Congratulations to the June 2014 Graduates

Tracy Yep, PharmD, MS; Carlos Gallego, MD, MS; Katharine Gries, PharmD, PhD;
Preeti Bajaj, PhD; Norio Kasahara, MPH, PhD
MESSAGE FROM LOU GARRISON, PhD
Interim Director

We are pleased to provide you with the annual report of the University of Washington Pharmaceutical Outcomes Research and Policy Program (PORPP) cataloging the activities, scholarship, and professional accomplishments of the faculty, staff, graduate students, and post-doctoral fellows. As you will see in reviewing this, PORPP continues to grow in number and in the achievements of its talented and dedicated staff working collaboratively across a wide range of disciplines.

As you probably know, we are beginning a period of transition with the ascension of our longstanding Director Sean Sullivan to his new role as Dean of the School of Pharmacy. Under his leadership over the past 15 years, PORPP has been established as one of the premier programs in this field. We aim to build on that foundation as we look to the coming years, including the selection of a new Director. We wish Sean continued success and look forward to supporting him in his new role.

We should highlight a few of the more notable achievements of the Program and staff in the past year. Several of our faculty and students received prominent recognition. Professor Josh Carlson received the ISPOR Bernie J. O’Brien New Investigator Award. Professor Beth Devine co-led and was featured at the recent PHRMA Foundation CER conference. Professor Andy Stergachis was named the 2013 Washington State Pharmacist of the year. Kai Yeung received the Best Student Podium Research Award at the ISPOR International Meeting. And, from the AMCP Foundation, Professor Sean Sullivan received the Steven G. Avey award for sustained, exemplary and distinguished service to managed care pharmacy.

This coming year, PORPP will welcome our third class of 70+ Distance Learning students enrolled in the Certificate in Health Economics and Outcomes Research (http://www.pce.uw.edu/certificates/health-economics.html). We have now trained over 120 students.

Our faculty and alumni have been generous in support of the program during this past year. The last page of this report lists the PORPP donors for 2013-2014. We heartily thank them for their support.

For this coming year, we are admitting another strong new graduate program cohort. Professors Veenstra, Devine, and Hazlet recruited our top candidates, who are profiled here. Also, I am pleased to welcome two new faculty members, Aasthaa Bansal, PhD, Research Assistant Professor, and Gary Lyman, MD, MPH, Professor. Finally, I want to thank Penny Evans and Paul Kraegel, our superb program and research coordinators, who help to make all of this possible.

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Welcome To Our New Students

Blythe Adamson, MPH

Blythe comes from the HIV Vaccine Trials Network at the Fred Hutchison Cancer Research Center where she managed scientific mentoring programs and training on topics ranging from vaccinology to adverse events in clinical trials. She received her Master in Public Health degree in Epidemiology and BS in Honors Microbiology both from the University of Washington. Previously, Blythe spent four years at the bench in an HIV laboratory studying elite controllers and dual-infection. Her research interests include comparative effectiveness of vaccine candidates and infectious diseases math modeling. Blythe is excited to join PORPP to expand her research skillset and become a future leader in the vaccine field.

Simrun Grewal, MPH

Simi joins PORPP by way of Johns Hopkins School of Public Health (JHSPH) where she received her Master of Health Science in Health Economics (’13) and worked as a Research Associate in the school’s Department of International Health. While at JHSPH, she conducted economic evaluations on the value of vaccines, explored individual preferences related to healthcare decision-making, and examined improved measures of health equity. Prior to her MHS, Simi’s experience included applied approaches to health systems strengthening in sub-Saharan Africa and impact evaluations of maternal and child health programs in Egypt and India. Simi looks forward to continuing her training with PORPP faculty and fellow students. She is particularly interested in strengthening her research capacity in economic evaluation and pharmacoepidemiology in order to contribute effectively to global essential medicines policies and health service delivery planning.

Katelyn Keyloun, PharmD

Katelyn received her PharmD degree from the University of Washington in June 2014. Coming to the program with a background in parasitology research, she decided to shift the focus of her research career from enzymology and drug screening in order to learn the techniques and tools used in outcomes research and policy development. Her interest in outcomes research grew from the desire to blend her knowledge of the pharmacy profession with a career in research and to affect key decisions within organizations and the pharmaceutical industry. Katelyn is excited to strengthen her professional career with the UW and Allergan.

