SANDOZ

RUTGERS HEALTH
Institute for Pharmaceutical Industry Fellowships

Pharmaceutical Industry Fellowship Program 2027-2028

Contents

SANDOZ

Message to Prospective Fellows

Thank you for your interest in the Rutgers Pharmaceutical Industry Fellowship (RPIF) Program at Sandoz.

At Sandoz, our purpose is clear: pioneering access for patients. As a global leader in generic and biosimilar medicines, we are committed to expanding access to high-quality, affordable treatments that help improve health outcomes for patients around the world. Through innovation, collaboration, and a strong focus on patient needs, we work every day to make healthcare more accessible and sustainable.

The fellowship experience at Sandoz offers a unique opportunity to contribute to this mission while gaining broad exposure to the pharmaceutical development and commercialization process. Fellows work alongside experienced professionals across a diverse portfolio of medicines, providing valuable insight into the complex and fast-paced environment of a global healthcare organization.

We value the clinical knowledge, scientific curiosity, and patient-centered perspective that Pharm.D. professionals bring to our organization. In return, Sandoz is committed to providing meaningful mentorship, professional development, and opportunities for growth. Our fellowship program is designed to help fellows build the skills, experiences, and relationships needed to become future leaders within the pharmaceutical industry.

I look forward to learning more about your interest in Sandoz and sharing how our fellowship program can help you make a meaningful impact while advancing your professional goals. Best of luck throughout the application and interview process.

