



**PharmD Industry Fellowships** 

# **Dear Prospective Fellow**

At Ironwood Pharmaceuticals, we are committed to advancing the treatment of GI diseases and redefining the standard of care for millions of GI patients. Ironwood is more than just a company—it's a group of people, each with unique perspectives and talents, who come together to create medicines designated to improve the lives of GI patients.

Joining Ironwood means becoming part of a diverse, inclusive, and collaborative team of individuals who like to challenge each other to think differently and push boundaries. At the same time, we treat each other respectfully because everyone's opinions matter, and we believe that each person's unique attributes and viewpoints facilitate the development of innovative ideas that



can help us discover and deliver breakthrough therapies for patients and build the next great pharmaceutical company.

If you are interested in working in a hands-on environment, taking on innovative discovery opportunities and advancing them into drugs designed to alleviate patients' symptoms, improve their quality of life, and potentially cure disease, look no further than our PharmD Fellowship Program.

Our Fellowships are designed to foster a unique learning environment to offer growth with a strong research foundation. Participation will enhance your knowledge of disease biology and drug delivery including the different phases of drug development, and provide an opportunity to make significant contributions to the millions of patients with Gl diseases. With additional opportunities to learn from mentors with decades of Gl expertise, you will gain valuable experience across a range of areas across our diverse organization, including medical, safety and regulatory affairs.

On behalf of everyone at Ironwood Pharmaceuticals, thank you for your interest in our PharmD Fellowship Program. We welcome your consideration of Ironwood and invite you to submit an application to invest in your future here.

All the best,

Mike Shetzline, MD, PhD

SVP, Chief Medical Officer and Head of Research and Development

# **Our PharmD Fellowship Programs**

Ironwood's fellowship programs are designed to offer Doctor of Pharmacy (PharmD) graduates in-depth experience within a biopharmaceutical setting. We are offering two unique experiences: A Clinical Development and Medical Scientific Affairs (Clin Dev/MSA) fellowship and a Global Patient Safety and Regulatory Affairs (GPS/RA) fellowship. As part of the drug development and commercialization process, Ironwood fellows gain the confidence and knowledge needed to excel in a dynamic, cross-functional team environment. Our fellowships are designed to foster individual learning and growth, both professionally and personally, and offer the opportunity to be involved in high-visibility, high-impact projects. By the end of the two-year fellowship, Ironwood fellows can develop highly marketable skills and experience to pursue a successful career within the pharmaceutical industry. The fellows will be interacting with preceptors in their respective functional areas. Both fellowships will be based out of Ironwood's headquarters in Boston.



"The Ironwood GPS/RA Fellowship provides the opportunity to develop a core foundation in pharmacovigilance best practices and regulatory science by providing the fellows with hands-on, real-world pharmaceutical experience. The fellows are important contributors to our team who will apply their learnings to their assigned projects. We will equip the fellows with the tools necessary to guide the next steps in their career paths."

Diane Stroehmann, MS, RAC

Head of Regulatory Affairs & Global Patient Safety

"The Ironwood Clin Dev/MSA Fellowship offers fellows a hands-on experience in multiple aspects of clinical development and medical scientific affairs, with emphasis on a gradual increase in responsibility and independence under the supervision of an experienced preceptor. Each fellow should acquire the fundamental knowledge and practical experience to form a strong foundation for a career in clinical development or medical affairs."



Head of Clinical Development



# Clinical Development / Medical Scientific Affairs

2-Year Fellowship, Recruiting 1 Position

## **About the Fellowship:**

The Clinical Development/ Medical Scientific Affairs (Clin Dev/MSA) Fellowship allows the fellow to acquire the knowledge and skills to perform as an individual contributor within the Clin Dev or MSA group. Collaboration between these two functions is essential to both the development of a commercialized therapeutic product and a product's lifecycle management. The fellow's goal during the Clin Dev year is to learn and contribute to clinical development strategy and execution for Ironwood's pipeline compounds. During the medical affairs year, the fellow will contribute to the design and implementation of complex strategic medical affairs plans for Ironwood GI products and acquire in-depth GI disease state knowledge.

