ABOUT OUR COMPANY

Allergan plc (NYSE:AGN), headquartered in Dublin, Ireland, is a bold, global pharmaceutical company and a leader in a new industry model - Growth Pharma. Our company is focused on developing, manufacturing and commercializing branded pharmaceuticals, devices and biologic products for patients around the world. Allergan markets a portfolio of leading brands and best-in-class products for the central nervous system, eye care, medical aesthetics and dermatology, gastroenterology, women’s health, urology, and anti-infective therapeutic categories. We are an industry leader in research and development, with one of the broadest innovative development pipelines in the pharmaceutical industry with 65+ mid-to-late stage pipeline programs in development. With commercial operations in approximately 100 countries, our company is committed to working with physicians, healthcare providers and patients to deliver innovative and meaningful treatments to help people around the world live longer, healthier lives. Learn more at www.Allergan.com.

OUR WORLD-CLASS MANUFACTURING AND R&D NETWORK

GLOBAL HEALTH ECONOMICS AND OUTCOMES RESEARCH (GHEOR) MISSION

1. PRODUCT VALUE PROPOSITION
   ...outcomes research strategy based on product value, stakeholder needs & insights

2. EVIDENCE GENERATION AND TOOL DEVELOPMENT
   ...through clinical and health economics & outcomes research (HEOR) data

3. VALUE COMMUNICATION
   ...about evidence informing the value proposition to stakeholders
   ...informs health care decision making
The University of Washington is a world-class leader in health sciences education and has been consistently listed in US News and World Report as one of the top 10 institutions for its graduate programs. The University is particularly noted for its strong research programs and since 1974 has received more federal funds for research and training than any other public university in the United States. It fosters a highly collegial atmosphere between departments and academic units, creating a particularly attractive environment for such partnerships between the public and private sectors.

The Pharmaceutical Outcomes Research and Policy Program (PORPP) is housed within the University of Washington School of Pharmacy, which boasts nearly 120 years of academic and research success. Faculty in the program (1) provide advanced research training for graduate students, post-doctoral fellows and clinicians (PharmDs, MDs); (2) conduct rigorous scientific research in the pharmacoeconomics and outcomes of pharmaceuticals and other health technologies, and (3) translate and disseminate the results of research into clinical practice and healthcare policy, with the goal of improving patient care.

PORPP faculty participating in the fellowship have been chosen both for their dedication to teaching and their excellence in research. Each is trained either as a health economist or health services researcher and all have an extensive history of effective pharmacoeconomic and pharmacoepidemiologic research.
ABOUT OUR FELLOWSHIP

The Allergan/University of Washington GHEOR Fellowship is a two-year program that provides training and hands-on experience in a broad-range of health economics and outcomes research topics. The program is structured to allow fellows to gain proficiency in health outcomes strategy and research as conducted in both academic and pharmaceutical industry settings.

THE FELLOWSHIP PROGRAM

Allergan and the University of Washington are pleased to offer two, 2-year GHEOR Fellowship positions for the academic year 2017-2019. Fellows will spend their first year at the University of Washington (Seattle, WA), and the second year at Allergan (Irvine, CA). The objective of the first year is to educate fellows on the principles and methods used in health economics and outcomes research. During the second year, fellows are provided with opportunities to gain practical knowledge and experience with the use of clinical, economic, and humanistic data by supporting the development and commercialization of pharmaceutical products. This will be accomplished by participating in work activities undertaken by the GHEOR team.

Compensation includes a competitive stipend, basic medical insurance, and holiday/vacation time. A Master’s (MS) Degree is awarded upon completion of all course requirements and thesis project.

FELLOWSHIP DIRECTORS

UNIVERSITY OF WASHINGTON
Beth Devine, PharmD, MBA, PhD, FASHP
Associate Professor
Pharmaceutical Outcomes Research & Policy Program
1959 NE Pacific Avenue, H-375D
Box 357630
Seattle, WA 98195-7630
E-Mail: bdevine@uw.edu

ALLERGAN PLC
Patrick Gillard, PharmD, MS
Director, GHEOR
2525 Dupont Drive
Irvine, CA 92612
E-Mail: Gillard_Patrick@allergan.com
Phone: (714) 246-2354
FIRST YEAR OBJECTIVES

The objective of the first year is to provide the fellow with the research tools necessary for pharmacoeconomic and policy assessment. The fellow will be given an overview of pharmaceutical economics and general health policy, and taught methods of economic assessment, health services research, epidemiology, clinical research design, and biostatistical analyses.

The fellow will be assigned a MS thesis project which is selected based on input from both Allergan as well as the University of Washington mentors. Fellows are highly encouraged to complete their MS project during their first year. Additionally, fellows will also engage in ongoing projects with Allergan throughout their first year, applying skills from previous pharmacy training as well as integrating new techniques developed from University of Washington courses. Applying learning to solve real-world problems is a constant focus of the fellowship.

The fellow’s actual course of study will be developed on an individual basis with the Program Director, Dr. Beth Devine, but will consist of courses in biostatistics, epidemiology, pharmacoeconomics and outcomes research, and health and pharmaceutical policy.