Jackline George

Associate Director
Regulatory Affairs Biosimilars

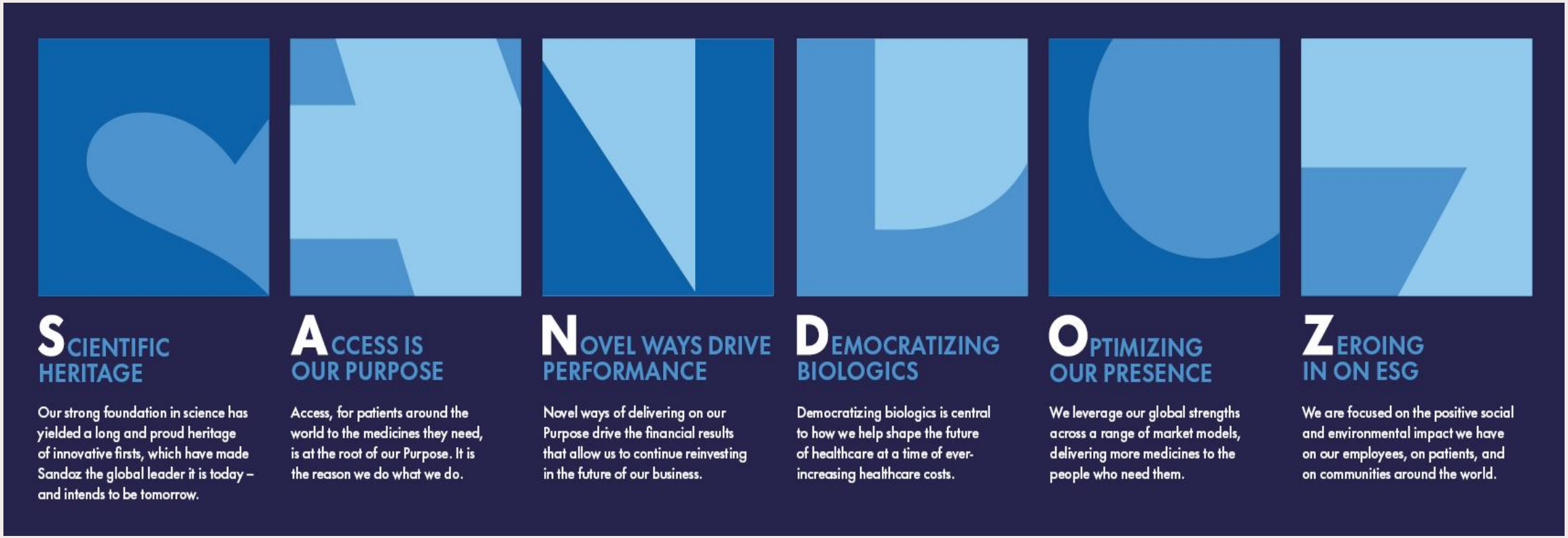
SANDOZ

About Sandoz

Sandoz is the global leader in affordable medicines, with a growth strategy driven by its Purpose: pioneering access for patients. More than 20,000 colleagues of 100 nationalities work together to ensure over one billion patients are reached by Sandoz, generating substantial global healthcare savings and an even larger social impact.

Its leading portfolio of approximately 1,300 medicines addresses diseases from the common cold to cancer. Headquartered in Basel, Switzerland, Sandoz traces its heritage back to 1886. In 2026, Sandoz celebrates 20 years of pioneering biosimilars, 80 years of antibiotics and 140 years of heritage.

Our market leadership is based on a powerful heritage and a clear Purpose



Building on our strong scientific heritage makes us the industry leader today – and sets us up for future success

Where we come from

From chemicals to medicines

- **1917:** In-house medical research begins
- **1929:** Launch of Calcium Sandoz

Pioneering penicillins

- **1946:** Start of scale production in Kundl
- **1951:** First oral penicillin

Leading in biosimilars

- **1980:** First recombinant interferon-alfa
- **1996:** Biosimilar research begins
- **2006:** Launch of first biosimilar

Where we are

Strong portfolio

- Scientific excellence & collaboration
- Broad portfolio, more than 900 million patient treatments annually

Delivering on our pipeline

- 450 generics in pipeline, 28 biosimilar candidates
- Advancing our pipeline incl. approvals in major markets

2024 groundwork for infrastructure investments:

- State-of-the-art biosimilar technical development center
- New global hub to develop advanced drug delivery devices

Where we are going

Building and expanding

- Realizing global portfolio synergies
- Designing our organization for the future

Focusing on unmet patient needs

- Affordable biologics
- Generics, incl. injectables, GLP-1s
- Additional benefits for patients and customers

Shaping the science

- Optimizing regulatory pathways
- Removing barriers: streamlined biosimilar development

Sandoz US Biosimilar Portfolio

TYRUKO® (natalizumab-sztn) 300 mg/15 mL IV

jubbonti® (denosumab-bbdz) injection 60 mg/mL

WYOST® (denosumab-bbdz) injection 120 mg/1.7 mL

Hyrimoz® adalimumab-adaz 40 mg/0.4 mL for injection

Pyzchiva® ustekinumab-ttwe | 90 mg/1 mL

Omnitrope® (somatropin) injection

CIMERLI® (ranibizumab-eqrn) injection

ZARXIO® (filgrastim-sndz)

ZIEXTENZO® (pegfilgrastim-bmez)

Omnitrope® was approved in US as follow-on protein product under 505(b)(2) pathway used for the approval of the set of biologic products that were regulated as drugs.

Patient access is at the heart of everything we do

Driving impact and access to healthcare

We produce quality medicines at scale, making them more accessible and affordable, while partnering to accelerate the pace of change

Championing sustainability

We prioritize environmental sustainability, driving down our carbon footprint and preserving natural resources

Empowering our people

We foster a safe, diverse, and inclusive workforce and develop exceptional talent through a strong company culture

Governing with integrity

We promote strong corporate governance that drives sound risk management, ethical behaviour, and safe, high-quality products

SANDOZ

Our Values

Our culture is **founded on integrity and inclusion**, with the intention that we can all be at our best. When we feel that we belong, we can make our greatest contribution.