Ryan Pistoresi, PharmD

Ryan is thrilled to be returning to the University of Washington this year as a student in PORPP. He has already received three degrees from the University of Washington, completing his Doctor of Pharmacy degree in 2014 and earning bachelor’s degrees in Biology and Biochemistry in 2010. The foundation for Ryan’s passion in pharmacoconomics and outcomes research originated from his time studying under PORPP faculty as a pharmacy student. The subject fascinated Ryan so much that he soon found himself engaged in the field, including initiat-

Doctor of Philosophy in Pharmacy Degrees

Preeti Bajaj, BS 2005 Johns Hopkins University; PhD 2014 University of Washington
Chair: Louis Garrison, Jr, PhD

Katherine Gries, BS 2004 and MS 2009 University of Washington; PharmD 2008 University of Southern California; PhD 2014 University of Washington
Dissertation: “Influence of Perspective on Preferences for Prostate Cancer Outcomes”
Chair: Donald Patrick, PhD

Norio Kasahara, BS 1991 Tokyo University of Pharmacy & Life Sciences, Japan; MPH 2001 Johns Hopkins University; PhD 2014 University of Washington
Chair: Louis Garrison, Jr, PhD

Graduating Class of 2014

Master of Science in Pharmacy Degrees

Carlos Gallego, MD, 2003 Universidad del Valle, Colombia; MS 2014 University of Washington
Chair: David Veenstra, PharmD, PhD

Tracy Yep, BS 2007 University of California, San Diego; PharmD 2012 University of Washington; MS 2014 University of Washington
Thesis: “Total and Disease Specific Healthcare Cost and Utilization of Glaucoma Patients”
Chair: Beth Devine, PharmD, MBA, PhD

Doctor of Philosophy in Pharmacy Degrees

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ing two research projects and traveling to Montreal to attend ISPOR this past June. Ryan is enthusiastic about the opportunity to study in PORPP and to continue conducting research in this field. He hopes to better understand how to properly utilize health economics research and health claims data and how this information can be applied to positively affect decision-making and health policy.

Vanessa Shih, PharmD
UW/Allergan Post-Doctoral Fellow 2014-2016

Vanessa received her PharmD degree from the University of California, San Francisco in 2014 where she developed her interest in health services and outcomes research as a member of the Health Services Research and Policy Pathway. She completed her research project on patient preferences in relapsing-remitting multiple sclerosis patients under Leslie Wilson, PhD. She is looking forward to joining the PORPP department and learning from the faculty at UW and Allergan to continue her education and develop her research skills in order to become an effective health economics and outcomes researcher.

Kangho Suh, PharmD

Kangho received his PharmD from Rutgers University in 2011 and then went on to do a health economics and outcomes research fellowship with The University of Texas in Austin, Scott & White Health Plan (SWHP), and Novartis Pharmaceuticals Corporation. During his time in Texas, he conducted cost analyses for the P&T committee at SWHP and analyzed the clinical and economic impact of a pharmacists-led diabetes medication management program. In 2013, he completed a Master’s degree in Pharmacy Administration at UT-Austin with a thesis assessing adherence and perceptions in patients with multiple sclerosis using survey data. While at Novartis, he worked on multiple sclerosis, COPD, and data analysis methods-oriented projects. He is excited to enhance his research skills at PORPP, while learning new statistical and economic methods as he desires to continue a career in the health economics and outcomes research field.

Justin Yu, PharmD
UW/Bayer Post-Doctoral Fellow 2014-2016

Justin received his PharmD degree from the University of Southern California in May 2014. As a pharmacy student, he worked as an intern in both health-system and ambulatory care settings – the latter which he credits for first sparking his interest in health economics and outcomes research. His passion for the field continued to grow after taking managed care and pharmaceutical commercialization electives during his third year, where he gained greater perspective on the value of HEOR to patients and the healthcare system. Carrying this interest forward, he competed in the 2013 AMCP National P&T Competition (3rd place), where his team presented data on the clinical, humanistic, and economic outcomes associated with tapentadol ER in order to make a formulary recommendation. Justin is excited to work with the excellent faculty at the University of Washington and the Bayer HEOR team, and looks forward to immersing himself in new experiences and opportunities.

Maria Agapova, MPH

Maria successfully completed her general exam during her fourth year of the PhD program and continues her work to complete her dissertation, “Quantifying Benefits and Harms of Imaging Tests: The Development of a Framework for Quantitative Method Selection”. She presented the preliminary benefit-harm framework at the Vancouver Health Economics Conference in June. Maria lead-authored a review related to her dissertation research, published in Academic Radiology, “Applying Quantitative Benefit-Risk Analysis to Aid Regulatory Decision-Making in Diagnostic Imaging: Methods, Challenges, and Opportunities”. Maria also lead-authored an article published in Journal of Comparative Effectiveness titled, “Using Indirect Comparisons to Compare Interventions within a Cochrane Review: A Tool for Comparative Effectiveness Research”. She collaborated with industry to develop a simplified Excel tool for evaluating cost-benefit of Mirasol Pathogen Reduction Technology across global settings and submitted for publication, the cost-utility findings for the country of Poland, to the Journal of Transfusion Medicine and Hemotherapy. She also contributed to two short papers on value of information analyses in pharmacogenomics.
**Students**

Caroline Bennette
- R36 Dissertation Grant from AHRQ
- NSF Doctoral Dissertation Improvement Grant