AFTER COMPLETION OF THE FIRST-YEAR, THE FELLOW WILL HAVE A CLEAR UNDERSTANDING OF:

- General principles of economics and in particular how economics influences the use, cost, and availability of pharmaceuticals.
- The complex structure of drug policy and how it determines relationships between consumers, health care providers, insurers, payers, and government agencies.
- The breadth and scope of analytical methods needed for the assessment of Patient Reported Outcomes (PROs), economic modeling, retrospective database studies, and observational studies.
- Formulary development, maintenance and evaluation in institutional, managed care, and state-level government programs.
SECOND YEAR OBJECTIVES

The second year of training will be at Allergan in Irvine, CA with the GHEOR department. This part of the program is designed to allow the fellow to learn about the role of pharmacoeconomics and outcomes research in the drug development and commercialization process within the industry setting. The research may be on an existing or experimental product, for a disease state that is of interest to Allergan.

In addition to completing individual research project(s), fellows will participate in ongoing pharmacoeconomic evaluations, outcomes research, and other projects in collaboration with the GHEOR team. These experiences will provide the fellow with opportunities to interact with team members in other departments at Allergan to learn how economic analyses and outcomes research are used throughout the pharmaceutical industry. Fellows will see firsthand how outcomes research is utilized to demonstrate the place of Allergan products in treatment pathways and its value.
ALLERGAN FELLOWSHIP MENTORS

Sepideh Varon, PhD  
Senior Director, GHEOR

Vaishali Patel, PharmD, MS  
Senior Director, GHEOR

Jonathan W. Kowalski, PharmD, MS  
Vice President, US HEOR

Patrick Gillard, PharmD, MS  
Director, GHEOR

Joanna Campbell, PhD  
Director, GHEOR

Hema Viswanathan, BPharm, PhD  
Director, GHEOR

Katelyn Keyloun, PharmD, MS  
Principal Research Associate, GHEOR

Vanessa Shih, PharmD, MS  
Principal Research Associate, GHEOR

ALLERGAN FELLOWSHIP MENTORS

VAISHALI PATEL, PHARM.D, MS  
Senior Director, GHEOR

LENNY GONZALES, PHARM.D, MS  
Associate Professor, Director of Graduate Programs

JOSH CARLSON, MPH, PH.D  
Associate Professor

LOUIS P. GARRISON, JR., PH.D  
Professor Emeritus

UNIVERSITY OF WASHINGTON  
PROGRAM FACULTY

• Anirban Basu, PhD  
  Professor and Stergachis Family Endowed Director of PORPP

• Denise Boudreau, PhD  
  Affiliate Associate Professor

• Beth Devine, PharmD, MBA, PhD, FASHP  
  Associate Professor, Director of Graduate Programs

• Josh Carlson, MPH, PhD  
  Associate Professor

• Louis P. Garrison, Jr., PhD  
  Professor Emeritus

• Ryan Hansen, PhD, PharmD  
  Assistant Professor

• Thomas K. Hazlet, PharmD, Dr. PH  
  Associate Professor

• Scott D. Ramsey, MD, PhD  
  Professor

• Sean D. Sullivan, PhD  
  Professor and Dean of School of Pharmacy

• David L. Veenstra, PharmD, PhD  
  Professor and Associate Director of PORPP

• Joseph Babigumira  
  Assistant Professor

• Aasthaa Bansal  
  Research Assistant Professor

• Caroline Bennette  
  Acting Assistant Professor

• Andy Stergachis  
  Professor and Associate Dean for Research, Graduate Programs and New Initiatives
SHEILA SHAPOURI, PHARM.D

Sheila joins the UW/Allergan fellowship after receiving her PharmD from the University of Washington in 2016. Prior to pharmacy school, she worked as a research associate at the Allen Institute for Brain Science generating publicly available neuroscience and genetics resources now used by researchers worldwide. Although she has left the lab, her interest in improving health outcomes at a patient population level through targeted research continues. During pharmacy school, Sheila completed clinical clerkships at the Food and Drug Administration (FDA), PATH, and the Centers for Disease Control and Prevention (CDC). There she engaged in the application of surveillance and outcomes data to guide healthcare decisions and policy at a national and global level. Sheila participated in the AMCP P&T Competition and her team placed as semi-finalists nationally.

Sheila is looking forward to the opportunity to work with the PORPP faculty and Allergan team while gaining the advanced training necessary to become an effective health economics and outcomes researcher. For her thesis project, she will be building a predictive model for 30-day hospital readmissions or ER re-visits among patients with acute bacterial skin and skin structure infections (ABSSSI).

MICHAEL SERBIN, PHARM.D

Michael received his PharmD degree from the University of Washington School of Pharmacy (UWSOP) in 2016 and a BS in biomedical engineering from the University of Southern California in 2011. At UWSOP he worked as a research assistant and was recently published as a first author in the Journal of Managed Care and Specialty Pharmacy. Michael has interests in P&T decision-making, formulary development, and the application of economic modeling. He focused his 4th year PharmD clerkships on formulary development and wrote P&T submissions at Premera Blue Cross, UW Medical Center, and Providence Health. Michael competed in the AMCP P&T competition where his team placed as semifinalists nationally.

