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CHOICE FACULTY

Joseph Babigumira, MBChB, MS, PhD
Adjunct Assistant Professor
Aasthaa Bansal, PhD
Assistant Professor
Douglas Barthold, PhD
Research Assistant Professor
Anirban Basu, PhD
Stergachis Family Endowed Director & Professor
Brian Bresnahan, PhD
Adjunct Research Assistant Professor
Josh Carlson, MPH, PhD
Associate Professor, Associate Director, Graduate Programs
Beth Devine, PharmD, MBA, PhD
Professor, Director, Graduate Programs
David Flum, MD, MPH
Adjunct Professor
Louis Garrison, Jr., PhD
Professor Emeritus
Shelly Gray, PharmD, MS
Shirley & Herb Bridge Endowed Professor
Ryan Hansen, PharmD, PhD
Research Assistant Professor
Thomas Hazlet, PharmD, DrPH
Associate Professor
Lurdes Inoue, MS, MS, PhD
Adjunct Professor
Jerry Jarvik, MD, MPH
Adjunct Professor
Larry Kessler, ScD
Adjunct Professor
Gary Lyman, MD, MPH
Adjunct Professor; Co-Director, HICORE (Hutchinson Institute for Cancer Outcomes Research and Evaluation), Fred Hutchinson Cancer Research Center
Zachary Marcum, PharmD, MS, PhD
Bailey Faculty Fellow; Assistant Professor
Donald Patrick, PhD
Adjunct Professor, Dept. of Health Services
Scott Ramsey, MD, PhD
Adjunct Professor, Director, HICORE (Hutchinson Institute for Cancer Outcomes Research and Evaluation), Fred Hutchinson Cancer Research Center
Andy Stergachis, PhD
Professor, Associate Dean for Research, Graduate Education & New Initiatives
Sean Sullivan, PhD
Dean of the School of Pharmacy
David Veenstra, PharmD, PhD
Professor, Associate Director
Davene Wright, PhD
Assistant Professor, Pediatrics; Adjunct Assistant Professor

STAFF

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University of Washington School of Pharmacy
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Graduate Program Advisor
Paul Kraegel, MSW
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Alex Levine
Computer Specialist, Photographer
I am pleased to present the first Annual Report for The Comparative Health Outcomes, Policy, and Economics (CHOICE) Institute, which was inaugurated in the Fall of 2017. Along with this inauguration, a new website, uwchoice.org, was unveiled. Our group continues to work towards the three-pronged mission of research, training, and service in the fields of health economics, outcomes research, and policy evaluations. Our faculty and students continue to excel in these missions. This annual report highlights some of those accomplishments and special moments. Our training programs are going strong. For this coming year, we are admitting another strong new graduate program cohort. The admissions committee has recruited our top candidates, who are profiled here. Our Distance Learning Certificate in Health Economics and Outcomes Research will welcome another large batch of students this fall. We have now trained over 350 students through this mechanism.

As with any program, we have subtractions and additions in personnel. We are excited to welcome new Research Assistant Professor Doug Barthold to our group. Unfortunately, our Graduate Program Advisor, Michelle Hughes, will be leaving us to pursue advanced degrees. We wish her well and thank her for all she has done over the past two years to help set up the Institute. A search for a new Graduate Program Advisor is on the way.

Our institute is committed to creating an inclusive academic community where every individual is treated fairly and with dignity and respect. We strongly believe that diversity enriches learning, broadens the perspectives of all in our program, and improves our sense of community. Diversity requires an atmosphere of inclusion, tolerance, respect, and equity. We invoke these principles in every decision we make at the institute. Our diversity statement can be found on our website. It is my great pleasure to thank our anonymous donor who established a first of its kind endowment for the Institute: The CHOICE Institute Diversity Endowed Graduate Fellowship. This new diversity fellowship supports underrepresented CHOICE graduate students in the field of health economics, outcomes research, and policy evaluations with deep personal experience with, and connection to, diverse cultures. We believe deeply in the benefits of this fellowship and have arranged a 50% match to all gifts made to the Diversity Endowment Fund. Please consider a gift to this fund while this match is available to boost the impact of your gift.

We remain ever grateful to PORPP’s founding members, alumni and our corporate advisors, whose continued support is instrumental to our success in the future. I thank all of our past and present Corporate Advisory Board members for their continued support to the program. We cherish their engagement with the program, and in the future with the Institute.

Anirban Basu, PhD, Professor, Stergachis Family Endowed Director, PORPP, Adjunct Professor, Health Services
DOUG BARTHOLD
THE CHOICE INSTITUTE’S NEWEST FACULTY MEMBER

We welcome Dr. Doug Barthold, PhD., Research Assistant Professor, to the faculty of the Department of Pharmacy and to The CHOICE Institute!

Douglas Barthold joined the CHOICE Institute faculty as a Research Assistant Professor in January of 2018. Prior to UW, Doug completed a postdoctoral fellowship at the Schaeffer Center for Health Policy and Economics at the University of Southern California, and earned his Ph.D. in Economics from McGill University. A health economist, Doug has two broad research areas, covering pharmacoepidemiology of dementia and aging, and economic evaluations of health policy questions, with specific attention to prescription drugs.

Since arriving at the CHOICE Institute, Doug has continued work on several existing studies. This includes an evaluation of disparities in the associations of specific classes of anti-hypertensive medications and Alzheimer’s disease risk. He recently finished a paper titled “The effects of state-level pharmacist regulations on generic substitution of prescription drugs,” which was published in Health Economics in July of 2018. Other ongoing work includes analyses of diagnostic and treatment patterns for dementia patients, and an examination of effects of a digital diabetes prevention program smartphone app.

Joining the CHOICE Institute has allowed Doug to begin new research collaborations with several faculty colleagues, both at UW and in the larger Seattle research community. In new efforts with CHOICE Institute faculty members Shelly Gray and Zachary Marcum, their team of researchers is analyzing commonly used prescription drugs as potential risk modifiers for dementia. This includes an evaluation of metformin’s association with dementia incidence in the Adult Changes in Thought (ACT) Study data (administered by Kaiser Permanente Washington Health Research Institute), and an assessment of bladder antimuscarinics in the Medicare claims data. As part of a larger group of studies that examine the trends in care utilization in older adults, this team will be evaluating trends in medication management and adherence for individuals in the years prior to dementia onset. Doug has also begun working with Anirban Basu and CHOICE Institute graduate Kai Yeung, in a project that aims to identify the effects of state policies that regulate patient out-of-pocket spending for specialty prescription drugs.