Team up to break barriers

Work together to drive access

Be as ambitious as our purpose

Be bold to make change happen

Lead by example

Commit to making a difference

Open minds open doors

Create new opportunities

SANDOZ

Sandoz Fellowship Program

At Sandoz, our work is focused on improving access to medicines. Our program is designed to prepare our fellows to become proficient, ethical, and confident pharmaceutical industry professionals.

This 2-year fellowship provides an opportunity to gain in depth experience and acquire extensive knowledge of the department described in the brochure. Fellows are provided the opportunity to attend seminars and workshops to develop professional skills such as time management, negotiation abilities, presentation skills, leadership and project management capabilities. Opportunities for internal training and attendance at medical and professional conferences are also available. Additionally, the program is designed to foster cross functional collaboration and teamwork to advance their understanding of the business in totality.

We are a global leader in generic and biosimilar medicines, committed to playing a leading role in driving access to medicine worldwide. Our program is an incredible development opportunity where fellows can learn how to build and leverage their skills, and to contribute to society's ability to support growing healthcare needs.

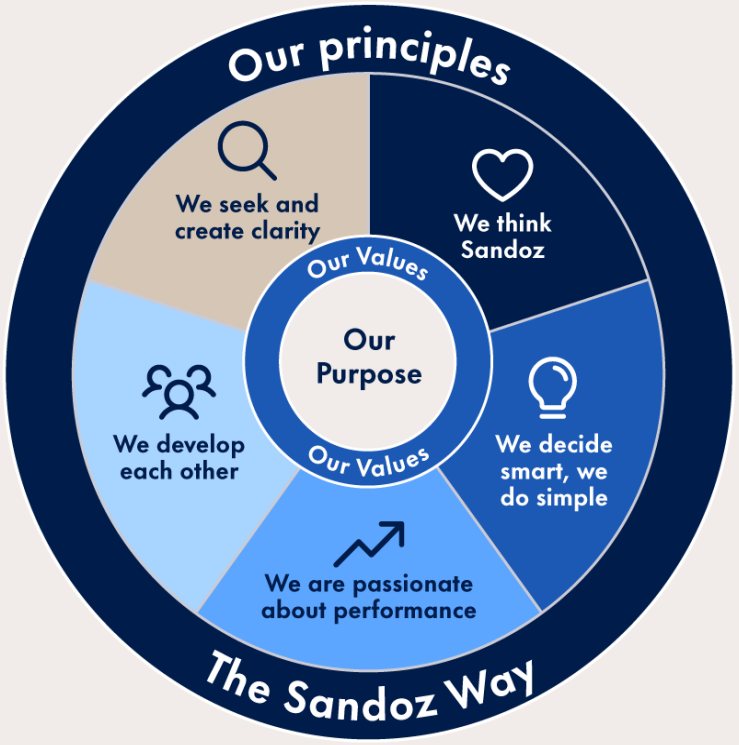
Here at Sandoz, we see our people as our greatest strength and the driving force that will shape our future and impact on millions of lives!

SANDOZ

Program Objectives

During the two-year program at Sandoz, fellows will:

- Gain a comprehensive overview of key areas within the pharmaceutical industry through practical insights and experiences.
- Expand clinical knowledge through participation in both industrial and academic programs.
- Promote the role and value of a clinically trained pharmacist within the pharmaceutical industry.
- Actively participate in specific areas of industry and academia through direct involvement in various projects and assignments.
- Become highly marketable for employment opportunities within the pharmaceutical industry.



SANDOZ

Hybrid Working – Flexible Experience

Sandoz fellowship positions are located near Princeton, New Jersey.

Fellows work in a hybrid position and are expected to work onsite in line with company policy. Our Sandoz flexible hybrid working approach allows US office-based employees to work up to 50% of their monthly workdays remotely.*

In-Office days are aligned with the preceptor and generally centered around "anchor days" with a focus on group meetings and team interactions.

SANDOZ

*Please note that Fellows are employees of Rutgers University

2-Year Rotational Patient Safety/Medical Affairs

Recruiting 1 Fellow

Year 1- Patient Safety

Foundations of Global and Local Patient Safety
- Understand how country specific patient safety functions drive compliance with applicable US and worldwide regulations and standards.

