

Career Road Map to Becoming an *Infectious Diseases Physician*:

From Undergraduate to
Attending Physician



Embarking on the journey to become a physician is like setting out on a road full of possibilities, challenges and opportunities for discovery. Like any journey, there can be twists, turns and perhaps unexpected detours. Some steps will require careful planning, while others may demand adaptability and resilience in the face of challenges.

Every physician's journey is unique, and along the way, you will encounter critical moments where you'll need to choose your direction. **One such moment comes when selecting a specialty. For those with a curiosity for the unknown, a desire to solve complex medical puzzles and a passion for public health, the field of infectious diseases offers an exciting and impactful destination.**

Whether you've decided to pursue infectious diseases or are still exploring your interests, consider this guide a companion on the journey. It outlines each step from undergraduate to life after fellowship, offering resources to help you explore and solidify your interests, prepare for each milestone, secure financial support, discover research opportunities and connect with professional networks and mentorship opportunities.

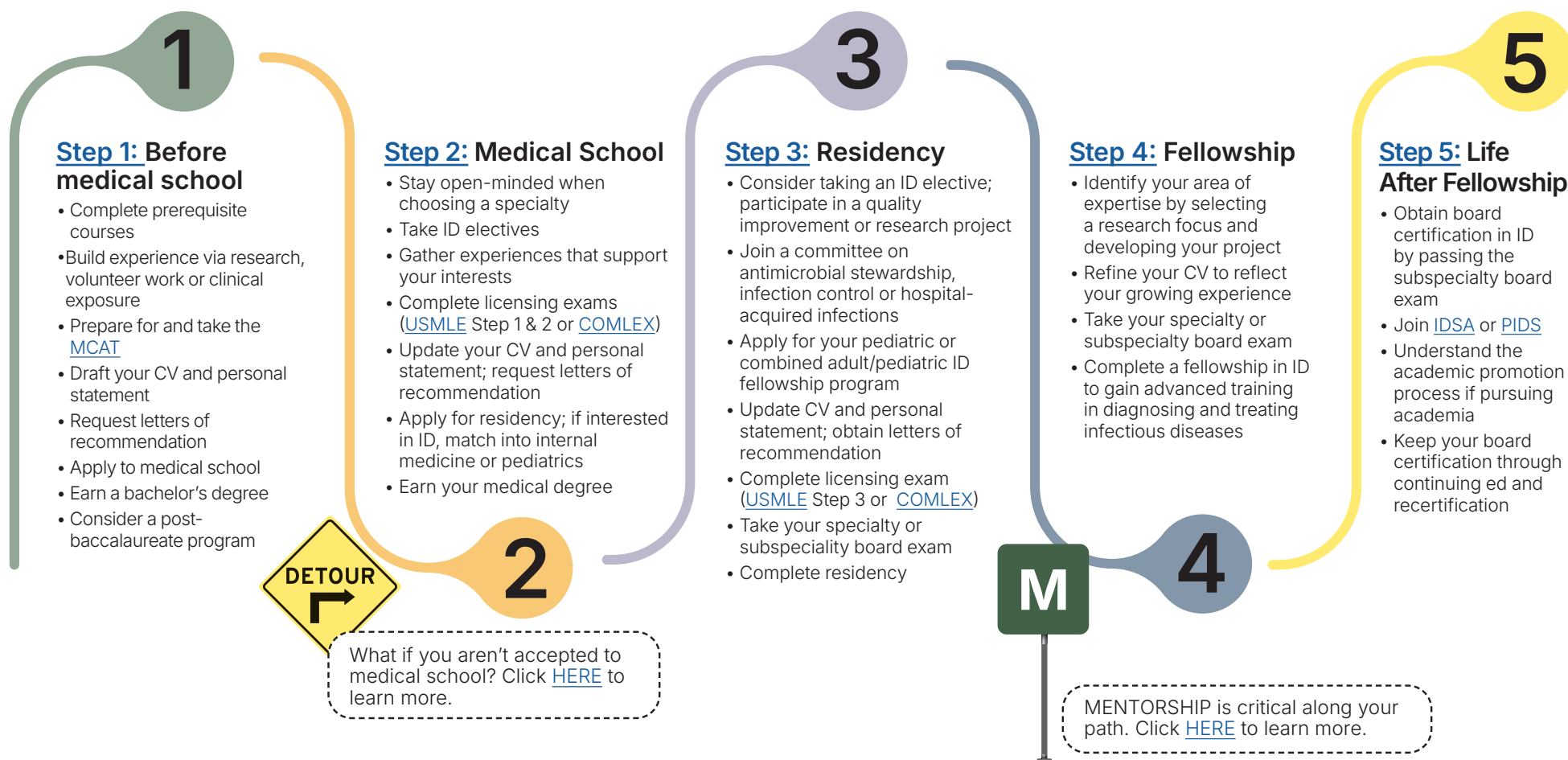
Let's get started!