In all of these studies, Doug and his colleagues aim to provide scientifically rigorous evidence that can inform policy makers and health care decision makers, as well as reduce the multifaceted and disparate burdens of chronic conditions, such as Alzheimer’s Disease. Doug is excited to develop these studies over the coming year, with a commitment to securing external research funding, publications in top academic journals, and building relationships with the faculty, staff, and students of the CHOICE Institute community.
CLASS OF 2018

DOCTOR OF PHILOSOPHY

Blythe Adamson*
M.P.H. 2009, University of Washington; B.S. University of Washington
DISSERTATION:
“Mathematical Models to Evaluate the Clinical and Economic Impact of Biomedical HIV Prevention Strategies in the United States”

Mark Bounthavong
PharmD 2004 , Western University; M.P.H. 2013, Emory University
DISSERTATION:
“Evaluation of the impact of the Veterans Affairs National Academic Detailing on naloxone prescribed”

Devender S. Dhanda
B.S.1999 , GJ Univeristy Hisar, India; M.B.A. 2001 Panjab University Chandigarh, India; M.S. 2007, University of Nebraska Medical Center Omaha
DISSERTATION:
“Treatment Patterns, Switching, and Cycling of Acute Medications for Migraine: A Cross-Sectional Survey”

Meng Li
DISSERTATION:
“The Real Option Value of Life and Innovation”

MASTER OF SCIENCE

Lauren Chin
B.S. 2012University of Southern California; PharmD 2017, University of Washington
DISSERTATION:
“Factors Associated With Direct Health Care Costs among Commercially-Insured Patients With Metastatic Ovarian Cancer: A Retrospective Analysis”

Sara Higa
B.S. 2012, Georgetown University; M.S. 2013, Georgetown University; Pharm.D., 2017, University of Maryland Baltimore
DISSERTATION:
“Psoriasis Treatment Patterns: A Retrospective Claims Study”

Chiemeka Ike
B.S. 2009, Morgan State University; M.P.H 2011, George Washington University; Pharm.D, 2017, University of Houston
DISSERTATION:
“Treatment Patterns, Switching, and Cycling of Acute Medications for Migraine: A Cross-Sectional Survey”
INCOMING STUDENTS

ALLERGAN FELLOWSHIP

Ashely Kim
BS, UCLA; PharmD, UCSF
Ashley’s research interests are in health economics and outcomes research (HEOR). Specifically, she likes that HEOR is a collection of methods to extrapolate clinical benefits and outcomes and make them meaningful to payers and other stakeholders. She was drawn to our program because it integrates her interests in clinical pharmacy, HEOR and epidemiology.

Jamie Ta
BS, UCSD; PharmD, UCSD
Jamie’s research interests and experiences include observational research studies of national quality measures, real world evidence (RWE)/retrospective claims database analyses, systematic literature reviews, cost-effectiveness analyses, and specialty pharmacy. Jamie is thrilled to be joining the fellowship program and is looking forward to developing her skills in HEOR and working with the UW CHOICE faculty and Allergan team.

BAYER FELLOWSHIP

Thomas Hopkins
BS, Loyola University of Chicago; PharmD, University of Illinois, Chicago
Thomas’ research interests include health economics modeling, patient reported outcomes and comparative effectiveness research. He is looking forward to integrating the academic component into practical applications during the fellowship and working with the faculty at the UW.

GENENTECH FELLOWSHIP

Eddie Neuberger
PharmD, MBA, University of Maryland
**PHD STUDENTS**

**Boshen Jiao**  
BA Fudan University; MPH, School of Public Health, Paris  
Boshen joins us from New York, where he currently works as a staff associate for Columbia University’s Mailman School of Public Health in the Global Research Analytics for Population Health Department. He is most interested in economic evaluation and decision modeling. His ultimate goal is to work as a researcher in an academic setting.

**Woojung Lee**  
BS Yonsei University; PharmD Seoul National University, Korea  
Woojung joins us from California where she works as a research assistant for the School of Public Health at UC Berkeley. Her interests include personalized medicine, and how social and genetic factors relate to drug efficacy and adverse events. Her ultimate goal is to pursue a career in research within the public or private sectors.

**Naomi Schwartz**  
MPH, University of Washington  
Naomi is completing her MPH in Epidemiology here at the University of Washington. She is looking forward to joining CHOICE because she will be able to incorporate her enthusiasm to conduct cost-effectiveness research in health care with her desire to use epidemiological methods to improve health outcomes and identify adverse effects. Her ultimate goal is to work in a hospital, health insurance agency or policy-making institution effecting policy change in health care.

**Sabra Zaraa**  
PharmD, Tunisia; MPH, University of Washington, Global Health  
Sabra Zaraa is coming to us from the Global Health Department here at the University of Washington. She hopes to strengthen her quantitative skills while focusing on application of various HEOR methods to value pharmaceuticals and other health care interventions. She is most looking forward to collaborating with mentors, faculty and peers. After completing her PhD with CHOICE, she will return to Tunisia to advance the field of HEOR.
POST-DOCTORAL FELLOWS

Kritee Gujral, Ph.D.
Kritee was most recently working as a transfer pricing analyst in San Jose, CA. and is most excited about working on applying VOI analysis to healthcare decisions and to learn more about Health and Pharma policy from everyone at the department. Kritee is passionate about contributing to societal improvements and having real-world policy impact. She has previously worked in the non-profit sector in Mysore, India, estimating corruption-related leakages in the food subsidy system of the state. She has also worked as a researcher at the Institute of Child Health Policy in Gainesville, Florida and as a senior transfer pricing tax analyst for Ernst and Young in San Jose, California.

Her primary research interests are Applied Microeconomics, Public Economics, Health Economics, Bargaining and Online Markets. Her doctoral dissertation studied the re-emergence and efficacy of bargaining in e-commerce markets and her Health Economics research identifies channels of improvement in healthcare service delivery. As a senior post-doctoral fellow at the CHOICE Institute, her current work focuses on Value of Information (VOI) analysis applied to healthcare decision-making.

Aig Unuigbe, Ph.D.
Aig is a Visiting Assistant Professor in the Department of Economics at Binghamton University. In this role, he has taught courses in Health Economics and Introductory Microeconomics. Prior to that, he received his Ph.D. in Economics from the City University of New York Graduate Center.

He is an applied microeconomist with interests in health economics, labor economics, applied econometrics and health outcomes. His research is geared towards understanding how health and labor policies, such as public insurance programs and minimum wage policy, affect individual and household behavior. This body of research includes work on the Medicare Part D program as well as Medicaid expansions. He also has an interest in infant mortality and has studied programs that aim to reduce it in high-risk populations.

Aig is excited to work with the faculty at the CHOICE Institute, learn more and collaborate on research in pharmaeconomics, cost effectiveness research and global health.

Jevay Grooms, Ph.D.
Grooms’ research focuses broadly on factors which impede the effectiveness of various health policies as they relate to underrepresented communities domestically and abroad. This past year she presented her research at several invited talk and conferences. Grooms was a member of the CHOICE Institute as a post-doctoral fellow and this fall she will join the faculty at Howard University as an Assistant Professor in the Economics Department.

