Moderna PharmD Fellowship Program

moderna

MCPHS
BIOPHARMACEUTICAL INDUSTRY
FELLOWSHIP PROGRAM

Moderna, in collaboration with MCPHS, is pleased to offer this unique postdoctoral fellowship program to expose qualified Doctor of Pharmacy graduates to the biopharmaceutical industry, and to enhance the role of pharmacists within this field. The fellowship is two years in duration and will be based out of Moderna's headquarters in Cambridge, Massachusetts.

Stéphane Bancel
Chief Executive Officer of Moderna

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Company Background

Moderna is a leader in the creation of the field of messenger RNA (mRNA) medicine. By working at the intersection of science, technology and health for more than a decade, we have developed medicines at unprecedented speed and efficiency, including one of the earliest and most effective COVID-19 vaccines.

Our mRNA platform has enabled the development of therapeutics and vaccines for infectious diseases, immuno-oncology, rare diseases and autoimmune diseases. With a unique culture and a global team driven by the Moderna values and mindsets to responsibly change the future of human health, we strive to deliver the greatest possible impact to people through mRNA medicines.

Our first commercial product, Spikevax (our COVID-19 vaccine), has helped hundreds of millions of people worldwide combat COVID-19. SARS-CoV-2, the virus that causes COVID-19, continues to evolve and in 2023, the COVID-19 vaccine market transitioned to an endemic, seasonal commercial market. Our second commercial product, mRESVIA, an RSV vaccine, was approved by the FDA in May 2024.

Having demonstrated clinical benefit in multiple infectious disease areas and skin cancer, as well as potential clinical benefit for several rare genetic diseases, we continue to advance a broad and diverse pipeline and are focused on execution to deliver for patients. Our pipeline includes 47 therapeutic and vaccine programs, nine of which are in late-stage development.

To learn more, visit modernatx.com.

Moderna's mission is to deliver the greatest possible impact to people through mRNA medicines.

Moderna's Pipeline

Modality	Program	ID #	Preclinical development	Phase 1	Phase 2	Phase 3	Commercial	Moderna rights
Respiratory vaccines: adults	COVID-19 vaccine	**Spikevax®**						Worldwide
	COVID-19 vaccine (next generation)	**mRNA-1283**						Worldwide
	Flu vaccine	**mRNA-1010**						Worldwide
		mRNA-1020						Worldwide
		mRNA-1030						Worldwide
		mRNA-1011						Worldwide
		mRNA-1012						Worldwide
	RSV vaccine (older adults)	**mRESVIA®**						Worldwide
Infectious disease vaccines	Flu + COVID vaccine	**mRNA-1083**						Worldwide
	Flu + COVID + RSV vaccine	**mRNA-1230**						Worldwide
	Flu + RSV vaccine	**mRNA-1045**						Worldwide
	Endemic HCoV vaccine	**mRNA-1287**						Worldwide
	Pandemic Flu	**mRNA-1018**						Worldwide
	RSV + hMPV vaccine	**mRNA-1365**						Worldwide
Respiratory vaccines: adolescents & pediatrics	COVID-19 vaccine (adolescents)	**mRNA-1273**						Worldwide
	COVID-19 vaccine (pediatrics)	**mRNA-1273**						Worldwide
	RSV vaccine (pediatric)	**mRNA-1345**						Worldwide
Latent vaccines	CMV vaccine	**mRNA-1647**						Worldwide
	EBV vaccine *(to prevent IM)*	**mRNA-1189**						Worldwide
	EBV vaccine *(to prevent EBV sequalae)*	**mRNA-1195**						Worldwide
	HSV vaccine	**mRNA-1608**						Worldwide
	VZV vaccine	**mRNA-1468**						Worldwide
	HIV vaccines	**mRNA-1644**						Worldwide ***IAVI** funded*
		mRNA-1574						Worldwide ***IAVI/others** funded*
Enteric	Norovirus vaccines	**mRNA-1403**						Worldwide
		mRNA-1405						Worldwide
Bacterial	Lyme vaccines	**mRNA-1975**						Worldwide
		mRNA-1982						Worldwide
Public health vaccines	Zika vaccine	**mRNA-1893**						Worldwide ***BARDA** funded*
	Nipah vaccine	**mRNA-1215**						Worldwide ***NIH** funded*
	Mpox vaccine	**mRNA-1769**						Worldwide
Cardiovascular therapeutics	Relaxin	**mRNA-0184**						Worldwide
Cancer vaccines & therapeutics	Individualized neoantigen therapy (INT) – adjuvant melanoma	**mRNA-4157**						50-50 global profit sharing with **Merck**
	Individualized neoantigen therapy (INT) – adjuvant NSCLC	**mRNA-4157**						50-50 global profit sharing with **Merck**
	Individualized neoantigen therapy (INT) – cSCC	**mRNA-4157**						50-50 global profit sharing with **Merck**
	Individualized neoantigen therapy (INT) – RCC	**mRNA-4157**						50-50 global profit sharing with **Merck**
	Individualized neoantigen therapy (INT) – bladder cancer	**mRNA-4157**						50-50 global profit sharing with **Merck**
	KRAS therapy	**mRNA-5671**						Worldwide
Intratumoral immuno-oncology	Checkpoint therapy	**mRNA-4359**						Worldwide
	OX40L/IL-23/IL-36γ (Triplet) *Solid tumors/lymphoma*	**mRNA-2752**						Worldwide
Rare disease intracellular therapeutics	Propionic acidemia (PA)	**mRNA-3927**						Worldwide
	Methylmalonic acidemia (MMA)	**mRNA-3705**						Worldwide
	Glycogen storage disease type 1a (GSD1a)	**mRNA-3745**						Worldwide
	Ornithine transcarbamylase deficiency (OTC)	**mRNA-3139**						Worldwide
	Phenylketonuria (PKU)	**mRNA-3210**						Worldwide
Inhaled pulmonary therapeutics	Crigler-Najjar syndrome type 1 (CN-1)	**mRNA-3351**						Provided to **ILCM** free of charge
	Cystic fibrosis (CF)	**mRNA-3692 / VX-522**						**Vertex** to pay milestones and royalties