## **Fellowship Year Directors:**



"Joining fellows will be immersed in our mission to lead and implement the clinical development strategy for Ironwood's pipeline committed to delivering novel GI therapies to patients with unmet needs. Under preceptor supervision, they learn the critical skills necessary to formulate a successful clinical development plan focused on patient-centric clinical trial design and be exposed to the role and responsibilities of a clinical scientist. Fellows collaborate cross functionally to cultivate a drug development program aimed at bringing an asset from the preclinical stage, regulatory approval, and the post-market lifecycle."

**Tina Shakhnovich, MD**Medical Director, Clinical Development



"The Clin Dev/MSA fellowship at Ironwood provides you with a unique experience to join a fast paced, ever-evolving, collaborative team. This unique fellowship enables fellows the opportunity to explore and experience key functional groups throughout the drug development process. With diverse hands-on experiences and mentorship opportunities, fellows can personalize their experiences to develop the necessary foundation and skills to thrive in industry."

Niha Yerneni, PharmD, MPH
Medical Affairs Manager, Medical Scientific Affairs



"Starting my career at Ironwood has given me the opportunity to expand my knowledge of the drug development process in an environment that fosters growth and collaboration. I was drawn to Ironwood for their commitment to advancing treatment for patients with unmet needs, unique fellowship structure, and overall company culture. The Clin Dev/MSA fellowship is unique in that it combines two functional areas that are clinically related and fundamental to the drug development process. The ability to dive deep into each area will give me a diverse skillset that will prepare me for a successful career in the pharmaceutical industry."

Danielle D'Achino, PharmD First Year Clin Dev Fellow

"The opportunity to start my career in the pharmaceutical industry at Ironwood is truly the opportunity of a lifetime. Being able to immerse myself in the Clin Dev/MSA role has allowed me to strengthen my knowledge-sharing mentality and elevated my experience in these two distinct but closely linked functional areas. Throughout my first year, I have contributed to and taken part in numerous opportunities for mentorship, collaborative teamwork, and leadership. I have no doubt that this is the perfect learning environment for me to continue developing the skills I am seeking to gain for a successful career."



Kayla Reid, PharmD, RPh Second Year MSA Fellow

## Fellowship Program Timeline & Experiences

#### **First Year**

Under preceptor mentorship, the fellow will work within the Clin Dev team to gain experience in clinical research, study design, development, and execution.

Activities may include assisting the team with literature reviews, study documents, strategies to enhance trial recruitment as well as data presentation.

#### **Second Year**

The fellow will be integrated within the MSA team to gain experience in medical strategy, Medical Legal Regulatory review process, publication strategy, content development, advisory board and congress strategy and insight generation.

# Global Patient Safety / Regulatory Affairs

2-Year Fellowship, Recruiting 1 Position

## **About the Fellowship:**

The purpose of the Global Patient Safety / Regulatory Affairs (GPS/RA) Fellowship is to provide the fellow with training in both functional areas to prepare them to enter an industry role as an individual contributor in safety or regulatory after the end of their two year fellowship. The cross-functional collaboration between these two groups is essential to both the development of a therapeutic product and management of that product throughout its lifecycle. By gaining experience in both functional areas, the fellow will be able to pursue a career in either functional area and have a practical understanding of the other function's responsibilities to enable them to be an optimal collaborator and colleague.

## **Fellowship Year Directors:**



"Ironwood knows the value an industry fellowship can provide and has hired multiple fellows from other programs, including myself. We are excited to grow our own fellowship programs, allowing more PharmD graduates to jumpstart their career in the pharmaceutical industry. In the GPS/RA fellowship, our fellow will have the opportunity to interact closely with other departments within Ironwood and gain valuable experience in both safety and regulatory to prepare them for a career in industry in either field."

**Theresa Foster, PharmD**Director of Pharmacovigilance, Global Patient Safety



"Fellows at Ironwood will have the opportunity to get real hands-on experience working with the cross-functional team on assets in development or in lifecycle management. As a company, Ironwood is a wonderful place for you to learn, develop, and hone your skills in a challenging, yet rewarding environment where opinions are valued and the potential for career growth is high."