Alice Ellyson, Ph.D.
Alice served as the Pfizer Senior Postdoctoral Fellow for two years after receiving a PhD in Economics from Florida State University in 2016. During her time at The Comparative Health Outcomes, Policy, and Economics (CHOICE) Institute, she collaborated with colleagues at the University of Washington as the lead author of several econometric analyses studying prescription drug pricing, the opioid epidemic and prescription drug monitoring programs, as well as her existing work in medical malpractice and physician choices. In addition, she studied the effects of WA state’s oral chemotherapy parity law as part of a grant from NIHCM with PI Anirban Basu. In the summer of 2017, she received extensive training in real world data analysis in New York City at Pfizer Inc. under the supervision of her mentor Cristina Masseria, and continues to collaborate with colleagues there on disease detection using real world data and prediction models. Alice is looking forward to transitioning from her academic role at UW into a private sector career in economic analysis with Alaska Airlines.
Elizabeth “Lizzy” Brouwer, MPH, PhD Student
Ms. Brouwer is entering her 4th year in CHOICE’s PhD program. During the past year, Elizabeth finished her required coursework, finished her research assistantship with ICER, commenced work on a grant from the PhRMA foundation with Dr. Carlson, and served as a Teaching Assistant in Pharmacy 541 to Drs Carlson and Hansen. In addition, Elizabeth started working on her short proposal for a dissertation on aspects of value-based insurance design and pharmacy formularies, which she hopes to submit for approval this autumn. In addition to making headway on her dissertation timeline this upcoming year, Elizabeth looks forward to continuing her work with Dr. Carlson on the PhARMA foundation grant to assess and categorize feasible alternatives to the QALY.

Shuxian Chen, MA, PhD Student
Shuxian is entering her 3rd year in CHOICE’s PhD program. During the past year, she has been working with faculty on a number of projects, including development of a framework and online tool for real-world evidence evaluation, and prediction model for performance-based risk-sharing arrangements in oncology. In the summer she completed an internship in Amgen’s Global Health Economics department, with a focus on economic modeling for innovative heart failure therapies using R. Next year she is excited to explore dissertation topic, and continue her work with Dr Beth Devine, PharmD fellows and Premera residents to refine the online tool.

Lauren Chin, PharmD, UW-Bayer Post-Doctoral Fellow 2017-2019
Lauren is entering her 2nd year of the UW/Bayer fellowship. During the past year, Lauren worked on various research projects in the areas of metastatic ovarian cancer, pulmonary arterial hypertension, and improving the usage of real world evidence for healthcare decision makers. For her master’s thesis, she assessed drivers of costs incurred by the upper quintile of patients with metastatic ovarian cancer using Truven MarketScan claims data. Prior to the fellowship, she received her PharmD from UW, and developed monographs at Formulary Resources and managed drug information at Anadem Publishing. She is excited to apply her formal training from UW to provide support for pipeline and marketed products in the oncology, hematology, and cardiopulmonary spaces at Bayer.

Samantha Clark, MS, PhD Student
Samantha is entering her second year in the program. During the past year, she completed her coursework, was a co-author on several publications, and was awarded a WRF-HEOR Fellowship. She worked with Dr. Aasthaa Bansal and Dr. Zachary Marcum over the summer on a longitudinal latent class analysis characterizing patterns of chemotherapy adherence in chronic myeloid leukemia (CML) patients and had a poster accepted for presentation at the 2018 Society for Medical Decision Making (SMDM) Conference in October. In the coming year, Samantha plans to complete her coursework and write her preliminary exams. She is excited to continue her independent research with faculty and to start on a new project with Dr. Andy Stergachis using survival analysis methods to evaluate the impact of international chemotherapy donations during this time as well.
Simrun (Simi) Grewal, MHS, PhD Candidate
Simi will be a fifth-year PhD candidate in CHOICE while continuing to work in health economics with the Bill and Melinda Gates Foundation through UW's START Center. Her dissertation focuses on the differential uptake of biosimilars between states in the U.S. and the potential impact of substitution legislation on use and cost-savings due to biosimilar products. She received her Masters in Health Economics from Johns Hopkins University and has years of experience as a researcher in academic and non-profit settings. During her doctoral studies, Simi has completed work as an intern at Genentech, a research assistant in personalized medicine with Dr. Joshua J. Carlson (her dissertation chair), and in the Department of Global Health.

Shalak Gunjal, MS, PhD Student
Shalak is entering the third year of his PhD program. During the past year, he worked with Dave Veenstra and developed a cost-utility model of genetic risk communication to first-degree relatives of CRC probands with positive Lynch Syndrome. Additionally, he worked as a teaching associate for the Biomedical Regulatory Affairs program. Currently, he is the Global Health Economics Intern in the Cardiovascular division at Amgen, conducting economic and pharmacoepidemiological evaluation of proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitors. During his third year, Shalak plans on identifying his dissertation research and write short proposal.

Karen (He) Guo, MSc, MPP, PhD Student
Karen is entering the second year of her PhD program. During the past year, she presented a poster at ISPOR 2018 about the impact of depression and anxiety on the quality of life at the population level. She also worked as a Research Assistant with Prof. Davene Wright, conducting the Cost Effectiveness Analysis model for appendicitis imaging diagnosis. The abstract has been accepted by the Society for Medical Decision Making (SMDM) 2018, and she will present a poster in Montreal, Canada. Currently, Karen works as a Teaching Assistant for Economic Evaluation in Global Health (online course), helping students from Africa region to learn how to do health economic evaluation. She also works as a Research Assistant with Prof. David Veenstra conducting the Cost Utility Analysis model for the colorectal cancer in high-risk population. During her second year, Karen plans on completing the core coursework and commence on identifying her dissertation research.

Award: 2018 Summer Institutes Scholarship.
Department of Biostatistics, University of Washington

Nathaniel Hendrix, PharmD, PhD Student
Nathaniel is entering his fourth year at The CHOICE Institute. In his third year, he began work on his dissertation, which concerns the use of health economics tools in the translation of machine learning-based diagnostic tools into clinical use. He also served as a research assistant first to Josh Carlson, and then to David Veenstra. With Prof. Carlson, he developed an online tool to allow users to estimate demand for novel genetic tests; with Prof. Veenstra and in collaboration with the Institute for Clinical and Economic Review, he performed a cost-effectiveness analysis of targeted drugs for treatment of plaque psoriasis. This summer, Nathaniel began a predoctoral fellowship in outcomes research sponsored by PhRMA Foundation, which supports his dissertation work. Nathaniel plans to defend his full dissertation proposal this fall and to begin collecting data for his dissertation soon after.
Sara Higa, PharmD, MS

Sara is entering her 2nd year of the UW/Allergan fellowship. She received her PharmD from the University of Maryland Baltimore and her BS and MS degrees from Georgetown University. This past year, Sara had the opportunity to take various courses including methods in economic evaluation, outcomes assessment, biostatistics for longitudinal and multilevel data, and beginner’s Lithuanian. For her master’s thesis at UW, she analyzed claims from the Truven MarketScan Databases to describe psoriasis treatment patterns. She is excited to join the Allergan team this year and apply her newly acquired skills from UW.

Chiemeka Ike, PharmD, MPH

Chiemeka is transitioning to her 2nd year of the UW/Allergan fellowship. In the first year of her fellowship, Chiemeka worked on various research projects in the migraine therapeutic area. For her master’s thesis, she evaluated treatment patterns of acute medications for migraine using Adelphi ® Real World Evidence. Prior to the fellowship, she received her PharmD from the University of Houston as well as her Master of Public Health (MPH) in Epidemiology and Biostatistics from George Washington University. Chiemeka is excited to apply her formal HEOR training from UW to support pipeline and marketed products in the migraine therapeutic area at Allergan.