Moderna's Values

Our values are built on a foundation of quality, integrity, and respect.

Bold

Deliver on the promise of mRNA technology to transform the lives of patients.
Be a visionary.

Collaborative

Accomplish goals by working together and respecting others' viewpoints.
Be a part of one team.

Curious

Seek to challenge and improve upon the status quo.
Be innovative.

Relentless

Stay undaunted by challenges and build quickly on successes.
Be tenacious in pursuit of our mission for patients.

Moderna's Mindsets

We act with urgency
Action today compounds the lives saved tomorrow.

We pursue options in parallel
to make the best choice later.

We accept risk
as the only path to impact.

We obsess over learning
We don't have to be the smartest—we have to learn the fastest.

We pivot fearlessly
in the face of new data.

We question convention
because proven models don't always fuel the future.

We push past possible
because greatness lives outside of comfort zones.

We behave like owners
The solutions we're building go beyond any job description.

We act with dynamic range
driving strategy and execution at the same time and at every step.

We remove viscosity
to encourage collective action.

We prioritize the platform
over any single product.

We digitize everywhere possible
using the power of digital information to maximize our impact on patients.

Fellowship Offerings 2025

Global Regulatory Science
(1 Position)

Clinical Safety and Pharmacovigilance
(1 Position)

Clinical Development Operations
(1 Position)

Global Regulatory Science

1 Position

The Global Regulatory Science (GRS) department drives rapid and efficient development of molecules and medicinal products derived from an mRNA platform. We hope to ensure patient access to transformative therapies, while building a sustainable and resilient function within Moderna. The fellow will join the Global Regulatory Science team in Cambridge, Massachusetts.

The 2-year Global Regulatory Science Program will provide PharmD graduates the opportunity to gain rapid experience in the pharmaceutical industry within Regulatory Science while working on diverse projects to deepen their understanding of product development.

The fellow will focus on Regulatory Strategy and may take part in projects covering 2-3 regulatory specialties, including:

- Regulatory Advertising and Promotion
- Regulatory Labeling
- Regulatory Policy
- Regulatory Operations
- Regulatory CMC
- International Regulatory Affairs

Projects will be assigned based on the fellow's areas of interest and available opportunities to build the fellow's competencies as a regulatory professional. Additionally, the fellow may have the option to take part in a 1-3 month rotation in another department outside of Global Regulatory Science at Moderna.