Martin Kwok, PharmD, RAC Sr. Director, Regulatory Affairs



"Starting my career in the pharmaceutical industry at Ironwood has been an incredible opportunity because the working environment is conducive to growth and learning. As a fellow who had no prior industry experience, my time here has been nothing short of amazing. I have found my colleagues and preceptors to be amiable and open to teaching me about the industry. The GPS/RA fellowship is unique as fellows can be fully immersed in the workings of two distinct, yet closely related functional areas which equips you with the necessary skillset and training to take ownership of your own career and be a competitive candidate in the job market."

Amira Abubakari, PharmD First Year GPS Fellow

"After completing my first year of fellowship, I am blown away by how much I learned during one year of GPS. The team cultivated an open and comfortable learning environment for me to grow to my full potential. Fellows wear many different hats, contribute meaningfully to high-profile projects, and get exposure to different aspects of each functional area. The preceptors support you and your career aspirations and expose you to experiences that fit your interests. I feel very lucky to begin my career in industry at Ironwood because of their dedication to innovation and improving patient lives."



**Julia Busiere, PharmD**Second Year RA Fellow

# **Fellowship Program Timeline & Experiences**

#### **First Year**

The fellow will work within GPS to gain experience in case processing operations, safety database management, signal detection, signal management, aggregate reports, safety governance, and advanced pharmacovigilance analytics.

#### **Second Year**

The fellow will work within regulatory affairs to gain experience in global/regional labeling, maintenance of IND and/or NDA applications, regulatory strategy, regulatory intelligence, Agency meeting management and correspondences, and regulatory operations.

# **About Ironwood**

At Ironwood Pharmaceuticals, we are on a mission to advance the treatment of GI diseases and redefine the standard of care for GI patients, and we have the experience, expertise and capabilities to get us there. As we explore new frontiers in research and development and advance our commercial strategies aimed at reducing the significant burdens associated with GI diseases, we keep patient needs at the center of everything we do.

Recently, Ironwood became a global company after acquiring VectivBio, a Switzerland-based clinical-stage biopharmaceutical company working to bring apraglutide, a next-generation, synthetic GLP-2 analog for the treatment of Short Bowel Syndrome with Intestinal Failure (SBS-IF), and other novel, transformational treatments for severe rare GI conditions to market. We share a relentless passion for transforming patient lives as we seek to become the leading global GI healthcare company.

We are successful pioneers in the development of LINZESS® (linaclotide), the U.S. branded prescription market leader for adults with irritable bowel syndrome with constipation (IBS-C) or chronic idiopathic constipation (CIC), and remain committed to our iconic brand for the patients we serve. Under the guidance of our seasoned GI industry leaders, we continue to build upon our history of innovation and challenge what has been done before to shape what the future holds. We have always taken the long view: we hope to grow and one step at a time, build a pharmaceutical company that helps people lead better lives. So we named ourselves after the Ironwood tree, which can live for thousands of years in the harshest desert, creating a shaded microclimate in which life thrives. Iron, like science, is undeniable and strong. Wood, like artistry and humanity, is flexible, resilient and versatile. The two words together represent our passion for making a positive impact on the health– and lives– of GI patients, their families and communities.

For more information, please visit <u>www.ironwoodpharma.com</u> or click the links below.