Erik Landaas, MPH, PhD Student

Erik is entering the third year of his PhD program. Erik completed his MPH from the UW, and has an extensive work history in healthcare policy, epidemiology and health technology assessment. During the past year, he has completed the majority of his coursework and developed more sophisticated economic modeling skills. He has been working at UW Medicine in partnership with Dean Sullivan on Smart Innovation – a hospital based health technology assessment program. Erik has been leading the implementation and evaluation of this newly developed program. Erik developed his cost-effectiveness analysis skills by conducting a study comparing intracranial pressure monitoring to advanced imaging among patients with a traumatic brain injury. Erik will be developing his dissertation plan around Smart Innovation in the upcoming year.

Tricia Rodriguez, MS, PhD Student

Tricia is entering her second year in the PhD program. During her first year, she focused on completing coursework in biostatistics and research methods. She is working with Dr. Zach Marcum on an exploration of diabetes medication use among older adults with cognitive impairment, and with Dr. Davene Wright to estimate transition probabilities for eating disorders using medical record data. This summer, she also worked with Dr. Alison Drake to model the cost-effectiveness of using a dual test for HIV and syphilis in pregnancy, which will inform the WHO 2019 testing guidelines. In her second year in the program she hopes to focus on coursework and projects in data science and to begin exploring potential dissertation topics.
Enrique M. Saldarriaga, MSc, PhD Student

Enrique is entering his 2nd year in CHOICE’s PhD Program. During the last year he worked on evaluating the impact of a national cash transfer program for local governments, and developing the cost-effectiveness analysis of the Prevention Program of Chronic Renal Disease, both with Peruvian institutions.

For the next year he hopes to finish two studies focused on the Body Mass Index: estimate the BMI’s income elasticities nationwide and by wealth strata, and find a new functional form of the index that increases its prediction capacity regarding health and resources-usage outcomes.

Lauren Strand, MS, PhD Student

Lauren is entering her third year in the PhD program in CHOICE. She has recently been working on projects in substance use, policy, and opioid prescribing with advising from Drs. Ryan Hansen and Anirban Basu. In January she published her work on statin medications and heart structure in Pharmacoepidemiology and Drug Safety. In the coming year she will continue to conceptualize her dissertation and to serve as a Washington Research Foundation (WRF) fellow, working on an early-stage health technology assessment in idiopathic pulmonary fibrosis. She is excited to continue her study of machine learning and to meet fellow students to study at coffee shops.

Kangho Suh, PharmD, MS, PhD Student

Kangho is entering his fifth year in the PhD program at the CHOICE Institute. In the past year he was working as a RA for Dr. Anirban Basu on a project with Kaiser Permanente using comparative effectiveness methods (instrumental variables and propensity score matching) to compare bariatric surgical procedures. He will continue in this role this upcoming year. Kangho plans on taking his general examination and defending his dissertation this upcoming year as he advances through the dissertation process. He will be performing comparative and cost effectiveness research on warfarin vs. the newer direct oral anticoagulants in patients who have had a percutaneous coronary intervention.

Wei-Jhih Wang, MS, PhD Student

Wei-Jhih is entering the fourth year at The CHOICE Institute, and her dissertation is about developing a potential approach to address the issues of generalizability of clinical trial and exploring the implications in health decision making. In addition, she works as a research assistant on value of information project, and also keep exploring the relationship between characteristics of geographic area and clinical trials. Wei-Jhih is receiving training as a fellow at the Centers for Disease Control and Prevention (CDC) in Atlanta this summer. She is working at the economics team for projects that are evaluating the disparity of health care between rural and urban areas as well as exploring the evaluation of community health.”

Society for Medical Decision Making Lee B. Lusted Finalist

SPOR 22nd Annual International Meeting Research Presentation Award Finalist
2018 RETREAT RECAP

The 2018 CHOICE retreat focused on Health Technology Assessments (HTA), Innovations, and bridging the gap between research and business. We started the day off with a welcome from CHOICE Director, Anirban Basu followed by a few student-led icebreakers. Core CHOICE faculty and Dean Sean Sullivan addressed the group to provide updates on the school of pharmacy as well as specific programs within CHOICE. Peter Neumann joined us for the day to discuss HTA and its evolution over the years as well as more ground level topics such as breaking into the business world after completing a Ph.D. program. Additionally, Terri Butler’s presentation on Health Innovation Opportunities in and Around UW, Seattle gave students insight into how they could get involved with health innovation on a local level. The retreat concluded on the Eastlake Bar & Grill deck with friends, family and plenty of good weather.

THE CHOICE INSTITUTE & THE HUTCHINSON INSTITUTE FOR CANCER OUTCOMES RESEARCH (HICOR) JOINT SEMINAR

On Wednesday, May 2nd, Peter Neumann, Sc.D. joined our PHEnOM seminar to discuss whether the Institute for Clinical and Economic Review (ICER) is becoming the U.S.’ counterpart to England’s National Institute for Health and Care Excellence (NICE).

PHEnOM facilitates discussion between faculty, students and researchers in the fields of health economics, econometrics and methodology development in outcomes research. NICE evaluates the effectiveness and cost-effectiveness of health strategies for that country’s health system.

On Thursday, Dr. Neumann addressed an audience of UWSOP alumni, friends, faculty, and students on Measuring Value in Healthcare. The enlightening presentation addressed how a value can be put properly on a treatment that reduces pain, relieves symptoms, or extends life. He discussed opportunities, barriers, and trends in using formal cost- effectiveness analysis to measure value in health care and in the practice of pharmacy.

Peter is Director of the Center for the Evaluation of Value and Risk in Health at the Institute for Clinical Research and Health Policy Studies at Tufts Medical Center, and Professor of Medicine at Tufts University School of Medicine.
HEALTH ECONOMICS OUTCOMES RESEARCH CERTIFICATE UPDATE

The Certificate in Health Economics and Outcomes Research program is entering its 7th year. Launched at the start of the 2012-2013 academic year in conjunction with the UW Professional and Continuing Education program, this distance learning program is designed for professionals working in health care settings such as payer organizations, health insurance industry, government, the life sciences, pharmaceutical and biomedical industries, and for professionals working within Health Technology Assessment or reimbursement organizations. The program offers one course per academic quarter; Fall quarter: Principles of Health Economics, taught by Lou Garrison and Anirban Basu; Winter quarter: Economic Evaluation, taught by Dave Veenstra and Josh Carlson; Spring quarter: Practice of HTA in a Global Environment, taught by Sean Sullivan and Beth Devine. During the program, students learn the key economic concepts and analytical tools of human economic behavior, explore the current state-of-the-art in the economic evaluation of health care technologies, and are introduced to the principles and methods of HTA practice. Students work in groups throughout the program on a capstone project, which applies their learning to an assigned country. Student evaluations have remained positive over the years. Applications have routinely been 50+ since the beginning of the program. The program also has an active LinkedIn alumni group. Courses are continually being updated and revised to keep pace with changing technologies and economies. Revenues from the Certificate in Health Economics and Outcomes Research program support 1-2 CHOICE teaching assistant positions each year.