Pharmacovigilance Operations
- Coordinate management of pharmacovigilance and medical device vigilance activities, driving operational excellence, strategy, and innovation, including management of external service providers and external alliances with partner manufacturers.

Global Medical Safety
- Collaborate with therapeutically aligned global safety teams for Biopharmaceuticals & Small Molecule Generics, providing product oversight, streamlined safety services, and beyond, whilst driving operational excellence.

US Risk Evaluation and Mitigation Strategies (REMS)
- Understand and support the design, implementation, and evaluation of REMS programs from our REMS Center of Excellence team.

Innovation
- Learn to critically analyze patient safety related challenges in an ever-evolving pharmacovigilance landscape and provide strategic solutions to meet needs of a leading biopharmaceutical and generics organization.

Year 2- Medical Affairs

- Responsible for supporting key Medical services such as Medical Information, and Medical Communications as well as Medical Governance and Operations.
- Focus on medical review of promotional and non-promotional materials and launch planning.
- Gain a deep understanding of clinical studies and statistical analysis to assess the use of this data in promotional materials and medical response documents.
- Develop medical information standard response letters and frequently asked questions.
- Participate in Medical Affairs strategic and tactical planning and join medical directors at key workshops and meetings for upcoming product launches.
- Understand how the Federal and State policies impact legislation and regulations that improve patient access to affordable medication.
- Support data generation activities alongside the HEOR/RWE team.

Preceptors

Arooj Akhtar, PharmD, MBS
Associate Director, Patient Safety
US Country Patient Safety Responsible

Gina Nadraws, PharmD, RUCIF
Manager
Content Development & Training

Current Fellow

Shabnam Alavinaeeni
First Year Fellow
PharmD, University of Maryland
School of Pharmacy

SANDOZ

2-Year Regulatory Affairs Policy

Not Recruiting

- Lead internal working groups to achieve aligned company policy positions and objectives and execute advocacy plans.
- Promote meaningful regulatory requirements to facilitate the development of generic and biosimilar medicines.
  - Coordinate with trade associations, including with respect to the upcoming BsUFA and GDUFA negotiations, and interact with health authorities via conferences, FDA public meetings, and EMA interested party meetings.
  - Comment on draft guidances from health authorities and generate publications and presentations to support company policy positions.
- Utilize expertise and network to support other functions within Sandoz including briefing on external trends, advising on health authority requests for development programs, and serving as a subject matter expert to government affairs/med affairs/commercial.

Preceptor

Jessica Greenbaum
Director
Regulatory Policy US

Current Fellow

Nathan Hilton
Second Year Fellow
PharmD, University of Florida
College of Pharmacy

SANDOZ

2-Year Regulatory Affairs Strategy

Not Recruiting

- Serve as the primary liaison between Sandoz and the Health Authorities worldwide (e.g., US Food and Drug Administration) for regulatory activities and submissions.
- Provide strategic input and tactical support to expedite the submission and regulatory approval of biosimilar medicines.
- Submit and maintain regulatory applications (e.g., Investigational New Drugs [INDs], Clinical Trial Applications [CTAs], 351(k) Biologics License Applications [BLAs] and Marketing Authorization Applications [MAAs]).
- Provide strategic regulatory science input into development programs (from early programs until approval) in key biosimilar areas such as oncology, immunology, neurology, etc.