First, choose where you'd like to begin navigating this guide:

- [Curious about becoming an infectious diseases physician?](#)
- [Interested in learning more about underrepresented populations in medicine?](#)
- [Need a better understanding of the guide and how to use it?](#)
- [Ready to jump into the road map?](#)

Career Road Map to Becoming an Infectious Disease Physician

Click on each step or road marker to navigate to resources



1

Before medical school

- Complete [prerequisite courses](#) (e.g., biology, chemistry, physics, English)
- Build experience and demonstrate interest through research, volunteer work or clinical exposure
- Prepare for and take the [Medical College Admissions Test \(MCAT\)](#)
- Begin drafting your CV and personal statement; request letters of recommendation
- Apply to medical school
- Earn a bachelor's degree
- Consider a [post-baccalaureate program](#) to fulfill prerequisites after completing your undergraduate degree

General Guidance and Resources

Exposure and preparation:

- [Summer Health Professions Education Program](#)
- [AAMC Directory of Medical Pathways and Enrichment Opportunities](#)
- [Dartmouth Pre-Health Opportunity Directory](#)
- [Pre-Health Shadowing](#)
- [AMSA Pathway to Medical School Program](#)
- [Prepare for the MCAT exam](#) and explore [free MCAT prep resources](#)
- [Mentoring in Medicine Medical Pathway Program](#)
- Career fairs and events

Mentorship and connection:

- Join medical student associations
 - [American Medical Student Association](#)
 - [Student National Medical Association](#)
 - [Latino Medical Student Association](#)
 - [Asian-Pacific American Medical Student Association](#)
 - [Association of Native American Medical Students](#)
 - [National Research Mentoring Network](#)
- Identify and cultivate mentors through your university or exposure opportunities

Financial:

- Explore tuition-free medical schools
- [AAMC fee assistance program](#)
- [Public Service Loan Forgiveness](#)
- [AAMC Loan Repayment/Forgiveness/Scholarship Database](#)



IDSA & ID-specific Resources

Exposure and preparation:

- IDSA ID career path overviews
 - [Career Paths in ID Presentation](#)
 - [Careers in ID Webinar](#)
- [CDC Fellowship and Training Opportunities](#)
- [Pediatric Infectious Diseases Society \(PIDS\) meetID Program](#)

Research

- [PIDS Summer Research Scholars Award](#)

2

Medical school

- Keep an open mind while identifying your specialty
- Consider taking electives in adult or pediatric ID
- Develop your narrative and gather experiences that support your interests and residency candidacy
- Continue drafting your CV and personal statement; request letters of recommendation
- Prepare for and complete licensing exams ([USMLE](#) Step 1 & 2 or [COMLEX](#) equivalents)
- Apply for residency; if you're interested in ID, you should match into internal medicine or pediatrics
- Earn your medical degree (MD or DO)
- International medical graduates take [ECFMG](#) exam

General Guidance and Resources

Exposure and preparation:

- [AAMC Careers in Medicine](#), including [Infectious Disease section](#)
- [AMA Specialty Guides and Profiles](#), including [Infectious Disease](#)
- [Funded Away Rotations for Minority Medical Students](#)
- Get to know the residency program director at your home institution
- [AMSA Residency Prep Series](#)
- [AMA FREIDA Road to Residency Guide](#)
- [FREIDA the AMA Residency and Fellowship Database](#)