GRS CURRENT FELLOWS

Clara Bechtold, PharmD

First-Year Fellow
University of Connecticut

Erin Supko, PharmD

Second-Year Fellow
University of Connecticut

GRS FELLOWSHIP CORE TEAM

Asli Santos, PharmD, RAC
Executive Director, Regulatory Strategy Oncology
Head of MCPHS PharmD Fellowship Programs at Moderna, GRS Program Lead

Kevin Hollister, MS, MBA, MPH
Senior Director, Global Regulatory Advertising and Promotion

Stacie Greenwood, PharmD, RAC-Drugs
Director, Regulatory Strategy Oncology
GRS PharmD Fellowship Preceptor

Julie Romanelli, MS, MPH
Director, Global Regulatory Advertising and Promotion

Carly Schaechter, PharmD
Senior Manager, Global Regulatory Advertising and Promotion

Anna Prisco, PharmD, RPh
Manager, Regulatory Strategy

Charbel Haber, MPH, PhD, MBA
Senior Vice President, Head of Global Regulatory Science

Clinical Safety and Pharmacovigilance

1 Position

Moderna Clinical Safety and Pharmacovigilance (CSPV) is committed to advancing patient safety with next generation mRNA science. The fellow will engage in diverse projects from a benefit-risk analysis perspective, contributing to the product portfolio, including individual case assessments, safety monitoring, medical review, and responding to health authority requests. They will gain an in-depth understanding of various safety functions, with exposure to safety governance, data analytics, and both routine and post-marketing surveillance. Additionally, the fellow will support the development of aggregate reports and gain a comprehensive understanding of programs in clinical trials through post market submission activities.

The two-year CSPV Fellowship will provide PharmD graduates with a fast-paced immersion and introduction to the pharmaceutical industry across multiple therapeutic areas from clinical trials to marketed products. As integral members of the Moderna team, fellows will acquire practical experience through direct engagement with subject matter experts, participate in cross-functional team collaborations, and benefit from valuable networking and mentorship opportunities.

The fellow will have the opportunity to rotate throughout the following areas:

- PV Operations
- Signal Management
- Clinical Safety Science: Clinical Trials/ Post Market
- Aggregate Reports
- Risk Management
- Elective

CSPV CURRENT FELLOWS

Sanam Kolia, PharmD
First-Year Fellow
Northeastern University

Natalie Ourfalian, PharmD
Second-Year Fellow
Massachusetts College of Pharmacy and Health Sciences

CSPV FELLOWSHIP CORE TEAM

Magalie Emilebacker, PharmD, CCRP
Director, Clinical Safety Scientist
CSPV PharmD Fellowship Program Lead

Melissa Rossi, MPH
Executive Director, Head of Clinical Safety Sciences

Rebecca Lackey, PharmD
Director, Clinical Safety Program Lead

Tony Rizk, PharmD
Senior Manager, Clinical Safety Scientist

Clinical Development Operations

1 Position

The Clinical Development Organization Operations (CDO) at Moderna is at the heart of making novel mRNA medicines a reality for a wide range of diseases and conditions. The functions that make up the CDO are collectively responsible for input to the strategic direction and leadership of Program Teams (Program Management), input to the design and execution of all clinical trials (Clinical Trial Operations, Clinical Drug Supply, Patient and Site Experience), delivery of accurate data to support decision-making and global regulatory interactions/submissions (Biostatistics, Biomarkers, and Data Management) maintaining portfolio health (Portfolio Analytics Operations and Governance) to to bring to fruition innovative ways to optimize clinical development. (Strategic Operations). The PharmD Fellow would be placed in this dynamic organization and given a plethora of opportunities to learn the business of drug and vaccine development in one of the fastest paced and fastest growing biotechnology companies in the world today - Moderna.

The 2-year CDO PharmD fellowship will include 12 months in Clinical Operations and 12 months in Program Management. A Fellow may have the opportunity to gain additional focused experience in other functional roles based on the Fellow's interest and available opportunities during their required core rotations in Clinical Operations and Program Management.

Core Rotations

- Clinical Operations
- Program Management

Projects will be assigned based on the Fellow's area of interest and available opportunities to build the Fellow's competencies as a diverse CDO professional.

CDO CURRENT FELLOWS

Devin Montgomery, PharmD, MS

First-Year Fellow
University of Kentucky

Daniel Thifault, PharmD, RPh

Second-Year Fellow
Northeastern University

CDO FELLOWSHIP CORE TEAM

Christina Kim, PharmD
Director, Program Management, Latent Viruses & Global Public Health
CDO PharmD Fellowship Program Lead

Clinical Operations Preceptor TBD

Axel Wiest MD, PhD, MPH
VP, Head of Portfolio & Program Management

Conor Knightly, MPH
VP, Clinical Operations Head, Infectious Disease

MCPHS Biopharmaceutical Industry Fellowship Program

MCPHS

MCPHS provides an academic environment to guide and support fellows toward a successful career in the biopharmaceutical industry. As a private institution with a history of specializing in health sciences, MCPHS offers programs that embody scholarship, professional service, and community outreach.