This year Michael is excited to start working with PORPP faculty and the GHEOR team at Allergan to improve his research and economic modeling abilities. For his thesis project, Michael will use the Medical Expenditure Panel Survey database to assess the societal burden of non-drop (surgery and other procedures) treatment of glaucoma in patients unsuitable for drop therapy.
Sarah Baradaran, PharmD, MS

Sarah received her doctorate of pharmacy from the University of Washington (UW) School of Pharmacy in 2015. During the first year of her fellowship, she was involved in a pharmacogenomic evidence project with her colleagues at UW, under mentorship from Professor Beth Devine. She also completed her thesis project entitled "The identification and characterization of acute kidney injury (AKI) associated with systemic polymyxins in the management of severe gram-negative infections."

During her second year of the fellowship, Sarah has worked in the infectious disease therapeutic area. She is performing additional analyses to estimate the association between healthcare utilization, cost and acute kidney injury. She will also begin supporting a project that will be an expansion of her thesis utilizing electronic health records. Sarah is excited to apply her clinical and research skills on various projects throughout the second year of the fellowship.

ABSTRACTS FROM FELLOWSHIP:

MANUSCRIPTS FROM FELLOWSHIP:

Amy Tung, PharmD, MS

Amy received her PharmD degree from the University of Washington (UW) in 2015. During the first year of her fellowship, she completed her thesis titled “Characterizing Healthcare Utilization, Direct Costs, and Comorbidities Associated with Interstitial Cystitis: A Retrospective Claims Analysis” under the mentorship of Professor Beth Devine.

During the second year of the fellowship, Amy has worked in the urology therapeutic area. After submitting her thesis as a manuscript to the Journal of Managed Care Pharmacy, she has been analyzing data from a prospective burden of illness study on nocturia to understand the association between frequency of nocturia episodes and quality of life. In tandem, she is conducting a claims analysis to estimate the opioid burden in the interstitial cystitis population as well as working with cross-functional departments to solicit feedback from global Health Technology Assessment (HTA) experts on Allergan’s evidence synthesis and strategy plans for LiRIS®. Amy is excited to apply her training in health economics and outcomes research in the industry setting during the second year of the fellowship.

ABSTRACTS FROM FELLOWSHIP:

MANUSCRIPTS FROM FELLOWSHIP:
KATELYN KEYLOUN
PharmD, MS
2014-2016

Principal Research Associate, Global Health Economics and Outcomes Research
Allergan plc, Irvine, CA

MANUSCRIPTS FROM FELLOWSHIP

VANESSA SHIH
PharmD, MS
2014-2016

Principal Research Associate, Global Health Economics and Outcomes Research
Allergan plc, Irvine, CA

MANUSCRIPTS FROM FELLOWSHIP
1. Shih V, Campbell J, Devine EB. The Association between Onset of Vision Impairment and Functional Limitations and Informal Caregiving Requirements in Older Americans. (In Progress)

TRACY YEP
PharmD, MS
2013-2015

Pharmacy Quality, Utilization, and Clinical Programs Coordinator
Group Health
Seattle, WA

MANUSCRIPTS FROM FELLOWSHIP
1. Yep T, Patel VD, Slejko JF, Devine EB. Comparing Total and Disease Related Healthcare Cost for Glaucoma Patients by Disease Severity: A Retrospective Claims Database Analysis. (In Progress)

CHRIS WALLICK
PharmD, MS
2012-2014

Health Economist
Genentech, San Francisco, CA

MANUSCRIPTS FROM FELLOWSHIP
MANUSCRIPTS FROM FELLOWSHIP

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MANUSCRIPTS FROM FELLOWSHIP
APPLICATION INFORMATION

Interested students must apply to both the University of Washington Graduate School, as well as the Pharmaceutical Outcomes Research & Policy Program. The online application process can be found at:

http://sop.washington.edu/department-of-pharmacy/pharmaceutical-outcomes-research-policy-program-porpp/fellowship-opportunities/

CONTACT INFORMATION

If you have any questions, please contact:

UNIVERSITY OF WASHINGTON
Penny Evans
Graduate Program Advisor
Box 357630
University of Washington
Seattle, WA 98195-7630
E-Mail: pennye@uw.edu
Phone: (206) 616-1383
Fax: (206) 543-3835

ALLERGAN PLC
Patrick Gillard, PharmD, MS
Director, GHEOR
2525 Dupont Drive
Irvine, CA 92612
E-Mail: Gillard_Patrick@allergan.com
Phone: (714) 246-2354

DEADLINE

The application deadline is December 15, 2016 and the start date of the Fellowship is July 1, 2017.

APPLICATION ELIGIBILITY

Applicants for this fellowship must have a degree in pharmacy or health-related discipline and have some research experience (preference will be given to those with a high academic standing). Excellent written and verbal communication skills are also essential. Applicants will be required to submit their curriculum vitae, a letter describing their career goals, and three letters of recommendation. Selection of fellows will be made by a steering committee composed of the University of Washington faculty members and representatives from Allergan.