Preceptors

Katie Petscavage, PharmD, RUCIF
Manager
Global Regulatory Affairs

Reena Amin
Associate Director
US Regulatory Affairs

Anthony Narisetty
Associate Director
Regulatory Affairs, US Biosimilars

Current Fellows

Emma Lopes
First Year US Regulatory Fellow
PharmD, University of Connecticut
School of Pharmacy

Sora Hashimoto
First Year Global Regulatory Fellow
PharmD, University of Pittsburgh
School of Pharmacy

SANDOZ

Fellowship Alumni

Katie Petscavage, PharmD, RUCIF*
Regulatory Affairs Strategy (2022-2024)

Gina Nadraws, PharmD, RUCIF*
US Medical Affairs (2023-2025)

Amal Agarwal, PharmD, MBA, RUCIF*
Regulatory Affairs Strategy (2024-2026)

Joseph Dalo, PharmD, RUCIF
US Medical Affairs (2024-2026)

Ruth Li, PharmD, RUCIF
Medical Affairs/Regulatory Advertising and Promotional Review (2024-2026)

Katie Petscavage, PharmD, RUCIF
Manager
Global Regulatory Affairs

"I am grateful for my fellowship experience at Sandoz, and the stimulating environment it offered to grow as an industry professional. The fellowship provides many mentors who are eager to share their wealth of expertise and challenging practical experiences that develop the fellow's knowledge and soft skills. The Sandoz fellowship program supplied the learnings to be successful beginning my industry career and beyond."

Gina Nadraws, PharmD, RUCIF
Manager
Content Development & Training

"Through my fellowship experience at Sandoz, I've built a strong network of mentors and colleagues who remain actively engaged in supporting my continued growth and long-term success in the pharmaceutical industry."

Amal Agarwal, PharmD, MBA, RUCIF
Associate
US Regulatory Affairs

"As a proud alumnus of the Sandoz RPIF Fellowship Program, I developed a strong foundation in Regulatory Affairs through hands-on experience supporting global regulatory strategies and cross-functional collaboration. The program strengthened my ability to translate complex regulatory requirements into practical business and development strategies, apply regulatory insights to FDA-focused initiatives, and contribute effectively to regulatory planning, submission strategies, and health authority interactions in a dynamic environment."

*Current Sandoz employee

SANDOZ

RUTGERS HEALTH
Institute for Pharmaceutical Industry Fellowships

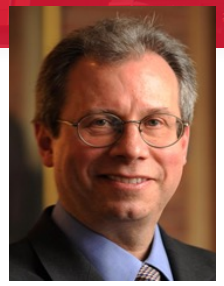
Soaring Ever Higher

Rutgers Pharmaceutical Industry Fellowship (RPIF) Program

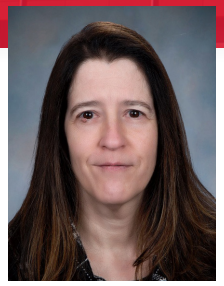
Ernest Mario School of Pharmacy (EMSOP)

Rutgers, The State University of New Jersey

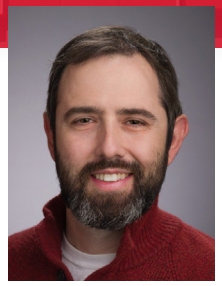
The RPIF Program has thrived under the leadership of the founder, Dr. Joseph A. Barone, Dean and Distinguished Professor of EMSOP, Dr. Carolyn Seyss, the Executive Director for the Institute for Pharmaceutical Industry Fellowships, and is supported by a team of RPIF alumni experienced in the pharmaceutical industry.



Joseph A. Barone, PharmD, FCCP
Dean and Distinguished Professor



Carolyn Seyss, PharmD, RUCIF
Fellowship Executive Director



Joseph Fulginiti, PharmD, MBA, RUCIF
RPIF Associate

Erica Dankiewicz, PharmD, RUCIF
RPIF Consultant

Patrick Park, PharmD, MBA, RUCIF
RPIF Consultant

Program History

1984

EMSOP and 2 pharmaceutical companies began a first-of-its-kind collaborative pilot program to evaluate the potential contributions of clinically- trained pharmacists within a pharmaceutical industry practice setting. Following the successful pilot, the RPIF Program grew significantly and expanded to now include 26 companies within the pharmaceutical and biopharmaceutical industry with almost 300 Fellows.

