



### **June 2010 PORPP Graduates and Faculty**

1st Row, Sean Sullivan, Graduates: Katie Gries, Bernardo Goulart, Lisa Bloudek 2nd Row, Faculty: Beth Devine, David Veenstra, Josh Carlson, Scott Ramsey 3rd Row, Lou Garrison, Tom Hazlet, Brian Bresnahan, David Blough

#### **Congratulations to Recent Graduates**

##### **Master of Science Pharmaceutical Sciences**

**Lisa Bloudek**, B.S. 2005, Pharm.D. 2009, University of Washington  
Masters Thesis: *“CDR State Transition Probabilities in Alzheimer’s Disease with and without Cholinesterase Inhibitor Intervention in an Observational Cohort of AD Patients in the NACC-UDS Database”*

**Bernardo Goulart**, M.D. 1997, Federal University of Rio de Janeiro  
Masters Thesis: *“Newer Agents for Advanced Non-Small-Cell Lung Cancer (NSCLC): Evidence from the NCI Patterns of Care Study”*

**Katie Gries**, B.S. 2004, Pharm.D. 2008, University of Southern California  
Masters Thesis: *“Validity and Reliability of the Visual Function Questionnaire Utility Index in Individuals with Age-Related Macular Degeneration”*

#### **Incoming Students Ph.D.**

##### **Maria Agapova, MSc**

Maria received her Masters degree in International Healthcare Management, Economics and Policy in 2007 with a keen desire to pursue economic evaluation of domestic and international health interventions and programs. At Blood Systems Research Institute, Maria has spent the last two years researching transfusion recipient health outcomes and modeling transfusion-transmitted adverse event progression for cost-effectiveness analyses of blood safety testing and screening options in domestic and international settings. She looks forward to joining a network of colleagues and is confident she will achieve becoming an independent health economics investigator through the experience, opportunities and credentials provided by the PORPP Ph.D. program.

##### **Katherine Gries, PharmD, MS**

Katie has just finished the Allergan Post-Doc fellowship, and after receiving her M.S. degree, has decided to continue her education and pursue her Ph.D. degree in our program.

Katie is interested in studying utility theory and patient reported outcomes; including but not limited to instrument development, qualitative methods, and psychometrics. She presented a poster titled “*Validity and Reliability of the Visual Function Questionnaire Utility Index in Individuals with Age Related Macular Degeneration*” at the ISPOR Annual Meeting in Atlanta, Georgia in May 2010.

### M.S.

#### **Cara McDermott, PharmD**

Cara is interested in geriatric oncology and palliative care. She works with Scott Ramsey on pharmacoeconomic and patterns of care projects at Fred Hutchinson Cancer Research Center. This summer Cara began working with Brian Bresnahan on a review of comparative effectiveness in oncology imaging. She presented a poster, “*Potential Interactions between Aromatase Inhibitors and Herbal and Vitamin Supplements in Geriatric Breast Cancer Patients*” at the American Geriatrics Society annual meeting in Orlando in May 2010.

#### **Veena Shankaran, MD**

Veena is currently a member of the medical oncology faculty at UW/SCCA/FHCRC, with a specific focus in gastrointestinal malignancies. She is joining the PORPP masters program with the ultimate goal of developing an academic research career in cancer pharmacoeconomics and comparative effectiveness. Her previous research has focused on cost-effectiveness of colon cancer screening strategies and the individual financial burdens of cancer therapy.

### Post-Doctoral Fellows

#### **Vincent Lin, PharmD**

##### ***Allergan Post-Doctoral Fellow 2010-2012***

Vincent is the current Allergan fellow. He received his PharmD degree from Touro University in California. He is currently studying cost-effectiveness of treatments and screenings of diabetic retinopathy and diabetic macular edema. Before joining the PORPP program, Vincent was an intern at Premera Blue Cross where he worked in the area of pharmacy formulary management. Vincent also served as a co-chair in the Education Committee for the ISPOR Student Network last year.

#### **Laurie Gold, MSPH, PhD**

##### ***Post-Doctoral Fellow, ADVICE Project***

Laurie joined the ADVICE project as a postdoctoral fellow in January 2010 and is working on initiating comparative effectiveness studies in cancer imaging. Currently, she is helping to design a study to determine whether the use of MRI following diagnosis of breast cancer affects outcomes such as mastectomy rates, time to initiation of cancer treatment, and breast cancer recurrence. Laurie’s dissertation work in the Department of Epidemiology at the UW focused on whether occupational exposures to chlorinated solvents increased the incidence of

multiple myeloma. She also has performed research on the epidemiology of cardiac arrests with the Emergency Medical Services division of Seattle/ King County Public Health. Laurie obtained her undergraduate degree in Environmental Science from the University of California, Berkeley.

