GSK Pharmaceutical Industry Fellowship Program

2022–2024
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Our goal is to provide the opportunity for fellows to gain the skills, knowledge, and experience needed to pursue a career in the pharmaceutical industry, enabling them to become successful leaders and innovators. Fellows develop a strong scientific foundation in areas of interest by gaining practical experience in the pharmaceutical drug development setting and applying those learnings for the advancement of pharmaceutical sciences.

GSK has a rich history of collaborations with a variety of leading academic institutions through sponsorship of joint fellowship programs.

Fellowships offered by GSK in partnership with UNC Eshelman School of Pharmacy include:

- US Medical Affairs (PharmD or PhD)
- Global Regulatory Affairs (PharmD, PhD, or MD)
- Pharmacokinetics/Pharmacodynamic (PharmD, PhD, or MD)
Today there are millions of people without access to basic healthcare, thousands of diseases without adequate treatments and millions of people who suffer from everyday ailments. We want to change this. That’s why we are harnessing our scientific and technical know-how, our talented people, our partnerships, and our global reach to develop and manufacture healthcare products for people who need them.

Our mission is to improve the quality of human life by enabling people to do more, feel better, and live longer.

Our strategy
Bring quality, needed healthcare products to as many people as possible, with our scientific and technical know-how and talented people.
Who we are

A science-led global healthcare company with a special purpose to improve the quality of human life by helping people do more, feel better, live longer.

Every day, we help improve the health of millions of people around the world by discovering, developing and manufacturing innovative medicines, vaccines and consumer healthcare products.

What we do

We aim to bring differentiated, high-quality and needed healthcare products to as many people as possible, preventing and treating disease and keeping people well with our scientific and technical know-how and talented people.

In 2020

£34.1bn total sales

£5.1bn R&D investment

9 major regulatory approvals, including in HIV, Oncology and Respiratory

58 Our biopharma R&D pipeline contains 39 potential new medicines and 19 candidate vaccines (as of March 2021)

Pharmaceuticals

Our Pharmaceuticals business has a broad portfolio of innovative and established medicines in respiratory, HIV, immunology and oncology. We are strengthening our R&D pipeline through a focus on immunology, human genetics and advanced technologies to help us deliver transformational new medicines for patients.

Vaccines

We are the world’s largest vaccines company by revenue, delivering vaccines that help protect people at all stages of life. Our R&D focuses on developing vaccines against infectious diseases that combine high medical need and strong market potential.

Consumer Healthcare

Our world-leading Consumer Healthcare business combines science and consumer insights to create innovative everyday healthcare brands that consumers trust and experts recommend for oral health, pain relief, cold, flu and allergy, digestive health and vitamins, minerals and supplements.
How we do it

Everyone at GSK is focused on our three long-term priorities, underpinned by our ambition to build a more purpose and performance driven culture, aligned to our values.

Innovation
Innovation is critical to how we improve health and create financial value. We invest in scientific and technical excellence to develop and launch a pipeline of new products that meet the needs of patients, payers and consumers.

Performance
We deliver growth by investing effectively in our business, developing our people and executing competitively.

Trust
We are a responsible company. We commit to use our science and technology to address health needs, make our products affordable and available and be a modern employer.

Our COVID-19 response
Since the COVID-19 pandemic began, we have been seeking ways to use our scientific expertise and technology to make a difference. We are working with several scientific partners to develop a broad portfolio of potential solutions from prevention to treatment, with several investigational COVID-19 vaccines and antibody medicines in clinical studies.

Shingles
Our Shingrix vaccine, which reached sales of £2 billion in 2020, is the most successful biopharma launch of the last 10 years.

HIV
Around 38 million people across the world live with HIV, including approximately 1.7 million children. Ensuring no child living with HIV is left behind, in June 2020 we received US FDA approval, followed by European EMA approval in January 2021, of the first-ever dispersible tablet formulation of dolutegravir, for children from four weeks of age.

Our Culture
We are building a stronger purpose and performance culture underpinned by our values and expectations – so that together we can deliver extraordinary impact for patients and consumers and make GSK a brilliant place to work.

Our values
Patient focus
Transparency
Respect
Integrity

Our expectations
Courage
Accountability
Development
Teamwork

Why we do it
To improve the quality of human life by helping people do more, feel better, live longer.
The UNC Eshelman School of Pharmacy, ranked as the #1 pharmacy school in the nation by the US News and World Report 2020, is a nationally recognized leader in progressive pharmaceutical care practice, education, and research. We are committed to building a diverse talent pipeline. Our global inclusion and diversity councils are driving our agenda.