Sara Forrester
- Finalist for Best Poster Award, Student Category: Estimating the Inpatient and Outpatient Costs of Atrial Fibrillation and Associated Adverse Events. Forester, SH, Sullivan SD, Devine EB. ISPOR 19th Annual Meeting, Montreal, Quebec Canada, June 2014

Tracy Yep
- Finalist for Best Poster Award, Student Category: A cost-utility Analysis of CYP2D6 Pharmacogenetic Guided Dosing versus Standard Dosing of Risperidone for Treatment of Schizophrenia. Yep TD, Devine EB. ISPOR 19th Annual Meeting, Montreal, Quebec Canada, June 2014

Kai Yeung
- R36 Dissertation Grant from AHRQ

Preeti Bajaj
Preeti is currently finishing work on her dissertation, titled "Assessing the Impact of Health Economics and Outcomes Research (HEOR) Studies on Reimbursement Decisions in the United States". She is working with Lou Garrison on her dissertation project, which entails identifying the product-market scenarios for which HEOR evidence has the greatest impact on payer decision-making. Preeti has recently presented her research at the 2014 ISPOR Annual Meeting. In addition, she gave a podium presentation at the National Accountable Care Congress on the topic "Should Pharmaceutical Companies Share in the 'Accountability?'", and participated in Merck Serono's Innovation Cup program.

Caroline Bennette, MPH
Carrie is entering her fourth year of the PhD program. In the last year Carrie successfully passed her general exam and was awarded an R36 Dissertation grant from the AHRQ and a Doctoral Dissertation Improvement Grant from the NSF to support her dissertation. Her dissertation will explore the use of portfolio management techniques to aid in the selection and prioritization of cancer clinical trials. Carrie also continues to work with David Veenstra on the development of a policy model evaluating the cost-effectiveness of returning incidental findings from genomic sequencing. In the next year Carrie will complete her dissertation and begin a postdoctoral K12 Mentored Career Development Award in Patient-Centered Outcomes Research, during which time she will pursue additional training and research projects at Group Health Research Institute, the Hutchinson Institute for Cancer Outcomes Research, and UW.

**Faculty & Post-Docs**

Josh Carlson
- 2014 ISPOR Bernie J. O’Brien New Investigator Award
  The ISPOR Bernie O’Brien New Investigator Award was established in 2004 to honor the long-standing commitment of Bernie J. O’Brien, PhD to training and mentoring new scientists in the fields of outcomes research and pharmacoconomics.

Ryan Hansen & Ryan Oftebro
- WSPA Cardinal Health Generation Rx Award for excellence in prescription drug abuse prevention.

Jean McDougall
- PhRMA Post-Doctoral Fellow Award

Sean Sullivan
- 2014 Steven G Avey Award
  The AMCP Foundation Steven G. Avey Award was established in 2001 to recognize an AMCP member for sustained, exemplary and distinguished service to the profession of managed care pharmacy. It is the AMCP Foundation’s highest award.

Andy Stergachis
- 2013 Washington State Pharmacist of the Year Award
  Honors a pharmacist who possesses qualities of excellence in routine practice and association activities, is an exemplary role model, and who has contributed in service and skill to the WSPA during the past year.
Current Students

Will Canestaro, MS
Will is entering his third year of the PhD program and has recently submitted a short proposal for his dissertation. The focus of his research will be developing methods to estimate societal economic loss from publication bias. Will has also spent the past year serving as the research assistant for the federally-funded PriMER study, for which Drs. Carlson and Veenstra are both principal investigators. This has provided an exciting opportunity to learn and build a mixed methods background. Will and his wife Sarah are also expecting their third child, a girl, in November.

Amy Cizik, MPH
Amy has had an exciting and busy 3rd year in the PhD program, which ended with approval of her dissertation short proposal. Her dissertation will focus on surgeon preferences for the treatment of soft tissue sarcoma; this will include research in the areas of quality of life and cost-utility for the treatment and outcomes of this rare cancer. Aim 1 of her dissertation is primary data collection with sarcoma surgeons at an international meeting held this fall in Berlin, Germany. As a research scientist in the Department of Orthopaedics and Sports Medicine she continues to collaborate and author papers with surgeons in the field of orthopaedic surgical outcomes.

Devender Dhanda, BSPharm, MS, MBA
Devender will be entering his second year of the PhD program in PORPP. He is interested in Value of Information (VOI) studies and Comparative Effectiveness Research (CER). During his first year, Devender refined a decision analytical model for warfarin pharmacogenomics. Currently, he is working on developing a framework for comparing VOI models for drug-drug interaction (warfarin-amiodarone) with warfarin pharmacogenomics. He wants to work further on evaluating the value of conducting additional research for personalized medicine.