# Our Values Our Products Our Pipeline The Common of the Co



## **Benefits of the Boston-Based Ironwood Fellowship**

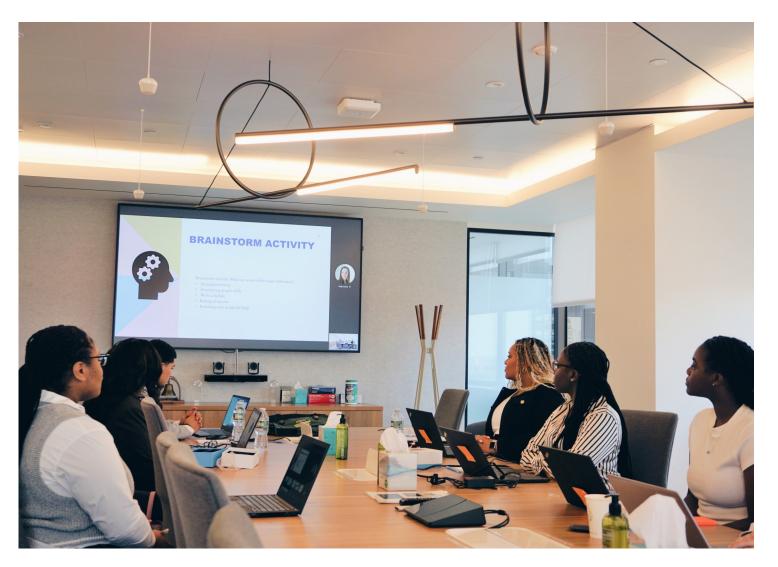


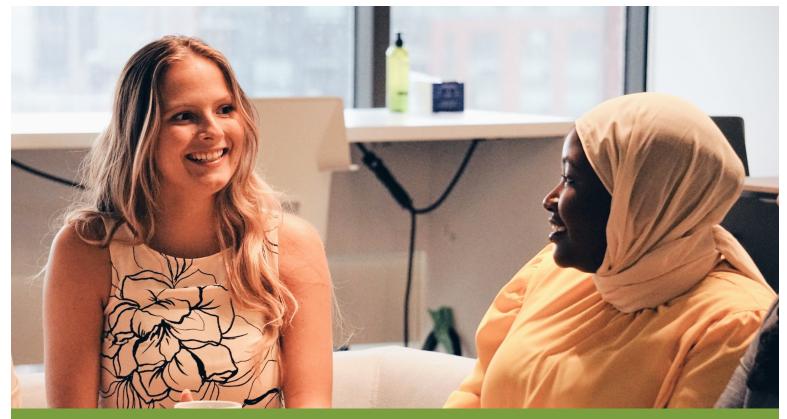
**Allison Corlett Caso, MPH, RAC** Sr. Manager, Regulatory Affairs Fellowship Coordinator

"Ironwood's office is situated on the 23rd floor of a modern skyscraper in downtown Boston. It is a blend of modern design and comfort, characterized by natural light, spacious workstations, state-of-the-art conference rooms, and common areas designed to foster collaboration and creativity. Our vantage point offers amazing panoramic views of the Boston and Cambridge skylines, the Charles River, and Boston Harbor. Located just steps away from the Boston Common and of the surrounding neighborhoods like the Seaport District, our office sits amidst the city's bustling streets, iconic landmarks, and impressive modern architecture. Our location offers access to a multitude of diverse restaurants, shops, and cultural attractions such as galleries, museums, and sports venues. Ironwood Fellows will be able to immerse themselves in the unique blend of history, culture, and modernity that Boston has to offer."

# **Potential Opportunities for Fellows**

- Attending national scientific or regulatory conferences
- Presenting topics at company-wide meetings
- Participation in interactive R&D workshops led by functional experts
- Co-precepting pharmacy students on longitudinal and experiential rotations
- Developing professional and work skills through internal workshops





# **Fellowship Alumni**

Name Alma Mater Current Position

**Medical Scientific Affairs Fellowship** 

Niha Yerneni, PharmD, MPH MCPHS-Boston

Medical Affairs Manager
Ironwood Pharmaceuticals

## **Clinical Development / Medical Scientific Affairs Fellowship**

Laura Nduka, PharmD, RPh University of Maryland Interdisciplinary Scientist
- Baltimore Food and Drug Administration

## Global Patient Safety / Regulatory Affairs Fellowship

Georgia Quartey, PharmD

MCPHS-Boston

Regulatory Affairs Manager Verve Therapeutics Northeastern University is a global, experiential, research university built on a tradition of engagement with the world, creating a distinctive approach to education and research. At Northeastern, students are encouraged to become engaged, confident, and resourceful global citizens who realize their knowledge and actions have a farreaching impact.