Mentorship and connection:

- Join medical student associations to find additional resources as well as connection and mentorship
 - [American Medical Student Association](#)
 - [Student National Medical Association](#)
 - [Latino Medical Student Association](#)
 - [Asian-Pacific American Medical Student Association](#)
 - [Association of Native American Medical Students](#)
 - [National Research Mentoring Network](#)
- Identify and cultivate mentors through your medical school or exposure opportunities

Research:

- Meet with the medical student research contact at your school to identify research opportunities

Financial:

- [Public Service Loan Forgiveness](#)
- [AAMC Loan Repayment/Forgiveness/Scholarship Database](#)



IDSA & ID-specific Resources

Exposure and Preparation:

- [ID Spark, Train, Educate and Prepare Program](#)
- [Dr. John G. Bartlett Memorial Webinar Series](#)
- [CDC Fellowship and Training Opportunities](#)
- IDSA ID career path overviews
 - [Career Paths in ID Presentation](#)
 - [Careers in ID Webinar](#)

Mentorship and connection:

- [IDSA Student/Resident Membership](#)
- Attend [IDWeek](#)
- [iDMentorship365 Program](#)

Research/Clinical trials:

- [Grants For Emerging Researchers/ Clinicians Mentorship Program](#)

3

Residency

- Consider taking an ID elective and participating in a quality improvement or research project
- Join a hospital committee on antimicrobial stewardship, infection control or hospital-acquired infections
- Update your CV and personal statement; get letters of recommendation
- Complete the licensing exam ([USMLE](#) Step 3 or [COMLEX](#)) to advance in your medical training.
- Take your specialty or subspecialty board exam
- Apply for an adult ID, pediatric ID or a combined adult/pediatric ID fellowship program
- Complete a residency in internal medicine, pediatrics or med/peds
- International medical graduates can apply to a U.S. residency

General Guidance and Resources

Exposure and preparation:

- [FREIDA the AMA Residency and Fellowship Database](#) Identify and cultivate mentors through your residency or exposure opportunities

Research:

- Identify institution-based research opportunities
- Mentorship becomes critical to securing research
- Focus on a small, meaningful project, or begin to explore your research interests.

Financial:

- [Handling Finances During Residency](#) – AAMC
- [Public Service Loan Forgiveness](#)
- [AAMC Loan Repayment/Forgiveness/Scholarship Database](#)



IDSA & ID-specific Resources

Exposure and preparation:

- [IDSA Recommendations for ID Training Program Curricula](#)
- [AMA FREIDA ID Fellowship Program Listing](#)
- [PIDS Fellowship Training Directory](#)
- [HIV Medicine Association Clinical Fellowship Program](#)

Mentorship and connection:

- [IDSA Student/Resident Membership](#)
- Attend [IDWeek](#)
- [iDMentorship365 Program](#)

Research:

- [IDSA Research and Funding Resources](#)
- [Research in Academic Pediatrics Initiative on Diversity](#)
- [Microbial Pathogenesis in Alzheimer's Disease Research Grant Program](#)
- [Thrasher Research Fund Early Career Awards](#)

4

Fellowship

- Identify your area of expertise by selecting a research focus and developing your project
- Continue refining your CV to reflect your growing experience
- Complete a fellowship in infectious diseases to gain advanced training in diagnosing and treating infectious diseases
- Take your specialty or subspecialty board exam
- International medical graduates can complete a U.S. fellowship if they have completed medical school and residency overseas

General Guidance and Resources

Mentorship and connection:

- [National Academy of Medicine's Emerging Leaders in Health and Medicine Program](#)
- Identify and cultivate mentors through your medical school or exposure opportunities

Research:

- [NIH Research Career Development \(K\) Award](#)
- [Ruth L. Kirschstein Institutional National Research Service Award T32](#)



IDSA & ID-specific Resources

Exposure and preparation:

- [IDSA Fellows-in-Training Career and Education Center](#)
- [IDSA Academy](#)
- [PIDS Resources for Fellows](#)
- [PIDS Fellows Survival Guide](#)
- [ABIM ID Board Exam Blueprint](#)
- [HIV Medicine Association Clinical Fellowship Program](#)
- IDSA's [CORE Antimicrobial Stewardship Curriculum for Fellows](#) and [Advanced Antimicrobial Stewardship Curriculum for Fellows](#)
- [IDSA Andriole ID Board Review Course](#)

Mentorship and connection:

- [IDSA Postdoctoral-in-Training Membership](#)
- Attend ID conferences
 - [IDWeek](#)
 - [St. Jude-PIDS Pediatric Infectious Diseases Research Conference](#)

Research:

- [IDSA Research and Funding Resources](#)
- [Microbial Pathogenesis in Alzheimer's Disease Research Grant Program](#)
- [ASM Maximizing Opportunities for Scientific and Academic Independent Careers Program](#)
- [Thrasher Research Fund Early Career Awards](#)

5

Life after fellowship

- Obtain board certification in infectious diseases by passing the subspecialty board exam
- Join [IDSA](#) or [PIDS](#)
- Learn about the academic promotion process if pursuing a career in academia
- Maintain your board certification by meeting continuing education and recertification requirements

General Guidance and Resources

Mentorship and connection:

- [National Academy of Medicine's Emerging Leaders in Health and Medicine Program](#)

Research:

- [Ruth L. Kirschstein Institutional National Research Service Award T32](#)
- [NIH Research Career Development \(K\) Award](#)
- [NIH Research Project Grant Program \(R01\)](#)

Financial:

- [NIH Loan Repayment](#)



IDSA & ID-specific Resources

Exposure and preparation:

- [PIDS Apprenticeship Program](#)
- [CDC Epidemic Intelligence Service Fellowship](#)
- [IDSA Academy](#)

Mentorship and connection:

- Join ID associations and groups
 - [IDSA Full Membership](#)
 - [APA Section on Infectious Diseases](#)
 - [Society for Healthcare Epidemiology of America](#)
- Attend ID conferences
 - [IDWeek](#)
 - [St. Jude-PIDS Pediatric Infectious Diseases Research Conference](#)

Research:

- [IDSA Research and Funding Resources](#)
- [E.W. "Al" Thrasher Awards](#)
- [Center for AIDS Research Scholar Grants for Faculty Development](#)
- Identify relevant industry-funded grants

APPENDIX



Curious about becoming an infectious diseases physician?

Have you ever wondered what it's like to address humanity's smallest and greatest challenges, from tiny microbes to global outbreaks? Are you passionate about public health, solving complex medical puzzles and health equity? If so, a career as an infectious diseases physician might be the perfect path for you. As you navigate the path to becoming a physician, you'll find that certain qualities are essential across all specialties: Perseverance, compassion and adaptability will guide you through the challenges of medical practice. For those drawn to the field of ID, additional qualities are essential. Attention to detail, a collaborative mindset and a deep desire to make a meaningful impact define the ID specialist. The field of ID sits at the crossroads of clinical care and public health, offering physicians the unique opportunity to effect change on both a local and global scale. ID physicians are natural problem-solvers, thriving on the complexity of diagnosing and treating infections while understanding the intricate connections between pathogens, patients and the broader community. They are also lifelong learners, constantly adapting to new discoveries, emerging diseases and the growing challenge of antimicrobial resistance. In this field, learning never stops, and the potential to make a lasting impact is vast. As you navigate your path, consider infectious diseases for its personal fulfillment, career opportunities and significant impact on public health.

ID physicians practice in a variety of clinical settings including:



HOSPITALS

- ID physicians provide consultation on complex or severe infections, diagnose and manage infections, oversee antibiotic stewardship programs and contribute to infection control and prevention efforts
 - Academic/Teaching Hospitals: Teaching students, residents, and fellows in addition to clinical practice
 - Community Hospitals: Focus primarily on clinical care, with less emphasis on teaching or research



CLINICS

- ID physicians may run or work in outpatient clinics, seeing patients for follow-up care, chronic infections, HIV/AIDS management, travel medicine and other infectious disease consultations.
- They provide long-term care, manage chronic infectious conditions and offer preventive care, such as vaccinations and travel health advice.