**UNC PARTNERSHIP**

The UNC Eshelman School of Pharmacy anchors one corner of North Carolina’s famed Research Triangle Park (RTP) which hosts an abundance of pharmaceutical, biotechnology, and healthcare companies. This environment offers opportunities for collaboration in research, education, and patient care with partners in academia, industry, and healthcare.

**CHAPEL HILL, NC**

The Eshelman School of Pharmacy is part of the University of North Carolina at Chapel Hill, a major research university with a large academic medical center. The School of Pharmacy has specialized research centers pursuing advancements in drug delivery, nanotechnology cancer treatment, pharmacogenomics, and medication optimization.

The Chapel Hill campus is close to the RTP business region, and several large health systems. It offers a rich blend of culture, entertainment, recreation, fine dining, and some of the best college basketball action in the country.

**RESEARCH TRIANGLE PARK (RTP), NC**

UNC anchors one corner of North Carolina’s famed RTP which hosts an abundance of pharmaceutical, biotechnology, and healthcare companies. This environment offers opportunities for collaboration in research, education, and patient care with partners in academia, industry, and healthcare.

RTP is the largest GSK commercial site that operates in the US and houses critical roles in pharmaceuticals, corporate, and manufacturing functions, as well as Research and Development (R&D) and Viiv Healthcare.

US Medical Affairs fellows gain pharmaceutical industry experience during the second year of the fellowship program at RTP. Global Regulatory Affairs fellows spend 2 years with their sponsor company.

"Every year, it is my privilege to observe the development of our highly motivated fellows, as they engage in opportunities and activities afforded to them by the University and GSK that could transform treatment! I am proud to be a part of the process."

Gauri Rao, PharmD, MS
Assistant Professor, Division of Pharmacotherapy and Experimental Therapeutics
Associate Director of Fellowship Programs
UPPER PROVIDENCE (UP) / COLLEGEVILLE, PA

The Upper Providence GSK site, which is the US R&D Hub, is named for its location in Upper Providence Township, Montgomery County, Pennsylvania. It is approximately 30 miles northwest of Center City Philadelphia and approximately 35 miles from Philadelphia International Airport.

At UP, GRA and PK/PD fellows gain hands-on pharmaceutical industry experience in a highly dynamic work environment.

WALTHAM, MA

The Waltham location, previously known as Tesaro, was acquired by GSK in 2019 to strengthen the oncology pipeline and has become a pivotal R&D location. It is located approximately 15 miles northwest of downtown Boston.

"Each year, for more than three decades, we have an incredible group of fellows, who make a significant contribution to the legacy of our program. These fellows are a reflection of UNC and GSK’s strong long-standing commitment to train and develop the newest generation of pharmaceutical industry professionals."

Robert Dupuis, PharmD, FCCP
Professor, Division of Pharmacotherapy and Experimental Therapeutics
Director of Fellowship Programs

Global Regulatory Affairs (GRA) fellows may be based out of UP or Waltham, based on business need, throughout the 2-year duration of the fellowship program.
Fellowship objectives

- Understand the role of Medical Affairs in the pharmaceutical industry working closely with the US Senior Medical Affairs Lead and collaborating cross-functionally for a medicine in support of the overall medicine plan.
- Understand principles of clinical research, apply clinical trial design strategies, and collect and analyze data.
- Conduct strategic reviews of the medical literature and the competitive environment to identify data and educational gaps to enhance patient care.
- Contribute to US scientific engagement between GSK and external communities to advance the understanding of disease treatment and management.
- Participate in the medical review of promotional materials and communicate scientific information to internal and field based colleagues.
- Support launch preparations for new medicines and/or new indications or label extensions.