NEW POST-PHARMD FELLOWSHIP WITH GENENTEC

The UW CHOICE Institute and Genentech are pleased to announce the initiation of a Health Economics and Outcomes Research (HEOR) Fellowship Program. This two-year program will provide formal training and hands-on experience in the HEOR field. The fellowship began in summer 2018. The first year will be spent at UW, where the fellow will take core courses in biostatistics, health economics, outcomes research, policy, epidemiology. The fellow will be awarded a Master’s Degree upon completion of course requirements and a thesis project. The second year will be spent at Genentech (South San Francisco, CA). The fellow will pursue hands-on training in strategically focused health economics and outcomes research to support the research and commercialization of Genentech’s products. Specifically, the fellow will work closely with colleagues in the Evidence for Access Medical Unit in Genentech’s US Medical Affairs organization.

We are excited to welcome Eddie Neuberger, PharmD, MBA, as our inaugural UW-Genentech Fellow. Dr. Neuberger received his PharmD from the University of Maryland, and recently completed his MBA there as well. Eddie will be mentored by David Veenstra (UW) and Jennifer Whiteley (Genentech).
Surveillance testing with serial biomarker measurements in cancer survivors offers hope for reducing the morbidity and mortality associated with disease recurrence, since it presents an opportunity to detect recurrence at a point when treatment may be curative. However, frequent biomarker testing may cause more harm than benefit for low-risk individuals, due to the costs and complications of unnecessary testing and increased likelihood of false positives leading to unnecessary treatment. Unfortunately, tailoring surveillance to individual patients is a complex decision-making problem that requires understanding the heterogeneity in biomarker measurements across patients and across time within patients. As a result, surveillance testing guidelines using one-size-fits-all strategies continue to be common in most cancers, despite their uncertain clinical utility.

CHOICE Institute Assistant Professor Aasthaa Bansal was recently awarded a seven-year Method to Extend Research in Time (MERIT) (R37) award from the National Cancer Institute to develop a dynamic decision-making framework for identifying personalized risk-adaptive surveillance strategies for cancer survivors. This research seeks to shift the paradigm of how routinely collected patient information is used for clinical management, by innovatively coupling data-adaptive prediction modeling with Value of Information analysis. The decision-making framework will evaluate the value of future clinical information and guide patient-level decisions about the timing of treatment and frequency of biomarker testing on an ongoing basis. It will be implemented on rich electronic health record data from Kaiser Permanente Southern California and could lead to major advances in personalized medical decision making.

The interdisciplinary team includes CHOICE Institute faculty Dr. Aasthaa Bansal (PI), Dr. Anirban Basu and Dr. David Veenstra, as well as collaborators in the UW Departments of Biostatistics and Medicine, Fred Hutchinson Cancer Research Center and Kaiser Permanente Southern California.
An important change for the BRAMS program occurred this spring 2017 with the approval of our full-time Applied enrollment option. When the BRAMS program launched in 1998, the intended applicant pool was healthcare industry quality/regulatory professionals interested in a part-time, in-person, evening program. It soon became clear that a full-time option was necessary, both permitting students to specialize in an area of interest through additional courses, e.g., Chemistry, Manufacturing and Control (CMC) statistics, pharmacoepidemiology, medical biometry, and satisfying visa requirements for international students. BRAMS has received STEM (science, technology, engineering, and mathematics) designation, allowing qualified F-1 holders to participate in optional practical training (OPT).

Eight students graduated with a master's degree from the BRAMS program in the 2017-18 academic year. Their practicum topics included:

• Evaluation and revision of regulatory documents and training materials for clinical research personnel
• Site qualification for a multi-site, placebo-controlled Phase III clinical trial
• Investigational New Drug Application for a Phase I lymphocyte immunotherapy trial
• A regulatory strategy for conducting clinical trials of an antiviral drug for Lassa hemorrhagic fever in endemic West African countries
• Development of a work instruction to outline the steps required to register dental devices in Mexico
• Auditing clinical sites in preparation for an FDA inspection
• Development of a pre-submission meeting packet for an Investigational Device Exemption Application
• Social Media Strategy for Patient Recruitment

Looking ahead, the BRAMS program is engaged in a strategic planning activity that is focused on how it can be even better positioned for the future, including developing of a marketing plan and preparation for the 2019-2020 review by the Graduate School of all of the School of Pharmacy's graduate programs.
The University of Washington School of Pharmacy (UWSOP) and the Institute for Clinical and Economic Review (ICER) formed a partnership in 2016 leveraging UWSOP’s expertise in economic modeling of pharmaceutical interventions to support ICER’s growing body of work in new drug assessments. The current UW team is comprised of faculty (Josh Carlson (PI), David Veenstra, Anirban Basu, and Lotte Steuten), staff scientists (Greg Guzauskas), post-doctoral fellows (Solomon Lubinga), and graduate students (Nathaniel Hendrix). To date we have completed or are working on economic evaluations on 11 topics: multiple myeloma, non-small cell lung cancer (NSCLC), plaque psoriasis (original and update), multiple sclerosis, atopic dermatitis, osteoporosis, RPE65-mediated inherited retinal disease, Hemophilia A, prostate cancer (in development), and hereditary angioedema (in development). Our work has been disseminated ICER public meetings, as part of ICER’s full topic reports, in conference proceedings (5 abstracts), and in peer reviewed journals (3 published, 2 under review, 1 in development).

This past year we have presented on voretigene neparvovec for RPE65-mediated inherited retinal disease, emicizumab for hemophilia A with inhibitors, and targeted drug treatments for moderate-to-severe plaque psoriasis. For the voretigene neparvovec analysis, Marita Zimmermann presented work done with Josh Carlson at the Midwest Comparative Effectiveness Public Advisory Council (CEPAC) in St. Louis, MO and found that it was not cost-effective versus no treatment in the base case. In a scenario analysis we found that it may be cost-effective in patients with minimal baseline visual impairment that typically coincides with younger age from the societal perspective.

Greg Guzauskas presented a work done with Lotte Steuten at the New England CEPAC, in Cambridge MA and found that compared to no prophylaxis or BPA prophylaxis, emicizumab offers improved health outcomes and overall cost savings, both from a health system and a societal perspective.

Finally, David Veenstra presented results of an economic evaluation of targeted drug treatments for moderate-to-severe plaque psoriasis at the New England CEPAC meeting in Burlington, VT. Nathaniel Hendrix, PharmD, a PhD student at The CHOICE Institute, worked with Dr. Veenstra to develop the model and conduct the analyses, which were updated from their 2016 ICER work. The key findings were many of the newer, more effective targeted agents were likely cost effective at higher willingness to pay thresholds, but the economic value of the newest and forthcoming drugs will be highly dependent on drug discounts provided to healthcare purchasers.