Katherine Gries, PharmD, MS
Katie has completed the data collection and analysis for her dissertation project titled, “Influence of Perspective on Preferences for Prostate Cancer Outcomes.” Her final exam is scheduled for fall 2014. During the past year she co-authored the publication, “Current trends in performance-based risk sharing arrangements between healthcare payers and medical product manufacturers” and presented one podium and two poster presentations at congress meetings: “Preferences for Prostate Cancer Outcomes: A comparison of patients and general population perspectives,” “Validation of a novel patient-reported respiratory symptom instrument in cystic fibrosis: CFRSD-CRISS,” and “A formal approach to evaluate the neuropsychiatric manifestations of PKU: Assessing the content validity of ADHD rating scales in phenylketonuria.”

Carlos Gallego, MD, MS
Carlos just finished his Masters in Science in PORPP. His interest is in the application of genomic technologies, specifically Next Generation Sequencing into clinical care. His Masters thesis was a cost-effectiveness analysis on the use of Next Generation Sequencing panels for the evaluation of colorectal cancer and polyposis in the medical genetics clinic. He presented part of this work at the American College of

PORPP Affiliates Lead the Pack With Four ISPOR Bernie J. O’Brien Awards
The ISPOR Bernie O’Brien New Investigator Award was established in 2004 to honor the long-standing commitment of Bernie J. O’Brien, PhD, to training and mentoring new scientists in the fields of outcomes research and pharmacoconomics. In the 10 years since inception of the award, four of the ten awardees have been PORPP affiliated scholars or are now part of the PORPP faculty.

♦ Shelby Reed, PhD
  2005 award recipient, 1998-2000 NIH Post-Doctoral Fellow & Research Associate, PORPP; Associate Professor in Medicine, Duke Clinical Research Institute

♦ Todd Lee, PharmD, PhD
  2007 award recipient, PORPP PhD class of 2001; Associate Professor, University of Illinois, Chicago

♦ Anirban Basu, PhD
  2009 award recipient, Adjunct Professor in Pharmacy, PORPP

♦ Josh Carlson, MPH, PhD
  2014 award recipient, 2007-2009 Pfizer Post-Doctoral Fellow, PORPP; 2009-2012 Research Assistant Professor, PORPP; 2012-present, Assistant Professor, PORPP
Current Students

Genetics and the ISPOR meetings, and will present a platform this year in the American Society of Human Genetics meeting. In 2014, Carlos published in the Contemporary Journal of Clinical Trials describing a clinical trial evaluating Whole Exome Sequencing in the medical genetics clinic. He also has an interest in health disparities and the access to genomic technology in the Hispanic community. Carlos is a AHRQ/UW K12 research scholar in patient centered outcomes research.

Richard Kim, MD, MS
Year three of Richard Kim’s PORPP experience has come to a close. Highlights include finishing his term as the UW ISPOR student chapter president, submitting his master’s thesis, and submitting his short proposal. He has had invited commentaries published in the fields of sleep medicine and critical care. With a grant from the Firland Foundation, he is analyzing treatment adherence in non-tuberculous mycobacterial infections. He presented the clinical outcomes of his multidisciplinary lung nodule clinic at the annual American Thoracic Society meeting this past May. When not devising new ways to get his 3 year old daughter to eat more vegetables, he is building a dataset of regional lung cancer diagnostic workup patterns that he will use for his doctoral dissertation.

Meng Li, MS
Meng is entering her second year as a PhD student in PORPP. In the past year, she worked with Dr. Hansen on several projects, including a systematic review of health outcomes of organic acidemia patients that is currently under review, a poster presentation on the cost-effectiveness of liver transplantation in methylmalonic and propionic acidemia at ISPOR, and another poster on liver transplantation outcomes among patients with inborn errors of metabolism at AST Cutting Edge of Transplantation. Meng was also an invited speaker to the American Thoracic Society 2014 International Conference and she presented her study on the cost-effectiveness of strategies for reducing treatment in mild persistent asthma. This summer, Meng is doing an internship in the US Health Outcome department at GSK.

Solomon Lubinga, BPharm, MSC
Solomon is entering the third year of the PhD program in PORPP. In the past year, he continued his work with Drs. Andy Stergachis and Joseph Babigumira in the Global Medicines Program to support a human resources intervention to strengthen the supply chain of essential medicines in Malawi, implemented by VillageReach, a Seattle based organization. A manuscript describing an impact evaluation of this project is currently under preparation. He also completed two cost-effectiveness analyses. The first, based on his work in the summer of 2013, looking at the cost-effectiveness of introducing second generation antipsychotics for the management of schizophrenia in Uganda is currently under review. In the second, he evaluated the cost-effectiveness of prenatal distri-

bution of misoprostol for the prevention of post-partum hemorrhage in Uganda, for which he was a co-recipient of the 2013 PORPP Endowed Prize in Health Policy and Economics. Solomon also worked with Dr. Ryan N. Hansen of PORPP on a study comparing the outcomes of pain management strategies in bariatric surgery patients, based on an analysis of the Premier Inpatient Database. This work has received a Top Poster Invitation at the 2014 ObesityWeek. This summer, Solomon travelled to Malawi for 3 weeks to support the supply chain strengthening project in Malawi. He will also work on preparing his short dissertation proposal.