Fellows collaborate cross-functionally with US Senior Medical Affairs Leads, Scientific Directors, Trainers and MSLs in support of the overall medicine plan. Fellows make impactful contributions to the business as they learn and develop professionally during their fellowship journey.
At the UNC Eshelman School of Pharmacy, fellows will have the opportunity to

• Review the principles of clinical research, such as Good Clinical Practice (GCP) and gain an understanding of the wellbeing of study subjects, data collection, analysis, and safety reporting
• Apply clinical design strategies, evaluate research designs and study reports, and utilize biostatistical tests
• Develop protocols, recruit and monitor subjects, collect and analyze data, and prepare an academic manuscript

At GSK within US Medical Affairs, fellows will have the opportunity to

• Understand the decision-making process that healthcare providers and payers follow for drug utilization
• Contribute to the development and execution of US Medical Affairs plans and integrate the voice of the customer including, providers, payers, patients, into a medical affairs strategy
• Gain clinical knowledge and product expertise in a therapeutic area

Program Director

Antoinette Burgess, PharmD
Head, Medical Engagement Center of Excellence, US Medical Affairs, GSK

“...The partnership between UNC and GSK provides a unique development opportunity. Fellows gain practical experience with the drug development and clinical trial process in an academic university setting and then apply those learnings within a pharmaceutical industry setting in US Medical Affairs. Our Fellows make a significant contribution as they develop on their journey with us and it helps to shape their overall professional careers.”

Antoinette Burgess, PharmD

Preceptors

George Clayton, PharmD
Director, Medical Capabilities and Learning Excellence, GSK

Dawn Wilson, PharmD
Director, Medical Capabilities and Learning Excellence, GSK

Fellows

Veronica Nguyen, PharmD
Second Year Fellow
St. John’s University College of Pharmacy and Health Sciences

Darrian Proco, PharmD
Second Year Fellow
UNC Eshelman School of Pharmacy

Michele Muir, PharmD
First Year Fellow
UNC Eshelman School of Pharmacy

Preston Skersick, PharmD
First Year Fellow
Mercer University College of Pharmacy
Global Regulatory Affairs fellowship

The Global Regulatory Affairs (GRA) fellowship provides practical training and experience to help fellows gain expertise in regulatory requirements and strategy pertinent to drug development. Fellows will develop an in-depth understanding of regulatory affairs and the drug development process from pre-clinical to post-marketing strategies. Fellows will establish a strong foundation of experience and knowledge to lead a successful career within the pharmaceutical industry, Food and Drug Administration (FDA), or Contract Research Organizations (CROs).

Fellowship objectives

- Develop regulatory strategy by using and interpreting regulations and guidelines
- Provide support to the life-cycle management activities pre- and post-approval, for drug and biologic products and gain an understanding of the principles of agency review processes
- Gain an understanding of early and late phase clinical development and gain expertise in the requirements of regulatory submissions
- Understand the various facets of global regulatory affairs, including labeling, advertising and promotion, regulatory intelligence and strategy, chemistry manufacturing and controls (CMC), and non-clinical regulatory
- Participate in departmental initiatives for process improvements and/or regulatory knowledge management
- Obtain valuable foundational knowledge by partaking in the Regulatory Affairs Certification (RAC) course and examination
## Therapeutic Groups (TG)

The TG fellow will have the opportunity to:

- Become an integrated member of the cross-functional team and provide regulatory strategic input for both early and late-stage clinical development programs
- Interact with health authorities globally through correspondences and preparation of submission packages to guide product development
- Develop and maintain awareness of the regulatory landscape to inform drug development

## Chemistry, Manufacturing & Controls (CMC)

The CMC fellow will have the opportunity to:

- Liaise with health authorities to obtain scientific advice and respond to CMC questions
- Collaborate with a variety of functional areas, such as biopharmaceutical development and supply, manufacturing, device engineering, quality, and clinical, to determine overall CMC regulatory strategy for biopharmaceuticals/cell gene therapy (CGT)
- Plan/prepare CMC Biopharmaceuticals regulatory documents for global submissions across all stages of product development and life cycle
- Support health authority engagements related to scientific advice and CMC questions

"Fellows are given the opportunity to utilize the knowledge and leadership skills they have obtained from our partnership with UNC and gain hands-on experience in the pharmaceutical industry at GSK. The program also assists in identifying and developing emerging talent to potentially support the future GSK business. On behalf of GRA, we very much look forward to working with the fellows over the coming years!"  