In summary, our collaboration with ICER continues to yield positive returns in terms of research productivity, graduate and fellowship training, and contributions to ongoing policy discussion about value in the U.S. healthcare landscape.
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Congratulations to 4th year, PhD student Lauren Strand who received the Louis Garrison Sr. And Marilyn Garrison Endowed Prize in Health Policy and Economics prize! Lauren’s paper is titled “New Statin use and left ventricular structure: Estimating long-term associations in the Multi-Ethnic Study of Atherosclerosis (MESA).”

Lauren’s research looked at recent clinical guidelines that have increased the number of individuals eligible for treatment with statin drugs. Statin users are now younger and expected to use these drugs for extended periods. Statins are reported to have “pleiotropic effects” where some effects may be beneficial to cardiovascular health outside their capacity to lower cholesterol. However, statins are known to have negative effects on skeletal muscle.

Lauren’s paper entitled “New statin use and left ventricular structure: Estimating long-term associations in the Multi-Ethnic Study of Atherosclerosis (MESA)” focused on estimating the effect of statin use on the structure of the heart. To date, small and short-term studies of this relationship have demonstrated very large effect sizes. This study in a large, diverse cohort demonstrated a modest association between statin use and reduced remodeling of the left ventricle (i.e. reduced change in mass) in a propensity score matched model. Overall findings suggest that any (small) statin effect on cardiac remodeling is likely not the main mechanism of statin benefit in the primary prevention of heart failure.

In future analyses, she plans on considering incorporating clinical outcomes and evaluating the relationship between other classes of medications (e.g. antihypertensive drugs) and heart structure.

The Garrison Prize is intended to recognize annually an outstanding research paper in the area of health policy and economics. CHOICE Professor Emeritus Louis Garrison, Jr and his wife, Fran, established this fund in 2008 in fond memory of his parents who were great believers in the value of higher education and science. We presented the award to Lauren at our annual retreat in May.
FACULTY RESEARCH HIGHLIGHTS/GRANTS

Josh Carlson
Over the last 10 years Josh Carlson’s research has sought to inform healthcare decision making using economic modeling, evidence synthesis, preference assessment, and health policy evaluation. Current projects include work with the Institute for Clinical and Economic Review (ICER), in which Josh leads the team in the development of economic models as part of ICER evaluations of new medical technologies. To date they have completed or are working on economic evaluations on 11 topics including: multiple myeloma, non-small cell lung cancer (NSCLC), plaque psoriasis (original and update), multiple sclerosis, atopic dermatitis, osteoporosis, RPE65-mediated inherited retinal disease, Hemophilia A, prostate cancer (in development), and hereditary angioedema (in development). He has also been working on two projects using value of information techniques to inform research prioritization activities with SWOG (UW PI)—a large cancer cooperative group, and the National Health Lung and Blood Institute (Co-investigator). Precision medicine has continued to be a research area of interest for the team and they recently completed an R01 funded through the NIH common fund, in which Josh led an aim evaluating patient, provider, and payer preferences for precision medicine. Finally, he continues to manage our performance-based risk sharing arrangements database and produce scholarly works and presentations on this evolving health policy topic.

Beth Devine
This year, Beth Devine continued her work in precision medicine/pharmacogenomics with funding support from the UW School of Pharmacy Faculty Innovations Fund. She is principal investigator for a feasibility study using pharmacogenomics-guided prescribing, delivered using clinical decision support, to optimize medication therapy to residents of retirement communities in the Seattle area. Her team includes Pharmacy faculty Jennifer Wilson-Norton, Rachel Firebaugh, Isabel Reguenau-Majessi, and Sophie Argon. To conduct this work, she has partnered with the UW School of Nursing, Era Living, Translational Software, and AlphaGenomix. Separately, she is using her health economics training as a co-investigator on a VA-funded grant wherein she will develop and administer a multi-criteria decision analysis (MCDA) embedded in a patient-decision aid, to help patients with critical limb ischemia determine their preferences for interventional procedures. Finally, her work on the Health Tech Fund Real World Evidence project (2016-2018; with Anirban Basu, Aasthaa Bansal, and Josh Carlson) is being featured in a workshop at the upcoming AMCP Nexus Meeting (Orlando, FL; October 2018). She and her team, Shuxian Chen (CHOICE PhD student), Sophia Yun (Premera) and Jennifer Graff (National Pharmaceutical Council) will be presenting the CHOICE REAdi (Real-world Evidence Assessments and Needs Guidance) framework and tool, comparing and contrasting it with other existing tools to assess real-world evidence to conduct comparative effectiveness research in the HTA context.

Current Grants and Contracts
Principal Investigator, Evaluating the Impact of Pharmacogenetic Testing on Clinical Outcomes in a Retirement Community. UW School of Pharmacy Innovations Award. 2018
Consortium Site Principal Investigator (Assistant Director), Pacific Northwest Evidence-based Practice Center (EPC) V with Oregon Health & Science University (OHSU), AHRQ, 2015 –
Lead Co-investigator, (PI: Czerniecki), Improving Dysvascular Amputee Outcomes by Enhancing Shared Decision Making Veterans Affairs Health Services Research and Development Service. 2018-2022
Principal Investigator/Faculty Mentor, UW-Allergan Post-Doctoral Fellowship, Allergan Pharmaceuticals, 2012 -

Jeffrey Jarvik
As the co-Director of the Comparative Effectiveness, Cost and Outcomes Research Center (CECORC) at the University of Washington (UW), Jeffrey has led or collaborated on multiple observational and randomized controlled trials (RCTs) of devices and procedures. Equally important, he has training in health services research and study design. He was a Robert Wood Johnson Clinical Scholar at UW, where he earned his Masters
in Public Health. He has focused my research on diagnostic imaging and therapeutic interventions, especially as they relate to the evaluation of low back pain.

He was the Principal Investigator (PI) of the recently concluded Back pain Outcomes using Longitudinal Data- Extended Research (BOLDER) project, a continuation of the $10 million BOLD project funded by the Agency for Healthcare Research and Quality to investigate diagnostic and therapeutic interventions in seniors with back pain. BOLDER partnered with large, integrated health systems- Kaiser Northern California, Henry Ford Health System in Detroit, and the Harvard Vanguard/Harvard Pilgrim Health System in Boston.

Jeffrey has extensive experience conducting observational studies and randomized trials of diagnostic and therapeutic interventions of back pain, both as a PI as well as a co-investigator. These projects include the Seattle Lumbar Imaging Project (SLIP), the Longitudinal Assessment of Imaging and Disability of the Back (LAIDBack), the Investigational Vertebroplasty Safety and Efficacy Trial (INVEST), and the Lumbar Epidural Steroid Injections for Spinal Stenosis (LESS) trial. He is Principal Investigator of a recently funded NIAMS P30 Core Center for Clinical Research (CCCR) called the UW Clinical Learning, Evidence And Research (CLEAR) Center for Musculoskeletal Conditions. Finally, he is the PI of the Lumbar Imaging with Reporting of Epidemiology (LIRE) project, part of the NIH Heath Care Systems Collaboratory. LIRE is a large, pragmatic, cluster RCT investigating an intervention to help both patients and clinicians better understand the results of imaging studies for patients with back pain.