Through MCPHS, fellows will have the opportunity to gain teaching and scholarship experience. Throughout the program, MCPHS faculty will be paired with fellows to mentor them and help them achieve their teaching and scholarly goals.

As a postdoctoral fellow at MCPHS, each fellow may have the opportunity to

- Develop, coordinate, and teach pharmacy courses
- Co-precept students on advanced experiential rotations
- Assist in the publication of scholarly research and review articles
- Present data at scientific and clinical meetings
- Participate in professional development seminars

MCPHS PHARMD FELLOWSHIP PROGRAM TEAM

Amee Mistry, PharmD, RPh
Director of the Postdoctoral Biopharmaceutical Industry Fellowship Program

Dr. Amee Mistry is Professor of Pharmacy Practice and has been with MCPHS since 2006. Dr. Mistry earned her PharmD at the Albany College of Pharmacy and completed a PGY1 Community Practice Residency with Walgreens and MCPHS. In 2015, Dr. Mistry took over as Director of the MCPHS Biopharmaceutical Industry Fellowship program. She works directly with leaders in the area to continue to foster growth and development of the post-graduate program, and to assist the fellows in attaining positions within the pharmaceutical industry. In addition, she is advisor for the student IPhO chapter at MCPHS, co-advisor for APhA-ASP, a national trainer for the APhA Pharmacy-Based Immunization training program, and is actively involved with the Massachusetts Pharmacists Association.

Samantha Nganju, MBA
Fellowship Program Manager MCPHS

Tara Miskell
Program Coordinator MCPHS

Application & Recruitment Process

Application Requirements

ELIGIBILITY
The MCPHS Biopharmaceutical Industry fellows will be selected on a nationally competitive basis. Applicants must have a Doctor of Pharmacy degree from an ACPE accredited college of pharmacy at the commencement of the program.

Candidates must have strong written and verbal communication skills and a strong interest in pursuing a career within the biopharmaceutical industry.

All candidates must have authorization to work in the United States throughout the duration of the one or two year fellowship. No visa sponsorship will be provided (i.e., TN, H-1B, STEM OPT, etc.).

APPLICATION PROCEDURE
The MCPHS application portal (SMApply) will open up on **Monday, October 7, 2024**. Applicants must upload the following application materials to the online portal by **Monday, November 4, 2024**:

- Letter of intent
- Curriculum vitae
- Unofficial college transcript
- Contact information for three references. References will receive an electronic recommendation form to complete separately.

Three recommendation evaluation forms must be submitted no later than **November 20, 2024** via the online portal. This is NOT a letter of recommendation but an online form that the recommender will receive for completion from SMApply.

Please visit the MCPHS biopharmaceutical industry fellowship website for more information:

https://www.mcphs.edu/faculty-and-research/fellowships-and-residencies/biopharmaceutical-fellowships

APPLICATION REVIEW AND INTERVIEW TIMELINE
Following a review of submitted applications, pre-screens and preliminary interviews will begin in October. Additional interviews, including final rounds will take place in December during ASHP. Candidates will be notified if selected for an interview. The process is rigorous and competitive; therefore candidates should submit their applications well in advance of posted deadlines as priority will be given to those who apply early.

ASHP MIDYEAR & ONSITE INTERVIEWS
The fellowship program will be conducting **in-person interviews** at the ASHP Midyear Clinical Meeting in New Orleans, LA. Applicants are strongly encouraged to attend, but it is not required. Candidates attending in-person will not be able to interview without registering for both ASHP and PPS. Please refer to the ASHP & PPS website for registration details.

Top candidates may be invited for interviews at the sponsoring company's location.

AIFA FIRST OFFER DATE
The choice of a Post-Doctoral Fellowship is an important decision. MCPHS, in conjunction with the Alliance of Industry Fellowship Associates (AIFA), has aligned to extend offers for Fellowships no earlier than **December 16th, 2024**. 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 aligned offer date.

ONBOARDING
Final candidates will be required to go through additional screening / onboarding as required by MCPHS.

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