2002

Dr. Ernest Mario generously provided an endowment to establish RPIF as an Institute to enhance and promote the role of pharmacists in industry through the RPIF Program. The Institute staff members:

- Create the Fellowship structure, providing strategic leadership and administrative support
- Promote quality, communication, scholarly activity, and professional development
- Arrange specialized training opportunities within the pharmaceutical and biopharmaceutical industry

2018

RPIF expanded to offer interdisciplinary Fellows' training by adding physician Fellowship opportunities to our well-established program.

2023

The RPIF Certificate is recognized with special credentials so our alumni can now proudly identify themselves as **RUCIF (Rutgers University Certified Industry Fellow).**

Well over 1,900 Post-Doctoral Fellows have completed the RPIF Program, most of whom are experiencing influential and rewarding careers in the pharmaceutical and biopharmaceutical industry throughout the US and abroad. The RPIF Program has Preceptors and Mentors from industry who share their knowledge and experiences with the Fellows through an intense but closely-guided training program. Assignments and projects are challenging, meaningful, and designed to enhance understanding of the pharmaceutical and biopharmaceutical industry and the Fellow's functional area(s). Our goal is to provide the environment for Fellows to build the foundations to fuel their careers as future leaders in the industry.

Professional Development Series

All Fellows gather once monthly as a group to participate in the Professional Development Day (PDD) series, an important component of their training that complements the hands-on experience provided at the sponsor companies. The PDDs are steered by a committee of Fellows and are designed to enhance the Fellows' leadership skills such as emotional intelligence, communication, critical decision making, and presentation skills. Fellows develop skill sets under the guidance of external trainers and accomplished RPIF alumni. PDDs also provide general knowledge about various aspects of drug development/ commercialization and issues facing the pharmaceutical and biopharmaceutical industry, and promote connectivity and a sense of community among Fellows and alumni from different companies and disciplines.

The Fellows can learn from each other through individual and group presentations on topics and issues related to the pharmaceutical and biopharmaceutical industry. In addition, outside experts provide training and professional development in a variety of areas (e.g., tools for corporate success, professional writing, presentations, meeting facilitation, negotiating, influencing, networking, conflict resolution, giving and receiving feedback, and business etiquette). Other PDD guest speakers include senior industry executives, including our successful RPIF Program alumni, who share their career paths, insights, and experiences. Importantly, PDDs provide an excellent opportunity for Fellows to interact with each other and develop lasting personal friendships and a strong professional network of Fellows, faculty, alumni, and other industry executives.

RUTGERS HEALTH
Institute for Pharmaceutical Industry Fellowships

Key Program Features

RPIF FOSTERs the growth and development of future pharmaceutical and biopharmaceutical industry professionals and leaders through:

F

Family of Leading Companies
Partners include several top global pharmaceutical/biopharmaceutical companies and offer large to small company environments.

O

Outstanding Alumni Track Record
Well over 1,900 alumni hold prominent positions at many leading companies, including VP and C-suite levels.

S

Strong Network
Fellows develop valuable, lasting connections with each other, alumni, Preceptors, and Rutgers EMSOP faculty.

T

Trusted and Proven Since 1984
The Rutgers Fellowship Program is nationally recognized, trusted, and proven as the key pathway to industry, developing foundations for future leaders.

E

Enhanced Career Development
Breadth of experiences informs career path choices, increasingly challenging assignments build depth of experience, and visibility creates opportunities - enhancing the potential for accelerated career paths.

R

Rigorous Academic Component
Rutgers affliation provides academic and professional development opportunities.

Because of its relationship with and close proximity to most of the nation's leading pharmaceutical and biopharmaceutical companies, EMSOP and the RPIF Program are uniquely capable of providing Fellows with advanced training in the pharmaceutical and biopharmaceutical industry.

Rutgers, The State University of New Jersey is one of the major state university systems in the United States. EMSOP is part of Rutgers Health and is the only state school of pharmacy in New Jersey. EMSOP is located on the University's main science and technology campus in Piscataway, New Jersey.