Scott Ramsey
Dr. Ramsey's team at Fred Hutch, The Hutchinson Institute for Cancer Outcomes Research (HICOR), released the first ever public report of cancer care quality and costs this year as the culmination of five years of stakeholder engagement and data analysis at the annual Value in Cancer Care Summit. The Community Cancer Care Report focuses on recommended treatments and follow-up testing for breast, colorectal, and lung cancer, hospitalizations during chemotherapy, and end-of-life care. HICOR also launched a new partnership with Microsoft to develop and pilot test technology to help cancer patients avoid emergency room visits through better management of chemotherapy side effects.

Dave Veenstra
Dr. Veenstra's research focus is on the clinical, economic, and policy implications of precision medicine (PM). Along with Josh Carlson and Anirban Basu of The CHOICE Institute, he recently completed a 5-year NIH-funded research project on the economics of precision medicine. A few of the interesting studies from this project include a quantitative evaluation of evidence thresholds for PM and a three national preference studies for PM technologies. The investigators found that policy makers are not necessarily consistent in applying evidence thresholds to genomic vs. clinical PM, and that uptake of PM is likely to be driven by evidence supporting the clinical benefit of PM testing.

Dr. Veenstra and Greg Guzauskas, PhD, MPH (Senior Scientist, CHOICE) are working on a new NIH-funded project to study the cost-effectiveness of population-based genomic screening in the US. This project is a collaboration with Vanderbilt University and Geisinger Healthcare System. The UW team will develop a model of screening for breast and colon cancer risk, as well as cardiovascular risk from syndromes such as familial hypercholesterolemia.
FACULTY HONORS & AWARDS

AASTHAA BANSAL
Promoted to Assistant Professor

RYAN HANSEN
Promoted to Assistant Professor

ANIRBAN BASU
2018 Mid-Career Excellence Award from the Health Policy Statistics Section of the American Statistical Association

BETH DEVINE
Promoted to Full Professor
Invited participant, NIH Collaboratory enhanced Pragmatic Clinical Trials (ePCT) Workshop, Duke University
Member, Academy Health Methods Council (2017-2019)

ANDY STERGACHIS
USP Group Award for Outstanding Contribution to the Standards, Chair of Expert Panel, 2018
Fellow, American Pharmacists Association-Academy of Pharmaceutical Research and Science, 2018

FACULTY PUBLICATIONS

JOSEPH BABIGUMIRA


AASTHAA BANSAL


ANIRBAN BASU


JENNIE BEST
Kong A, Kim G, Michalska M, Best JH. Costs of disease relapses among individuals with granulomatosis with polyangiitis or microscopic polyangiitis in the United States. J Rheumatol 5:159–170; 2018


FACULTY PUBLICATIONS continued

W. Katherine Tan, BS, Saeed Hassanpour, PhD, Patrick J. Heagerty, PhD, Sean D. Rundell, DPT, PhD, Pradeep Suri, MD, MS, Hannu T. Huhdanpaa, MD, MSc, Kathryn James, PA, MPH, David S. Carrell, PhD, Curtis P. Langlotz, MD PhD, Nancy L. Organ, BA, Eric N. Meier, MS, Karen J. Sherrman, PhD, MPH, David F. Kallmes, MD, Patrick H. Luetmer, MD, Brent Griffith, MD, David R. Nerenz, PhD, Jeffrey G. Jarvik, MD, MPH. Comparison of Natural Language Processing Rules-based and Machine-Learning Systems to Identify Lumbar Spine Imaging Findings Related to Low Back Pain. Elsevier Inc. In Press.

ZACHARY MARCUM


SCOTT RAMSEY


JOSH ROTH


ANDY STERGACHIS

Huang Y, Pan K; Peng D, Stergachis A. A qualitative assessment of the challenges of WHO prequalification for antimalarial drugs in China. Malaria J. Apr 3;17:149.


SEAN SULLIVAN


DAVID VEENSTRA
Feero WG, Wicklund CA, Veenstra D. Precision Medicine, Genome Sequencing, and Improved Population Health. JAMA. 2018. PMID: 29547675


DAVENE WRIGHT
Jacob-Files E, Powell J, Wright DR. “Exploring parent attitudes around using cash and non-cash incentives to promote engagement in family-based weight management programs.” Preventive Medicine Reports. 2018 April. doi: 10.1016/j.pmedr.2018.04.007


KAI YEUNG


A new study by dozens of researchers from the University of Washington and around the world has found that Greece’s population health declined markedly and death rates rose sharply after harsh austerity measures were imposed on Greece by the European Union and the International Money Fund in 2010.

“This study is important because it provides a framework for health surveillance on a national level following major socioeconomic changes,” said Dr. Georgios Kotsakis of the UW School of Dentistry, one of the study’s authors.

The study, published in the British journal The Lancet Public Health, reported that government health spending fell sharply and that the causes of death that increased the most were largely those that could have been addressed by health care. The researchers noted that Greece’s reduced health spending, required as part of the austerity measures, had been criticized for omitting measures to protect the country’s National Health System. They said that health policymakers should place a special focus on ensuring that Greece’s health-care system is equipped to meet the needs of the country’s citizens.

The study, which was funded by the Bill & Melinda Gates Foundation, relies heavily on the UW’s 2016 Global Burden of Diseases, Injuries, and Risk Factors Study (GBD). The 2016 GBD study, conducted by the UW’s Institute for Health Metrics and Evaluation (IHME), is an outgrowth of the original 1997 GBD study. This was the world’s largest systematic effort to chart the scope of health loss from all major diseases, injuries, and risk factors by age, sex, and population.

Co-authors of the Greece study were Dr. Kotsakis, assistant professor at the School of Dentistry; Dr. Stefanos Tyrovolas, a visiting scholar at the School of Dentistry; Dr. Andy Stergachis, professor of pharmacy and global health and associate dean at the UW School of Pharmacy; and Dr. Nick Kassebaum, associate professor at IHME and in the Department of Anesthesiology and Pain Medicine at Seattle Children’s Hospital. The four were joined by 43 other GBD collaborators in a number of countries, including 15 at the UW.
“Post-austerity measures, we observed increases in death rates associated with reductions in government health expenditures and increases in an aging population in Greece.”

– Andy Stergachis, Professor and Associate Dean, UW School of Pharmacy

The researchers identified an increase in the pace at which Greece’s population was aging as another important concern and wrote: “The increase in total deaths in children younger than 5 years and older adults with increase in causes sensitive to resource availability (e.g., access to screening and urgent care) suggest that the health system requires substantial restructuring to cope with the effects that the financial crisis has had on resource availability, resource allocation, and population structure.”

They reported that while the country’s overall death rate rose by about 5.6 percent from 2000 to 2010, it jumped by about 17.7 percent in the six years that followed, after austerity measures were imposed. The rate rose three times faster than the rate in Western Europe overall, and came at a time when mortality rates were actually declining worldwide. The largest increase came among people 70 and older, while the very young also saw a disproportionate increase.