#### **Kyle Ross, PhD**

##### ***Eli Lilly Post-Doctoral Fellow 2009-2011***

Kyle is currently working with Lou Garrison on intellectual property issues with biosimilars. He is also pursuing research on the cost-effectiveness of HPV vaccination in China and the cost-effectiveness of diagnostic tests in cancer. Over the past year, Kyle presented “*Economic Considerations of Biosimilars: Theory and Examples*” at the UW Biosimilars Conference in March and “*Importance of Considering Treatment Complementarity of Medicines in Designing Pharmaceutical Benefits*” at ISPOR 2010 in Atlanta in May. He has also written a chapter entitled “*Drug Use, Access and Pharmaceutical Industry*” for the upcoming 5<sup>th</sup> edition of *Introduction to Health Care Delivery: A Primer for Pharmacists* along with Lou Garrison and Dana Hammer.

#### **Rahber Thariani, MS, PhD**

##### ***Post-Doctoral Fellow CANCERGEN Project***

Rahber joined the PORPP program as a senior fellow in December 2009 and is working on comparative effectiveness and clinical trial development in cancer genomics alongside David Veenstra, Lou Garrison and Scott Ramsey. His dissertation work in Bioengineering at the UW focused on the development of cost-effective point-of-care diagnostics utilizing novel optical techniques. He has also collaborated with the UW Business School in projects involving technology development, venture capital and entrepreneurship. Rahber received his undergraduate degree from Middlebury College in Mathematics, Physics and Geography.

#### **David van der Goes, PhD**

##### ***Pfizer Post-Doctoral Fellow 2010-2012***

David finished his Ph.D. in economics at Lehigh University in May 2010. His dissertation is titled “*Three Essays on the Vietnam War and the Draft*.” It covers the long-term impacts of active duty service and draft policy on veterans and their families, including labor, health, and child well-being issues. Also, David is co-author on a forthcoming publication in the *Eastern Economic Journal* that investigates the effect of changes in the number of state health mandates on employer-provided health insurance coverage. David has a B.A. in economics from Temple University and during the two years prior to coming to the UW he taught full-time at Muhlenberg College. David is interested in all aspects of health economics and hopes to include some veterans’ health issues in his pharmacoeconomics and outcomes research while here at PORPP.

#### **Bruce Wang, PhD**

##### ***Post-Doctoral Fellow BOOM Project***

Bruce spent the past year working in the Bariatric Outcomes

and Obesity Modeling (BOOM) Collaborative. In addition to providing expertise in economic modeling, he manages the databases, makes hiring decisions, and interfaces with external clients. One of the many, innovative works from this group is on the lifetime burden of obesity, which was presented at ISPOR. Dr. Wang has shunned advances from external organizations and looks forward to continuing his work at UW. With the modeling complete, the upcoming year should bring a series of papers from BOOM on a multitude of subjects spanning theory, application, and opinion. Though writing these papers will take the majority of his time, he plans on researching health technology assessment in emerging countries.

### **Current Students—Honors & Awards**

#### **Rafael Alfonso, MD, MSc**

During the last year, Rafael has participated in several projects involving the assessment of biologics and biosimilars from different perspectives. Together with Beth Devine and Sean Sullivan, they developed an indirect comparison analysis of the different biologic therapies available in the U.S. for the treatment of rheumatoid arthritis. The results of these analyses have been presented as a poster at the ISPOR Atlanta 2010, and have been recently accepted to be published in *Pharmacotherapy*. A review of the status of biosimilars in Latin America led him to present at the Biosimilars Conference at the University of Washington (March 2010, Seattle) and to be appointed as Advisor for the Pan American Health Organization (PAHO-Bio PANDRH working group-2010), during their meeting in the Dominican Republic in June 2010. Rafael also continues his work with Sean Sullivan and Lou Garrison on the development of obesity models to determine the cost-effectiveness and the budget impact of surgical treatments. Preliminary results of this project have been presented at ISPOR Atlanta 2010 (Poster) and at the Air Force Medical Symposium (AFMS) in Washington D.C. 2010 (Oral Presentation). Finally, he continues to be very active in multiple activities in Latin America; recently he was appointed as Chair of the ISPOR Distance Learning & On-site Training 2010-2012 – Latin American Consortium, and participated as speaker and moderator at the ISPOR Chapter Congress in Colombia (July 2010). Additionally he has been invited to give several conferences and trainings at scientific meetings in the region.

#### **Joseph Babigumira, MBChB, MS**

Joseph gave a podium presentation entitled “*Economics of Unsafe Abortion and Contraception*” at the Fourth Annual Population and Poverty Research Network meeting in Cape Town, South Africa in January 2010. He spent two months last spring supervising data collection in a longitudinal study of the health and economic outcomes following induced abortion in Uganda. He is preparing a poster entitled “*Cost-Effectiveness of a Pharmacy-Only Refill Program for the Management of Patients on Antiretroviral Therapy in Uganda*” for the upcoming Meeting of the Consortium of

Universities for Global Health Meeting in Seattle, WA on September 19<sup>th</sup> to 21<sup>st</sup> 2010. He is also involved in the Treatment, Research and Expert Education Program (TREE), a distance learning portal for international program managers and researchers to access resources at the University of Washington. As a contribution to this program, Joseph gave a web lecture entitled “*Measuring the Cost of Outcomes: The Case of Abortion in Uganda*” to an international audience on September 25<sup>th</sup> 2010.

