocates, coaches, and community leaders is a key to work/life integration.
American Academy of Pediatrics: Join Us, Get Involved!
Jennifer Linebarger, MD and Sara Slovin, MD, MSPH
Since 2016, medical students have been welcomed as national members of the AAP. There are now over 1,800 medical student members of the AAP!

- All US/Canadian and international medical students are welcome
- Annual membership dues are inexpensive to encourage medical students to join!
- A link to the Membership Application can be found on the AAP website.

AAP Membership Benefits for Medical Students

- Stay current with the latest in pediatrics and infectious diseases with Red Book® Online, Pediatrics (online), AAP News (online), eBreaking News and AAP News OnCall
- For International Medical Students – automatic membership in the Provisional Section on International Medical Graduates (PSOIMG)
- Online Access to MyAAP member only content
- Concur - Internet booking engine for members to book their own air reservations
- Advocate for children and make a difference through the Federal Advocacy Action Network (FAAN)
- Section/Council membership in accordance with bylaws (additional fees may apply)
- Stay informed of the happenings in the pediatric training world through News and Views, the SOPT newsletter
- Get all the online resources relevant to you by visiting the YoungPeds Network
- Learn everything there is to know about the field of pediatrics through Pediatrics 101
- Share ideas and experiences with fellow medical students via the Listserv®
- Attend the AAP National Conference and Exhibition at no additional charge
- Save money with member discounts on AAP products, services, and meetings
- Save money through Member discount programs in credit cards, car rentals, office supplies, and more.

AAP National Conference & Exhibition (NCE)

- FREE admission for medical students to the AAP National Conference.
- Multi-day programs with seminars, plenary sessions, and workshops on pediatrics topics designed for all levels of learners
- Specific high-yield and engaging programming just for medical students

How to Get Involved

Become a member today! Medical student members get involved at many levels. We currently have 2 key focus areas aimed to improve communication and infrastructure at a local and a national level:

- Pediatric Interest Groups: The Local Level -- The AAP is working to partner with pediatric interest groups (PIGs) at every medical school in the United States, and has developed a Pediatric Interest Group Listserv to enhance networking between groups and also with the AAP. The AAP has also developed a Pediatric Interest Group Resource Guide designed to help medical students at medical schools without an interest group start PIGs and also help students already leading a PIG at their school make their group even more successful.
Medical Student Subcommittee: The National Level — SOPT started a medical student subcommittee in 2007. This group currently has 20 medical student members according to district, plus a student newsletter editor position and chair (22 members total). The subcommittee employs two year terms, which overlap so that 10 positions open to new members at the end of each year. For more information about this group or to learn more about how to apply to become a member, please visit our website.

Other opportunities to get involved include:

- Writing an article for the AAP Medical Student News
- Partnering with residents and the medical student subcommittee in their annual AAP advocacy project
- Connecting with leaders within your AAP chapter
- Advocating on issues impacting children’s health at the State and Federal level

Bottom Lines

Getting involved with the AAP is one of the best ways that medical students, residents, fellows and attending pediatricians take care of their patients…and themselves! Professional involvement adds a rich dimension; take advantage of it!
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