ACADEMIC/RESEARCH INSTITUTIONS

- Many ID physicians work in academic settings where they split their time between patient care, research and teaching.
- They conduct research on infectious diseases, develop new treatments or vaccines, publish papers and teach future health care providers.



PRIVATE PRACTICE

- ID physicians also work in private practice, either independently or as part of a group practice.
- They see patients in an outpatient setting, manage infections, provide consultative services to local hospitals and possibly specialize in areas like travel medicine or HIV care.

Beyond clinical practice, ID physicians can work in other areas including:

- Public health
- Clinical or medical microbiology
- Infectious diseases research
- Epidemiology
- Pharmaceutical industry

See [Career Paths in ID Presentation](#) for more information on these and other career paths in infectious diseases.

Underrepresented in medicine

Underrepresentation in medicine is a pressing issue that impacts care quality, patient outcomes, and workforce diversity. Underrepresented in medicine, or URiM, is defined as those who have been adversely impacted by life experiences such as racial or other forms of discrimination, socioeconomic status (low-income or low-income housing background, first-or second-generation higher education student, medically uninsured or underinsured, currently, or historically underserved environment) or similar circumstances. Well-documented and systemic barriers such as financial challenges, educational disparities, lack of exposure and support, limited mentorship, and experiences of bias and discrimination make it challenging for URiM individuals to enter medicine, reinforcing existing inequalities. Addressing this imbalance is vital for creating a more equitable health care system. In specialties like infectious diseases, where physicians frequently work with vulnerable populations, enhancing diversity is crucial for tackling health disparities and improving patient outcomes.

While every journey is different, the path to becoming a physician — particularly for URiM individuals — can be challenging. However, with proper support, these challenges can become growth opportunities. Dedication, resilience and diverse perspectives enrich the medical field and patient care. By leveraging mentorship, utilizing resources and staying committed, future physicians can overcome obstacles and thrive.

About this guide

Developed by the Infectious Diseases Society of America, this guide supports aspiring physicians with a particular focus on the ID career path and the unique challenges faced by URiM individuals. While the guide has these focus areas, the high-level steps and general resources are relevant to anyone pursuing a medical career. It provides a comprehensive overview of each stage, from undergraduate to professional practice, highlighting key resources such as mentorship programs, exposure opportunities and research grants. The guide also highlights the extensive professional support, training and community available through IDSA and related organizations.

How to use this guide

Use this guide to help you explore career stages, access resources and connect with the broader medical and ID community. We encourage you to:

- **Review the guide** for insights relevant to your current stage and the steps ahead.
- **Explore the resources** provided to support you at each phase of your career.
- **Find additional opportunities** from organizations highlighted in this guide or locally available resources.

¹ Tello C, Goode CA. [Factors and barriers that influence the matriculation of underrepresented students in medicine](#). Front Psychol. 2023 May 25;14:1141045. doi: 10.3389/fpsyg.2023.1141045. PMID: 37303920; PMCID: PMC10247986.

Notes

- The guide highlights key resources, primarily from established national organizations, and is not exhaustive.
- Links to third-party sites may change. If a link is broken, search for the program by name to find the updated page.
- The programs listed were current at the time of publication but may change over time. We will check periodically to ensure currency.
- The roadmap steps focus on the U.S. student pathway. Your pathway may differ if you are an international medical graduate or physician. Please consult the following resources for additional guidance: [IDSA's information for international medical graduates](#), [Applying to Medical School as an International Applicant](#), [Residency Program Requirements for International Medical Graduates](#), [Practicing Medicine in the U.S. as an International Medical Graduate](#) and [International Medical Graduates – Planning for an Infectious Diseases Fellowship](#).

About IDSA

The [Infectious Diseases Society of America](#) is a global community of 13,000 clinicians, scientists and public health experts working together to solve humanity's smallest and greatest challenges, from tiny microbes to global outbreaks. Rooted in science, committed to health equity and driven by curiosity, our compassionate and knowledgeable members safeguard the health of individuals, our communities and the world by advancing the treatment and prevention of infectious diseases.