Marita Mann, MPH
Marita completed her second year in the PhD program, and successfully completed all of her required coursework. Marita has been refining her dissertation proposal on evaluation of an active surveillance program for HIV drugs in Namibia under the guidance of Dr. Andreas Stergachis. Marita submitted her short proposal and selected her committee members in early 2014. Her general exam is scheduled for August 2014. In the fall she plans to travel to Namibia to complete data collection. Marita also spent the past academic year as a TA for the distance learning certificate program, which she will continue next year.

Cara McDermott, PharmD, MS
Cara will be presenting a poster in October at the Society for Medical Decision Making's annual meeting; the research topic is a systematic review and meta-analysis of directly observed therapy for hepatitis C treatment. This year she plans to prepare for her general exam and work on her dissertation focusing on end of life care in older adults with cancer.

Elisabeth Vodicka, MPH
Elisabeth is entering her second year in the PhD program in PORPP. During her first year, Elisabeth was awarded an AHRQ T32 Health Services Research Pre-Doctoral Fellowship. She also published a first-authored manuscript in Journal of Medical Internet Research that evaluated patients' concerns about privacy when having online access to their clinical notes. She presented this work as a poster at AcademyHealth, where she also participated in the NRSA Trainee Meeting. Elisabeth worked on a number of other projects this year, including design of a program evaluation for a maternal health training program in Ghana under the guidance of Andy Stergachis and a project evaluating the use of patient-reported outcomes in clinical trials with Beth Devine and Donald Patrick. Over the summer, Elisabeth worked with the Treatment Research and Expert Education (TREE) program in Kenya to design and conduct a cost-finding study of cervical cancer screening methods with Joseph Babigumira, Michael Chung, and Lou Garrison.
Current Students

Tracy Yep, PharmD, MS
Tracy has finished the first year of the UW-Allergan fellowship and will spend the second year at the Allergan campus in Irvine, Ca. Over the past year Tracy has worked to complete her master’s degree with a thesis titled: “Total and Disease Specific Resource Use and Healthcare Cost of Patients with Glaucma.” She also presented work completed with advisor Dr. Beth Devine at the 19th Annual ISPOR conference in Montreal, Canada. Her poster titled: “A Cost Utility Analysis of CYP2D6 Pharmacogenetic Guided Dosing vs Standard Dosing of Risperidone for Treatment of Schizophrenia,” received a student poster finalist ribbon at the conference. Tracy will be working with the ocular department in the coming year and is looking forward to getting involved with projects and furthering her knowledge of outcomes research through her experience at Allergan.

Kai Yeung, PharmD, MS
Kai Yeung has completed his third year in the PhD program. During this academic year, Kai has successfully passed all his preliminary exams as well as his general exam. Kai’s dissertation focuses on the evaluation of the impact a novel value-based formulary which uses cost-effectiveness analysis to determine drug copayments. Related to this work, Kai gave a podium presentation on “Incentivizing value in managed care drug formularies: design, implementation, and first-year outcomes of a value-based formulary” at the annual meeting of the International Society for Pharmacoeconomics and Outcomes Research. This presentation received ISPOR’s best student podium research presentation award. Kai has also successfully completed a NIH funded, 1 year multidisciplinary predoctoral clinical research training grant offered through the Institute of Translational Health Sciences and has applied for a dissertation grant through the Agency for Healthcare Research and Quality which is pending review. Kai is very grateful to his mentors at PORPP for their advise.

PORPP Endowed Prize Recipients
The PORPP Endowed Prize was given to two students this year. Both Solomon Lubinga and Marita Mann had winning papers and they each received $500. The title of Solomon’s paper was: “Potential Cost-Effectiveness of Prenatal Distribution of Misoprostol for Prevention of Post Partum Hemorrhage in Uganda.” Marita’s paper was titled: “Assessing the Potential Cost-effectiveness of Alternative Methods to Screen for Cervical Cancer among HIV-Positive Women in Kenya.”
The $1,000 Prize is awarded to eligible candidates in the PhD or Master’s program in PORPP, or related fields such as Public Health Genetics, Health Services, Economics or Global Health who are enrolled in a class taught by a PORPP faculty member. The paper must deal with an original health policy or health economic issue.

Update on the PORPP Certificate Programs
Certificate in Health Economics and Outcomes Research
The Certificate in Health Economics and Outcomes Research program successfully concluded its second year, with 64 students completing the program. This distance learning program is designed for professionals working in health care settings including payer organizations, health insurance industry, government, the life sciences, pharmaceutical and biomedical industries, and for professionals working within Health Technology Assessment or reimbursement organizations. There are 70+ students enrolled for the 2014-2015 session. 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 Rafael Alfonso. 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 throughout the year have been positive, noting asynchronous learning design and faculty-developed content as major factors in their satisfaction. Visit: http://www.pce.uw.edu/certificates/health-economics.html for additional information.