While RPIF offers all the benefits of a large program with an extensive network of distinguished professionals, Fellows receive the individual attention of a small program where they are known and supported as individuals.

Application Process and Eligibility Requirements

Pharmacy Fellows for the RPIF Program are selected on a nationally competitive basis. Candidates must have completed a Doctor of Pharmacy from an ACPE-accredited institution before July 1 of the fellowship term.

HOW TO APPLY:

The RPIF Program is highly competitive. **Candidates will be selected for interviews on a rolling basis, so we strongly encourage you to submit your application as soon as possible.**

Interested candidates may submit their application with short-answer questions and supporting materials (letter of intent, curriculum vitae, and 3 letters of recommendation) as soon as **Wednesday, October 14, 2026** by visiting our website at: **https://pharmafellows.rutgers.edu/how-to-apply/**

All application materials must be submitted electronically to the RPIF website per instructions on the site.

REQUIRED ITEMS:	SUBMIT BY:
Application with short-answer questions	Tuesday, October 20th
Letter of Intent (LOI)	Tuesday, October 20th
Curriculum Vitae (CV)	Tuesday, October 20th
Letters of Recommendation (LORs)	Tuesday, December 1st

ADDRESS LOI AND LORs TO:

Joseph A. Barone, PharmD, FCCP
Dean and Distinguished Professor
Ernest Mario School of Pharmacy
Rutgers, The State University of New Jersey
160 Frelinghuysen Road
Piscataway, NJ 08854-8020

RUTGERS HEALTH
Institute for Pharmaceutical Industry Fellowships

"My experience as an RPIF Fellow has been one of the most meaningful and transformative parts of my professional journey, providing countless opportunities for growth while reinforcing the importance of giving back to the Ernest Mario School of Pharmacy community. I am grateful to draw upon my nontraditional experiences prior to pharmacy school to mentor, support, and advocate for our RPIF Fellows, encouraging them to embrace their own unique backgrounds as strengths in their professional careers. Investing in their professional and personal development is especially rewarding because today's Fellows will become tomorrow's leaders, advancing innovations that improve the lives of patients and strengthen the communities we serve."

John (Eun Sik) Cho, PharmD
Global GMP QA Strategy

"It is hard to put into words how much this fellowship has meant to me in just my first year. RPIF has challenged me to grow, think differently, and embrace opportunities I never imagined having this early in my career. Knowing that my work has the potential to impact patient care on a global scale has been incredibly rewarding, and I am excited to see how RPIF continues to shape my career and growth as a leader. I encourage future fellows to take advantage of everything the program has to offer because the experiences you gain and the relationships you build will shape your future."

Hillary Anne Reeves, PharmD
Late-Stage Clinical Development

"I am incredibly grateful for the personal and professional growth I have experienced as a Rutgers Fellow. Through RPIF and my partner company, I have been able to learn from inspiring mentors, collaborate with talented peers, and pursue opportunities that have accelerated my development. Being surrounded by such a supportive fellowship community has made this experience especially meaningful and has helped me feel prepared and excited for the future!"

Brynn Gilbert, PharmD
Medical Communications

AIFA
Alliance of Industry Fellowship Associates

Aligned First Offer Date
December 11, 2026

The choice of a Post-Doctoral Industry Fellowship is an important decision. AIFA exists to promote a consensus first offer date for all Fellowship positions. We believe this is a positive reflection of the cultures our Programs offer, and that culture is a critical consideration in choice of Fellowship.

We hope that other academic and non-academic Fellowship Programs will NOT pressure candidates to accept offers prior to this AIFA-aligned offer date. Candidates should feel free to request an extension for any earlier offer to allow them to consider their options.

Connect with us on social media: @RutgersFellow

RUTGERS HEALTH
Institute for Pharmaceutical Industry Fellowships

SANDOZ