What should I do if I don't get into medical school?

Strengthen your application to apply again.

- Review your application with your university's student affairs office to identify opportunities to strengthen your application.
- Consider enrolling in a [post-baccalaureate program](#).
- Take a year off and conduct research or gain clinical experience to strengthen your candidacy.
- Enroll in a medical school application support program.

Consider an alternative career path, such as becoming a physician's assistant.

Additional Resources:

- [5 Things You Must Do Before Reapplying to Medical School – The Princeton Review](#)
- [What to Do If You Weren't Admitted to Medical School](#) – Tufts University School of Medicine

Mentorship

Why mentorship matters: Mentorship is essential for any aspiring physician and is particularly crucial — yet often lacking — for those who are underrepresented in medicine. Mentors play a vital role by:

- Providing critical guidance on navigating medical education, residency and career paths. For URiM individuals, who may lack representation, mentors help overcome barriers by offering insights into unique challenges and sharing information that might otherwise be difficult to access.
- Supporting the development of clinical, research and leadership skills, which are key to career advancement.
- Opening doors to networks, resources and opportunities that might not be readily available. This is especially important for URiM individuals, who may face systemic barriers to accessing these resources.
- Fostering a sense of belonging by understanding cultural and structural challenges, helping mentees remain engaged and resilient throughout their careers.
- Advocating for their mentees, amplifying their voices in professional spaces and ensuring they have the support needed to thrive in environments that may lack diversity.

What to keep in mind in identifying a mentor and nurturing a mentoring relationship

1. Look for time and expertise, not just seniority.

It's important to find a mentor who has the time and expertise to support you. While the most senior leaders in your institution may seem like ideal mentors, they may not always have the time or availability. A mentor at a mid-career or even earlier stage can often provide valuable guidance.

2. Choose someone who truly wants to mentor.

A mentor-mentee relationship works best when the mentor genuinely invests in the role. Look for someone enthusiastic about mentorship, open to sharing their knowledge and eager to help you grow. A mentor should view your success as part of their contribution to the field rather than feeling obligated.

3. Understand how to engage with your mentor effectively.

A common challenge for mentees is learning how to engage with their mentor, often due to feeling intimidated or assuming the mentor is too busy. It's important to overcome these fears by clearly communicating your needs and understanding how your mentor prefers to work. Be proactive in setting up regular check-ins and seeking guidance on specific goals or challenges.

4. Know the different types of mentors.

Not all mentors serve the same purpose. Understanding the various roles they can play is crucial in maximizing the relationship.

- **Mentor:** Offers guidance, advice and professional development support. They help you navigate challenges and build your skills.
- **Sponsor:** Advocates for you, leveraging their influence to open doors to new opportunities like promotions, projects or connections. Sponsors are critical in helping you move forward in your career.
- **Project Mentor:** Focuses on specific tasks or research projects, providing hands-on guidance in specialized areas. These mentors may help you with publications, research design or clinical skills.

5. Seek complementary mentors.

Consider having multiple mentors who can address different aspects of your career. One mentor may offer career strategy advice, while another helps with research skills, and yet another might sponsor you for leadership roles. A diverse set of mentors provides a well-rounded support system.

6. Be intentional in building the relationship.

Nurturing a successful mentoring relationship requires effort and intentionality. Regularly update your mentor on your progress, ask for feedback and show appreciation for their time and support. Being an engaged and committed mentee makes the relationship more rewarding for both parties.

Other resources for finding and maintaining a mentorship relationship:

- IDSA's [iDMentorship365](#) connects students, residents, fellows and early-career professionals with experienced mentors in infectious diseases. The program supports mentees in exploring ID careers and expanding their networks while empowering mentors to give back and foster future leaders.
- [Finding a Mentor in Medicine](#) – American Academy of Family Physicians
- [Ask the Experts: Finding and Working With a Mentor](#) - Association of American Medical Colleges
- [5 Tips for Finding and Working with a Mentor](#) – Association of American Medical Colleges
- [Physician Mentorship: Why It's Important, and How to Find and Sustain Relationships](#) – The New England Journal of Medicine