UW Center of Excellence in Comparative Effectiveness Research
Led by Lou Garrison, Beth Devine, and Anirban Basu, the UW has now completed the second year of the UW Center of Excellence in Comparative Effectiveness Research (CER), the cornerstone of which is the Graduate Certificate in CER. The Certificate is open to currently enrolled PhD and MS students in PORPP and Health Services. Coursework beyond the core work required for each degree prepares enrolled students to execute projects that use advanced skills in observational data analysis and decision sciences, preference (utility) estimation from patient reported outcomes data, network meta-analysis, and Bayesian statistics. To date, six students have registered to complete the Certificate; three of these have been supported by the formal research assistantships, offered in conjunction by the Pharmaceutical Research and Manufacturer’s Association (PhRMA) Foundation. An additional four have each received a $10,000 dissertation stipend. See http://sop.washington.edu/porpp/certificate-programs/graduate-certificate-in-comparative-effectiveness-research.html for additional information.

In January 2014, Beth Devine and Lou Garrison joined Jodi Segal of Johns Hopkins in leading a national invitational conference titled, "Curricular Advances for Patient-Centered CER." 120 attendees representing 50 academic institutions, the life sciences industries, the Federal government, professional organizations and health plans discussed approaches used to prepare a workforce skilled in CER and patient centered outcomes research (PCOR). The conference was supported by grants from AHRQ, PCORI, and the PhRMA Foundation. The conference report may be accessed on the website by going to this link: PhRMA Foundation, OR: http://pharmafoundation.org/index.php?option=com_content&view=article&id=100&Itemid=41

The UW Center for Excellence in CER has led to two new initiatives now under development: 1) a stakeholder-driven educational and experiential training program to prepare scientists and clinicians to conduct CER/PCOR in the WWAMI (Washington, Wyoming, Alaska, Montana, Idaho) region, with a focus on American Indians and Alaska Natives, and 2) a certificate program in Translational Sciences. The first is supported by a grant from AHRQ, with Larry Kessler as PI; the second is supported by the Institute of Translational Health Science (UW CTSA), with Beth Devine as Lead Faculty.
Welcome New Faculty

Aasthaa Bansal, PhD

Aasthaa is a Research Assistant Professor in the Department of Pharmacy. She received her PhD in biostatistics from the University of Washington and her current research interests include comparative effectiveness research, biomarker development & evaluation, and personalized medicine.

Over the past year, she has collaborated on several projects at the Hutchinson Institute for Cancer Outcomes Research (HICOR) at the Fred Hutchinson Cancer Research Center and at the UW. At HICOR, she has been involved in projects including analyses of survival, costs and resource utilization among prostate cancer patients and among colorectal cancer patients, development of methods using cure modeling in economic analysis, analyses relating to bankruptcy among cancer patients and analyses of cancer treatment and outcomes among American Indians. On these projects, she has collaborated with Scott Ramsey, Jeannine McCune, Bernardo Goulart and Jean McDougall.

At the UW, she is involved in a project to develop a mitochondrial biomarker for cancer detection and prediction in ulcerative colitis. Aasthaa is also actively working on developing statistical methods for prognostic biomarkers and risk prediction models using censored survival data. In the past year, she has had nine articles published or accepted in peer-reviewed journals. She has also had one book chapter published relating to her dissertation work on combining biomarkers to improve performance in diagnostic medicine.

Additionally, Aasthaa has served as a statistical consultant and mentor in PORPP and the Department of Pharmacy, providing statistical advice to faculty, postdoctoral fellows and students. She is currently serving on the doctoral committees of PORPP students Cara McDermott (dissertation title: Imaging, treatment, and mortality in lung cancer patients in Washington State, 2002-2010) and Will Canestaro (dissertation title: Calculating the clinical and economic impact of publication bias in a historical case).

Gary Lyman, MD, MPH

Gary H. Lyman MD, MPH, is Co-Director of the Hutchinson Institute for Cancer Outcomes Research and Member of the Public Health Sciences and Clinical Research Divisions at the Fred Hutchinson Cancer Research Center. He is also Adjunct Professor in the School of Pharmacy and the School of Public Health at the University of Washington as well as Professor of Medicine in the Department of Medicine in the University Of Washington School Of Medicine. Dr Lyman is a Medical Oncologist and Hematologist and a member of the Breast Cancer Program at the Seattle Cancer Care Alliance. He was most recently Director of Comparative Effectiveness and Outcomes Research-Oncology at Duke University and the Duke Cancer Institute where he also served as Professor of Medicine in the Duke University School of Medicine and a Senior Fellow at the Duke Center for Clinical Health Policy Research. In addition to his training in Internal Medicine at UNC-Chapel Hill and Hematology/Oncology at Roswell Park Cancer Institute, Dr Lyman was a Postdoctoral Fellow in Biostatistics at the Harvard School of Public Health. Dr Lyman is also a member of the ASCO Research Committee, Biomarkers Guideline Working Group, the Comparative Effectiveness Research Task Force and the Value of Cancer Care Task Force contributing to development of ASCO’s Top Five as a part of the ABIM Choosing Wisely Campaign. He is Editor-In-Chief of Cancer Investigation and on the Editorial Board of the Journal of Clinical Oncology and several other specialty journals. His research interests include comparative effectiveness and outcomes research related to targeted therapies and biomarkers, efforts to integrate health economics into evidence-based medicine, health policies and real world research paradigms. His research group is also engaged in advanced methods of evidence synthesis in support of clinical practice guidelines and population studies of patterns of cancer treatment and the impact of health disparities on the quality of cancer care.