The Northeastern University Fellowship Program provides a dynamic academic environment offering fellows the opportunity for a wide breadth of experiences, such as:

- Developing teaching skills through participation in our Teaching and Learning Seminar series
- Facilitate small and large group didactic education in partnership with a faculty mentors
- Utilize a layered learning model in experiential education by co-precepting students on pharmacy practice experiences including Northeastern's unique co-op program
- Create, present, and publish scholarly research through collaborative industry and university relationships
- Engage with faculty who participate in various interdisciplinary graduate programs including biotechnology, nanomedicine, immunology, health informatics, and drug discovery
- Network with local residents and other Northeastern fellows via professional development programs, teaching seminars, and participation on fellowship committees



Andrew Orr-Skirvin Clinical Professor Fellowship Program Director



Jason Lancaster Clinical Professor Fellowship Faculty Manager



Debra Copeland Clinical Professor Fellowship Faculty Manager



Sherisse Mayala-Nelson Fellowship Program Manager



Michael Gonyeau Clinical Professor Fellowship Faculty Manager



Sophia Sawtelle Fellowship Program Coordinator



Jenny Van Amburgh Clinical Professor Interim Fellowship Faculty Manager

#### INDUSTRY PARTNERS OF THE NORTHESTERN UNIVERSITY FELLOWSHIP PROGRAM





































Through these exciting partnerships, Northeastern fellows collaborate and learn from each other, further positioning them to be successful in both academic and industry settings. Fellows are empowered to shape their experience, as well as the future of the program, through leadership on the Professional Development & Networking and Recruitment committees.

#### Life in Boston

Northeastern University is in the heart of Boston, steps away from the famous Fenway Park and downtown Boston. Surrounded by top tier academic and research institutions, the area is home to pioneers of innovation who are committed to intellectual curiosity and scientific advancement. The greater Boston area is a cultural hub, offering world-class attractions and rich history.







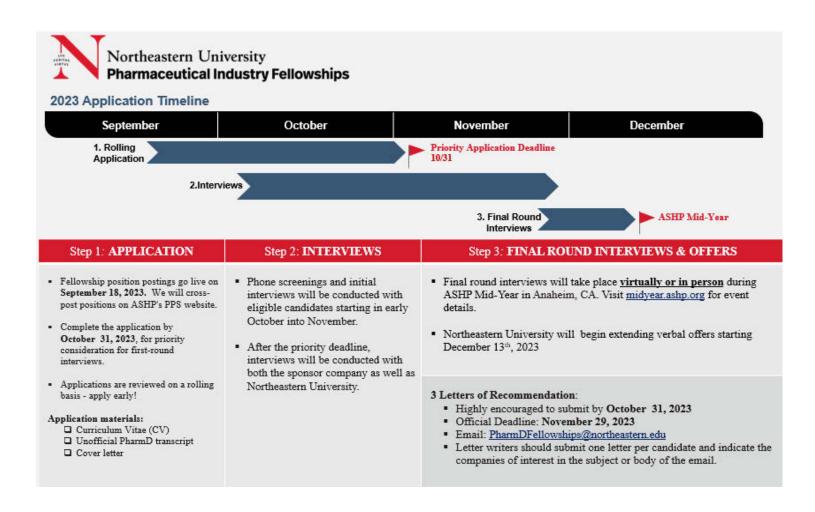


# **Application Process**

## Launch your post-graduate career. Apply Now!

Fellows are selected on a nationally competitive basis. Unless otherwise noted in the position description, candidates must have a Doctor of Pharmacy degree from an ACPE-accredited college of pharmacy by June 30, 2024.

Candidates must apply through Northeastern's career portal and are encouraged to do so by the priority application deadline of **October 31st, 2023**. Please see the graphic below for more information on the application process.



#### Questions?

Visit: www.NUfellowship.com

Email: PharmDfellowships@northeastern.edu

Send Email letters of recommendation to PharmDFellowships@northeastern.edu