Mark DeSiato

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<tr>
<th>Sponsor</th>
<th>Program Director</th>
<th>Program Preceptor</th>
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| Mark DeSiato  
Vice President, Therapeutic Group  
Regulatory Head, GSK | Kevin Fitzgerald,  
BS Pharm  
Senior Director, Delivery Team  
Lead & Regulatory Expert, Regulatory Transformation RPS, GSK | Kwadwo Yeboah,  
PharmD  
Manager, Oncology Therapeutic Group, Global Regulatory Affairs, GSK |

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<th>CMC Fellows</th>
<th>TG (Strategy) Fellows</th>
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| Lauren Xu,  
PharmD, MS, RAC  
Second Year Fellow  
University of Pittsburgh | Deanna Rubin, PharmD  
Second Year Fellow  
Oncology Therapeutic Group  
UNC Eshelman School of Pharmacy |
| Holly Maize,  
PharmD  
First Year Fellow  
Medical College of Wisconsin School of Pharmacy | Hayley Karpick, PharmD  
First Year Fellow  
Oncology Therapeutic Group  
Purdue University College of Pharmacy |
| Stephanie Kim, PharmD  
First Year Fellow  
Specialty Therapeutic Group  
UNC Eshelman School of Pharmacy | |
The Pharmacokinetics/Pharmacodynamics (PK/PD) fellowship provides practical training and experience needed to successfully obtain a position as a Clinical Pharmacologist in the pharmaceutical industry, academia, or in a clinical setting. The fellowship emphasizes coursework and hands-on experience focused on the application of population and physiologically-based PK/PD modeling and simulation techniques to guide drug development. Fellows will work on cross-functional teams and contribute to drug development from a clinical pharmacology perspective. In addition, fellows will implement model-informed drug discovery and development (MID3) approaches to accelerate and de-risk drug development to bring novel therapies to patients faster.

**Fellowship objectives**

- Understand the nature and relevance of clinical data evaluations relative to drug development
- Design and implement studies to examine drug absorption, drug disposition, pharmacodynamic endpoints and drug interactions in healthy human volunteers or diseased patient populations
- Understand foundational concepts related to population PK/PD and physiologically-based PK modeling and simulation techniques
- Understand important considerations in clinical trial design and the conduct of clinical investigations in specific patient populations (e.g., pediatrics)
- Perform PK/PD and statistical data analysis using relevant software packages
- Prepare a manuscript, seminar and other scholarly vehicles for communication of scientific results
Year one

At the UNC Eshelman School of Pharmacy, fellows will have the opportunity to

- Engage in didactic and scholarly training via coursework in population and physiologically-based PK/PD modeling and simulation techniques
- Coordinate and support clinical pharmacology, drug pharmacokinetic and metabolism studies and mathematical modeling with UNC Division of Pharmacotherapy and Experimental Therapeutics (DPET) faculty
- Design, conduct and carry out data analysis of clinical pharmacology studies in the academic setting as part of the learning experience

Year two

At GSK within Clinical Pharmacology Modelling and Simulation (CPMS), fellows will have the opportunity to

- Interact with multi-disciplinary teams to apply state-of-the-art quantitative methodologies to aid the development of compounds in the GSK portfolio; such as population PK/PD analyses, exposure-response, disease progression modeling and clinical trial simulations
- Provide expertise to the design and analysis of first-time-in-human, proof-of-concept, drug-drug interaction or other clinical pharmacology studies
- Contribute to modeling and simulation efforts for quantitative decision making to enhance study design, support candidate selection, provide dose rationale, and/or benchmark against competitor compounds

Sponsor

Brandon Swift, PhD
Director, Clinical Pharmacology, Modeling and Simulation, Clinical Pharmacology and Experimental Medicine, R&D, GSK

Program Director

Daniel Gonzalez, PharmD, PhD
Associate Professor, Division of Pharmacotherapy and Experimental Therapeutics, UNC

Fellows

Eleni Karatza, PhD
Second Year Fellow
National and Kapodistrian University of Athens

Abdallah Derbalah, PhD
First Year Fellow
University of Otago

“An academic setting like the UNC DPET within the Eshelman School of Pharmacy is a phenomenal learning environment for the fellow to become acquainted with the concepts and methodologies that will aid them at GSK. While at GSK, the fellow will contribute to drug development programs by utilizing state-of-the-art modeling and simulation techniques.”