Back to the Future

The 2014 PORPP/ISPOR Reception in Montreal had some of the original PORPP graduates meeting our newest crop of students. Many enjoyed a few pints of Guinness at McKibbin’s Irish Pub, and a good time was had by all. Sláinte!
Post-Doctoral Fellows

Souvik Banerjee, PhD
Souvik will join the PORPP-Pfizer postdoctoral fellowship program in Fall, 2014 after completing his PhD in Economics from University at Albany, SUNY. In his dissertation he is examining the impact of mental illness on labor market outcomes like employment and labor supply, using a latent continuous measure for mental illness. Souvik has presented his work at the Ifo/CESifo Conference on Empirical Health Economics, Munich, Germany and also at the Annual Health Econometrics Workshop, Chapel Hill, NC in 2013. In the position as a postdoctoral fellow he will be working under the primary supervision of Louis Garrison and will also be mentored by Sean Sullivan and Anirban Basu. In the summer of 2015 he is expected to work with Dick Willke at Pfizer, New York, NY for about 3 months. Before joining the program at UW he will meet with Dick Willke to discuss future projects of mutual interest.

Jean McDougall, PhD
Jean received her PhD in Epidemiology from the University of Washington in 2013. Her primary research focus has been on understanding social and economic determinants of the receipt of guideline-concordant cancer care. Her work in investigating socioeconomic disparities in breast cancer screening and treatment won a Komen Scholar-in-Training Award to present her research at the American Association for Cancer Research Science of Health Disparities Conference held in San Diego, CA in 2012. Jean is working with Sean Sullivan and Scott Ramsey on a diverse set of projects including an analysis of the costs, resource utilization, and impact on survival of skeletal related events among men with prostate cancer, an economic evaluation of alternative breast cancer screening modalities for high risk women, and an analysis of risk factors for bankruptcy among cancer patients.

Julia Slejko, PhD
Julia has concluded the second year of her PORPP-Pfizer postdoctoral fellowship. In November, she presented her work on adherence modeling at ISPOR Europe and the paper Dynamic Medication Adherence Modeling in Primary Prevention of Cardiovascular Disease: A Markov Microsimulation Methods Application has recently been published in Value in Health. Over the past year she has worked with Dick Willke and the Pfizer pharmacometric modeling group to develop a health economic microsimulation model of COPD. She has recently been working with Sean Sullivan, Anirban Basu, Lou Garrison and Preeti Bajaj on the Health Tech Fund projects, assessing the impact of HEOR studies on the commercial success of drug products. She has accepted a faculty position at the University of Maryland Baltimore in the Pharmaceutical Health Services Research Department to begin this Fall.

2014 PORPP Retreat at Talaris Conference Center
Biomedical Regulatory Affairs Program

The School of Pharmacy’s Biomedical Regulatory Affairs Master of Science (BRAMS) program admitted its first class in 2008 and will graduate its 100th student this coming year. An outgrowth of two long-standing certificate programs, Biomedical Regulatory Affairs and Clinical Trials, BRAMS is unusual with its focus on all medical products – biologics, drugs, medical devices – and draws students from both local industry and the Food and Drug Administration, as well as international students (Canada, China, Egypt, India, Japan, Jordan, and Taiwan). The MS degree includes a practicum, and is typically completed in two years. BRAMS faculty have been active participants in the on-going development of a national accrediting organization, Association of Graduate Regulatory Educators.

Employers of our graduates, many hired from the practicum, include:

- Amgen (3)
- Applied Precision, Inc.
- bioMerieux
- Bio-Rad Laboratories
- ComplianceOnline
- Coulter Program (2)
- CTI (2)
- Dendreon
- EKOS Corporation
- Eurofins Lancaster Laboratories (for Amgen)
- FDA
- Fred Hutchinson (2)
- Genentech
- Genoa Healthcare
- Gilead Sciences
- Group Health Research Institute
- Health Canada
- Skagit Regional Hospital
- IDRI
- IPSEN
- Kona Medical Inc.
- L’Oreal Research and Innovation
- Luye Pharma Group, Beijing
- Metagenics
- Microsoft
- Mycenas Biotech, Inc., Taiwan
- NanoString
- Natus Medical Inc.
- Paccar
- Philips (3)
- Physio-Control
- Puget Sound Blood Center
- Qorum Review
- Sarepta Therapeutics
- Seattle Cancer Care Alliance
- Seattle Children's Hospital (2)
- Seattle Genetics (3)
- Self-employed
- SonoSite
- Stanford University
- Stephens and Associates
- Swedish Medical Center (2)
- The Medicines Company
- UW (3)
- WiseWoman Herbnals, Bastyr faculty

