

# Career Road Map to Becoming an Infectious Disease Physician:

From Undergraduate to  
Attending Physician



**E**mbarking 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 (ID) 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 university 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 disease 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

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## Step 1: Before Medical School

- Complete prerequisite courses
- Build experience via research, volunteer work or clinical exposure
- Prepare for and take the [MCAT](#)
- Draft your CV and personal statement
- Request letters of recommendation (LORs)
- Apply to medical school
- Earn a bachelor's degree
- Consider a post-baccalaureate program



What if you aren't accepted to medical school? Click [HERE](#) to learn more.

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## Step 2: Medical School

- Stay open-minded when choosing a specialty
- Take ID electives
- Gather experiences that support your interests
- Complete licensing exams ([USMLE Step 1 & 2](#) or [COMLEX](#))
- Update your CV; and personal statement; request LORs
- Apply for residency; if interested in ID, match into internal medicine or pediatrics
- Earn your medical degree

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## Step 3: Residency

- Consider taking an ID elective; participate in a quality improvement or research project
- Join a committee on antimicrobial stewardship, infection control or hospital-acquired infections
- Apply for fellowship into an adult, pediatric or combined adult/pediatric ID program
- Update CV and personal statement; get LORs
- Complete licensing exam ([USMLE Step 3](#) or [COMLEX](#))
- Take your specialty or subspecialty board exam
- Complete residency



MENTORSHIP is critical along your path. Click [HERE](#) to learn more.

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## Step 4: Fellowship

- Identify your area of expertise by selecting a research focus and developing your project
- Refine your CV to reflect your growing experience
- Take your specialty or subspecialty board exam
- Complete a fellowship in ID to gain advanced training in diagnosing and treating infectious diseases

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## Step 5: Life After Fellowship

- Obtain board certification in ID by passing the subspecialty board exam
- Join [IDSA](#) or [PIDS](#)
- Understand the academic promotion process if pursuing academia
- Keep your board certification through continuing ed and recertification

# 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](#)
- Career fairs and events – such as [Diversifying the Next Generation of Doctors](#)
- [Pre-Health Shadowing](#)
- [Mentoring in Medicine Medical Pathway Program](#)
- [AMSA Pathway to Medical School Program](#)
- [Prepare for the MCAT exam](#) and explore [free MCAT prep resources](#)

#### 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 Infectious Disease Career Path Overviews
  - [Career Paths in ID](#)
  - [Develop Your Career in ID](#)
- [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
  - [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 Support, Train, Educate and Prepare](#)
- [Dr. John G. Bartlett Education Series](#)
- [CDC Fellowship and Training Opportunities](#)
- IDSA Infectious Disease Career Path Overviews
  - [Career Paths in ID](#)
  - [Develop Your Career in ID](#)

#### 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 fellowship into adult ID, pediatric ID or a combined adult/pediatric ID 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 & Funding for Students Guide](#)
- [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 & Funding for Early Career Guide](#)
- [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 & Funding for Early Career Guide](#)
- [IDSA Research & Funding for Other Faculty Guide](#)
- [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 DISEASE PHYSICIAN?**

**Have you ever wondered what it's like to be on the front lines of combating infectious disease? Are you passionate about public health, solving complex medical puzzles and making a broad impact?** If so, a career as an infectious disease (ID) 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. Infectious diseases sit 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 ongoing challenges of antibiotic 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.

## **UNDERREPRESENTED IN MEDICINE (URiM)**

Underrepresentation in medicine is a pressing issue that impacts care quality, patient outcomes, and workforce diversity. Although Black, Hispanic, Native American, and Native Hawaiian individuals comprise about 35% of the U.S. population, they represent only 13% of physicians—5% Black, 6% Hispanic, and less than 1% Native American.<sup>1</sup> This disparity worsens health inequities, as historically marginalized patients often fare better when treated by physicians who understand their cultural context. 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.<sup>2</sup> Addressing this imbalance is vital for creating a more equitable healthcare system. In specialties like infectious diseases (ID), 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.

<sup>1</sup> The American Association of Medical Colleges describes those underrepresented in medicine (URiM) as "racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population" As of 2020, 5.2% of physicians identified as Black or African American, 6.3% identified as Hispanic, Latino, or of Spanish origin, 1.9% identified as Other race or ethnicity, and less than 1% identified as American Indian or Alaska Native or as Native Hawaiian or Other Pacific Islander (0.4 and 0.2%) , respectively; [AAMC, 2022](#)). By comparison, the census bureau reported that Black and African-American citizens accounted for 13.7% of the population and Hispanic/Latino/Latina/Latinx for 19.5% , American Indian or Alaska Native 1.3% and Native Hawaiian or Other Pacific Islander as 0.3% ([U.S. Census Bureau, 2021](#)).

<sup>2</sup> 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.

## ABOUT THIS GUIDE

Developed by the Infectious Diseases Society of America (IDSA), this guide supports aspiring physicians with a particular focus on the infectious diseases (ID) career path and the unique challenges faced by underrepresented in medicine (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 university 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.

## 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 International Medical Graduate, 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 community of over 13,000 physicians, scientists, and public health experts specializing in infectious diseases. Our mission is to improve the health of individuals, communities and society by promoting excellence in patient care, education, research, public health and prevention relating to 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 (URiM). Mentors play a vital role by:

- Providing critical guidance on navigating medical education, residency and career paths. For URiM, 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, 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 a maintaining mentorship relationship:

- [Finding a Mentor in Medicine](#) – American Academy of Family Physicians
- [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
- [Medical Student Perspectives: Find a Mentor Who is Right for You](#) – American College of Physicians