The rise in mortality coincided with changes in causes of death, with notable increases in communicable, maternal, neonatal, and nutritional diseases.

Other findings from the study included these:

- The incidence of tuberculosis increased among native-born Greeks after austerity was imposed.
- The incidence of HIV nearly doubled from 2010 to 2012, spurring reinstatement of syringe distribution programs. After this was done, HIV rates declined.
- The period of austerity saw rises in major depression and suicide, as well as a lack of improvement in in maternal, infant, and child mortality rates.
- “Notably, the number of individuals with unmet health-care needs nearly doubled since 2010, with a considerable fraction reporting health-care cost as the main reason for not receiving the recommended health-care services,” the researchers wrote.
STUDENT SPOTLIGHT

Meng Li

Meng Li, a recent graduate of our PhD program, along with Kai Yeung (CHOICE Alum), and Josh Carlson (CHOICE Faculty) won Journal of Managed Care & Specialty Pharmacy’s (JMCP) Best Paper Award. The paper was submitted to JMCP as a Research Brief. They simulated the costs and outcomes of trastuzumab for the treatment of metastatic breast and gastric cancers, under the traditional indication-based pricing (IBP) framework using clinical trials data and the outcomes guarantee framework using data from observational studies.

They found that compared to a outcomes guarantee contract, a traditional IBP would be likely to produce an underpayment for metastatic breast cancer and overpayment for advanced gastric cancer. This research illustrated the potential of an outcomes guarantee framework to achieve prices aligned with real-world value for drugs with multiple indications.

Key Take Away: The policy implication for this research is that payers and manufacturers desiring to implement a value-based purchasing should consider outcomes guarantee contracts when there are analytic resources to support them.
Mark Bounthavong

Mark Bounthavong, a recent graduate of our PhD program, has been nationally recognized by the U.S. Department of Veterans Affairs and was invited to speak on the topic of improving medication safety for veterans. His goal is to educate providers using unbiased, noncommercial evidence so that they can provide the best care for Veterans.

Additionally, Mark and his team were awarded the American Society of Health-System Pharmacy Best Practice Award for their work on using trained clinical pharmacist to engage in academic detailing with Veterans Health Administration providers in order to augment their opioid and naloxone prescribing. The opioid epidemic has been called a national public health emergency by the U.S. President. Strategies to combat this has been varied, focusing on limiting the drug supply and identifying alternatives to pain management. My work focused on behavioral modification using educational outreach to target providers.

Simrun (Simi) Grewal

Since January 2017, CHOICE PhD student Simrun (Simi) Grewal has worked with UW’s Strategic Training, Analytics, and Research Center (START) as a research assistant with the Bill & Melinda Gates Foundation’s (BMGF) Integrated Portfolio Management (IPM) Team.

Recognizing the inherent trade-offs across investments to develop, introduce, and deliver healthcare solutions in low-and middle-income countries, IPM uses a systematic approach to estimate and compare the economic value, health impact, and risks of different vaccines and interventions. Through such a process, potential investments can be transparently prioritized to maximize total health impact across disease areas.

In addition to its internal function, IPM was designed to ultimately provide a public good in valuation modeling support to various communities facing global healthcare resources allocation decisions. As part of this aim, the team has collaborated with Gavi, the Vaccine Alliance. Founded in 2000, Gavi carries a mission to save children’s lives and protect people’s health by increasing equitable use of vaccines in lower-income countries. During the summer of 2017, the IPM team, including START student research assistants, conducted an analysis to assess the health impact of a typhoid conjugate vaccine (TCV) across countries eligible for Gavi support. The analysis contributed to information presented to the World Health Organization and the Gavi Board. In November 2017, Gavi announced its decision to provide $85 million between 2019-2020 to support to use of TCV in eligible countries.
The CHOICE Institute at UWSOP is pleased to announce a partnership with the Washington Research Foundation (WRF) that will create four new fellowships per year designed to support non-profit research institutions and life science researchers.

Health economics and outcomes research (HEOR) is increasingly being used at earlier stages of product development for healthcare and life sciences to inform decision-making. While this expertise is commonly available at larger companies it may be inaccessible or unaffordable to researchers and technology developers within non-profit research institutions that have arguably the greatest need for that kind of service.

The WRF-HEOR Fellowship aims to address this gap by providing high quality health economic and outcomes research services to technology developers (scientists, engineers, inventors and entrepreneurs) at non-profit research institutions in Washington state while also providing a valuable training activity for graduate students at Washington state research institutions. On the UW side, the Fellowship will be led by Lotte Steuten of The CHOICE Institute at UWSOP and Fred Hutch. Dr. Steuten specializes in developing and applying quantitative (Bayesian) methods for estimating and comparing the expected health and economic benefits of new approaches and interventions in disease prevention and treatment, and prioritizing data collection to efficiently build the evidence for such promising new interventions.

Through this fellowship program at The CHOICE Institute, we aim to increase the number of decision-making tools available to researchers and technology developers. Ultimately this is democratizing this expertise and making it available across the state—all to the benefit of patients and the healthcare systems in Washington.

-Will Canestaro, Ph.D., Washington Research Foundation

Fellows and projects will be selected by a committee of faculty in The CHOICE Institute based on academic merit. Generally, awards will be made to second and higher year students in CHOICE. Fellows will have a CHOICE faculty mentor as well as an advisor from WRF.

The projects will evaluate a health technology (such as a diagnostic, therapeutic, or software), with preference for the most novel and high-impact technologies for patients or the healthcare system. Each fellow will create deliverables for the technology developer they are working for with the ultimate goal of providing meaningful insight that can improve their research and development process. Examples of project types include creating a cost effectiveness model to estimate the value of a technology in real-world practice, measuring the budget impact on the healthcare system of a technology, and measuring the human and economic burden of disease to patients and society.

“We appreciate the partnership developed with the Washington Research Foundation,” said Anirban Basu, Director of The CHOICE Institute. “Our student fellows will now have a wonderful opportunity to advance their research and training in a way that helps their local community and the state. We look forward with great anticipation to the first class of fellows and seeing what their research helps advance in health care.”
The idea for the student blog started at a meeting of our ISPOR chapter. We were talking about how it was really interesting to see the conversations that happen between the great minds of the field on Twitter, but that it sometimes felt hard to engage as a student. So we created the blog to have a space for students to talk about their interests and ideas while hopefully creating value for other students around the world. As such, we share our experience with aspects of student life from the application process through the dissertation, as well as providing technical tutorials and writing about new papers in the field.

https://choiceblog.org/

NATHANIEL HENDRIX
PHD STUDENT AND ONE OF THE BLOG'S FOUNDERS
The new CHOICE Institute Diversity Endowed Graduate Fellowship fund will support underrepresented students in the field of health economics, outcomes research, and policy with deep personal experience with, and connection to, diverse cultures. Fellows will be selected based on academic merit.

For a limited time, ALL gifts to this fund will receive a 50% match!