Daniel Gonzalez, PharmD, PhD
UNC GSK Fellowship Alumni

Employed at GSK

Keith Pappa  
Head of Clinical Sciences, Chief Scientific and Medical Office, Viiv  
Clinical Research & Drug Development fellow 1985-1986

Lynn Henson  
Senior Director, SERM, Central Safety Department, GSK  
Clinical Research & Drug Development fellow 1990-1992

Katy Moore  
Global Head, Clinical Pharmacology, Viiv Research & Development  
Pharmacokinetics & Pharmacodynamics Clinical Pharmacology fellow 1993-1995

Melissa Ellis  
Director, SERM, Central Safety Department, GSK  
Clinical Research & Drug Development fellow 1994-1996

Amy Meadowcroft  
Director, Clinical Development, Medicine Delivery, GSK  

Sarah Roberts  
Manager, Global Regulatory Affairs, Labeling, GSK  
Clinical Research & Drug Development fellow 1998-2000

Susan Ford  
Director, Clinical Pharmacology, GSK  
Pharmacokinetics & Pharmacodynamics fellow 2000-2002

Lakshmi Vasist  
Director, Clinical Pharmacology, GSK  
Pharmacokinetics & Pharmacodynamics fellow 2004-2006

Justin Koteff  
Director, Scientific Communications, Strategy & Medical Information, Viiv  
Clinical Research & Drug Development fellow 2009-2011

Bryant Tran  
Scientific Director, US Medical Affairs, GSK  
Clinical Research & Drug Development fellow 2009-2011

Elizabeth Blair  
Director, Clinical Development, Scientific Medical Office, Viiv  
Clinical Research & Drug Development fellow 2012-2014

Christine Trezza  
Director, Medical Governance & Operations, Global Medical Affairs, Viiv  
Clinical Research & Drug Development fellow 2013-2015

Michael Bogart  
Manager, US Value Evidence Outcomes, GSK  
Pharmaceutical Outcomes Research fellow 2013-2015

Elizaveta Budko  
Manager, Labeling, Global Regulatory Affairs, GSK  
Global Regulatory Affairs fellow 2014-2016

Jennifer Kim Cremer  
Manager, Clinical Development, Respiratory & Specialty, GSK  
Clinical Research & Drug Development fellow 2014-2016

Prani Paka  
Scientific Director, Global Medical Affairs Oncology, GSK  
Medical Affairs fellow 2016-2018

EM PLOYED AT UNC

Denise Rhoney  
Associate Dean for Curricular Innovation, PACE, UNC Eshelman School of Pharmacy  
Clinical Research & Drug Development fellow 1993-1995

Craig R. Lee  
Professor of Pharmacy, DPET, UNC Eshelman School of Pharmacy  
Clinical Research & Drug Development fellow 2000-2002
Fernando Carreño
Manager, Quantitative Clinical Pharmacology Oncology - Clinical Pharmacology, Modeling and Simulation (CPMS) Department Pharmacokinetics/Pharmacodynamics fellow 2019-2021

Kristina Goyal
Manager, Oncology Therapeutic Group, Global Regulatory Affairs, GSK Global Regulatory Affairs fellow 2017-2019

Brittany Dustman
Associate Director, Oncology Therapeutic Group, Global Regulatory Affairs, GSK Global Regulatory Affairs fellow 2016-2018

Hitesh Patel
Medical Information Scientist, Medical Affairs, GSK Medical Affairs fellow 2017-2019

Kwadwo Yeboah
Manager, Oncology Therapeutic Group, Global Regulatory Affairs, GSK Global Regulatory Affairs Fellow 2018-2020

Lauren Hothem
Manager, Respiratory, Medical Affairs, GSK Medical Affairs Fellow 2018-2020

Kristina Goyal
Manager, Oncology Therapeutic Group, Global Regulatory Affairs, GSK Global Regulatory Affairs fellow 2017-2019

Eric Mui
Manager, CMC-Regulatory Affairs, Development-GRA-Biopharm Development Projects Chemistry, Manufacturing, Controls (CMC) Fellow 2019-2021

Riddhi Virparia
Manager, Oncology Therapeutic Group, Global Regulatory Affairs, GSK Global Regulatory Affairs Fellow 2019-2021
Application and Eligibility

The UNC Eshelman School of Pharmacy and GSK Pharmaceutical Industry Fellowships commence in July 2022.

Applicants must submit an online application including a letter of interest, CV, unofficial transcript, and 3 letters of recommendation.

Interviews will be arranged virtually for selected candidates.

Visit [http://pharmacydpetfellowships.web.unc.edu](http://pharmacydpetfellowships.web.unc.edu) for application instructions and deadlines.

Early applications are highly encouraged.