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- CTI (2)
- Dendreon
- EKOS Corporation
- Eurofins Lancaster Laboratories (for Amgen)
- FDA
- Fred Hutchinson (2)
- Genentech
- Genoa Healthcare
- Gilead Sciences
- Group Health Research Institute
- Health Canada
- Skagit Regional Hospital
- IDRI
- IPSEN
- Kona Medical Inc.
- L’Oreal Research and Innovation
- Luye Pharma Group, Beijing
- Metagenics
- Microsoft
- Mycenas Biotech, Inc., Taiwan
- NanoString
- Natus Medical Inc.
- Paccar
- Philips (3)
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**PORPP Student**

**MARIA AGAPOVA**


**PREETI BAJAJ**


**WILL CANESTARO**


**AMY CIZIK**


**CARLOS GALLEGRO**


DENISE BOUDREAU


BRIAN BRESNAHAN


JOSH CARLSON


BETH DEVINE


LOUIS GARRISON, JR.


SHELLY GRAY


RYAN HANSEN


JERRY JARVIK


LARRY KESSLER


SCOTT RAMSEY


ANDY STERGACHIS
Sangare L, van Eijk AM, ter Kuile FO, Walson J, Stergachis A. The association between malaria and iron status or...

SEAN SULLIVAN

DAVID VEENSTRA

PI, Impact Evaluation of a Pharmacy Assistant Training Program in Malawi Barr Foundation 2014-2017

ANIRBAN BASU
Co-PI, (PI Huang) Comparative Effectiveness of Dynamic Patterns of Glucose Lowering Therapies, AHRQ, 2012-2016

DENISE BOUDREAU

BRIAN BRESNAHAN
PI, Economic analysis of an international, multi-site randomized controlled trial of ultrasound screening? primary project sponsor (Bill and Melinda Gates Foundation).

BETH DEVINE
PI, Use of Patient-Reported Outcome Instruments in Clinical Trials, Novartis Pharmaceuticals, 2013-2014
PI, UW-Allergan Post-Doctoral Fellowship, Allergan Pharmaceuticals, 2012-
Lead Co-Inv, Methods Core, CERTAIN (Comparative Effectiveness Research Translation Network) Hub, AHRQ, 2014-2015

JOSH CARLSON

LOUIS GARRISON, JR.
Principal Mentor, UW-Pfizer Post-Doctoral Fellowship, 2014-2016.
Co-Inv. (PI-Chung) University of Nairobi HIV Capacity Building Fellowship. USAID, 2014-2018
Co-Inv., (PI-Frenkel), Drug-resistance testing in Kenya to improve ART suppression of HIV replication, National Institutes of Health (NIH), 2012 – 2015

SHELLY GRAY
PI (UW subcontract, Larson PI), Longitudinal Effect of Anticholinergic Polypharmacy on dementia and neuro-pathology 2012-2014
Co-Inv., (Larson PI) Alzheimer’s Disease Patient Registry NIA 2009-2014
Co-Inv., (Dublin PI) Opioids, benzodiazepines, general anesthesia & risk of dementia and other brain outcomes Branta Foundation 2012-2015

DONALD PATRICK
PI, Biobehavioral Cancer Prevention and Control Training Program NIH/NCI 2011-2016

SCOTT RAMSEY
Co-Investigator/Co-Chair, “SWOG Network Group Operations Center of the NCTN” submitted to Oregon Health and Sciences University (OHSU), National Cancer Institute (NCI) for funding period 03/01/2014 – 02/28/2019

ANDY STERGACHIS
PI, Pharmacy & Supply Chain Strengthening Program to Improve Access to Essential Medicines in Malawi Barr Foundation via VillageReach
PI, Operational Planning for Pharmacy-Local Health Jurisdiction Memorandum of Understanding Department of Health, State of Washington
PI, Systems to Improve Access to Pharmaceuticals and Services: Namibia, Ukraine, 2014 USAID via Management Sciences for Health

SEAN SULLIVAN
PI, CHASE K12 Training, 2014-2019, AHRQ
Co-Inv. (PI Linda Teri) From Evidence-Base to Practice: Implementing RDAD in AAA Community-Based Services. (National Institute of Aging)

Co-Director, Pacific Northwest Evidence-Based Practice Center (AHRQ) August 2012 to July 2017

DAVID VEENSTRA
Co-Inv. (PI Sullivan) CHASE K12 Training, 2014-2019
AHRQ
Co-Inv. (PI Burke) Center for Genomics and Healthcare Equality, 2010-2015, NIH/NGRI
Co-Inv. (PI Thummel) Pharmacogenetics in Rural and Underserved Populations, 2010-2015, NIGMS

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