#### **Preeti Bajaj, BS**

During her first year in the PORPP program, Preeti worked with Lou Garrison to research recent trends in evidence hierarchies, and develop these into policy recommendations for comparative effectiveness research to be conducted under the Patient-Centered Outcomes Research Institute established by the Patient Protection and Affordable Care Act. This summer, she completed an internship within Genentech's Biometrics, Health Outcomes and Payer Support group. She is currently working with Dave Veenstra on a risk-benefit analysis to evaluate the clinical utility of genetic testing for thromboembolism in pregnant women.

#### **Mindy Cheng, MS**

Mindy helped to complete an evidence review evaluating the economic value of using novel drug delivery technologies to reduce medication dosing frequency. Results of the review are published in the current issue (Vol.13, No.2) of *Journal of Medical Economics*. Currently, Mindy is making progress on her dissertation in the subject area of oncology orphan drugs. She received the 2010 PhRMA Foundation Pre-Doctoral Fellowship Award in Health Outcomes.

#### **Catherine Corbell, MSc**

Catherine Corbell is a 4<sup>th</sup>-year Kenyan student currently working on her dissertation entitled, “*The Risk of Anemia Associated with Zidovudine-based Antiretroviral Therapy in Namibia.*” Her dissertation work involves linking records in three computerized databases containing clinical and administrative information for persons with human immunodeficiency virus (HIV). The linked data file will be used to examine the risk of anemia in zidovudine users. Catherine has spent the better part of 2010 in Namibia, where she has been providing the Ministry of Health and Social Services with the technical expertise in record linkage methods. She has also travelled around the country gathering data for her dissertation work, scheduled for completion at the end of the year. On completion of her PhD studies, Catherine hopes to be involved in work that helps to improve health outcomes in low income countries.

#### **Ryan Hansen, PharmD**

Ryan recently completed a study on the economic costs of non-medical use of prescription opioid medications. This research was presented in a poster at the International Society of Pharmacoeconomics and Outcomes Research (ISPOR) 15th Annual International Meeting in Atlanta, Georgia, May 2010. His burden of illness study evaluating the economic burden of



Hiep Nguyen presented his poster “The Impact of Pharmaceutical Benefit Changes on the Utilization of Asthma Medication and Related Health Care Services and Costs” at the 2009 CAB meeting held at The Columbia Tower.

individual prescription opioid medications is currently in press at the *Clinical Journal of Pain*. His dissertation research is focused on evaluating the association between sedative hypnotic insomnia treatments and motor vehicle crashes using data linked between Group Health Cooperative and the State of Washington's motor vehicle crash database.

**Norio Kasahara, MPH**

Norio is completing his second year of the PhD program focusing on class work on applied biostatistics and comparative effectiveness analysis in developing countries. He has also been working on a short proposal which may potentially serve for his dissertation; Cost-effectiveness Analysis of Primary Health Care Services in Urban Kabul, Afghanistan, Comparing Different Modalities of Service Provision (i.e. government, private and NGO). He presented a poster: “Cost-utility analysis on hypothetical neuroimaging tracer for diagnosis of dementia of Alzheimer's type in Japan”, at the ISPOR meeting in Atlanta, in May 2010.

**Hiep Nguyen, MPH**

Hiep is in the process of conducting a meta-analysis which includes a systematic review of the research literature on the efficacy of self-management educational intervention in modifying health outcomes for children with asthma. The meta-analysis will be conducted to determine the effectiveness of self-management education programs on measures of physiological function, morbidity and functional status, self-perception, and health care utilization in children and adolescents with asthma.

**Justin Robertson, BS, MA**

Justin is a fourth-year PhD student in the Department of Economics at the University of Washington and a second-year Master's student in PORPP. His research interests include the role of information and contracts in the health care industry and cost-effectiveness analysis. He has spent time this past year working with Lou Garrison on numerous projects in the areas of diabetes, renal cancer, benefit-risk analysis, and risk-sharing agreements.

**Joshua Roth, MHA**

Josh is currently working on completing his dissertation proposal entitled “Evaluation of Opportunities to Optimize Medical Care with Pharmacogenomic Technology: The Cases of Warfarin Pharmacogenomics, ERCC1 Testing in Non-Small Cell Lung Cancer, and Gene Expression Profiling in Early Stage Breast Cancer”. He was the recipient of the 2010 PORPP Endowed Prize, the 2010 American Foundation for Pharmaceutical Education (AFPE) Fellowship, and was awarded the 2010 Best Student Podium Research Presentation at the International Society for Pharmacoeconomics and Outcomes (ISPOR) 15<sup>th</sup> Annual International Meeting in Atlanta, GA.

**Jonathan Watanabe, PharmD, MS**

Jonathan was an author on manuscripts “Cost analysis of interventions for antimuscarinic refractory patients with overactive bladder” (*Urology*, epub April 2010) and “Treatment success for overactive bladder with urinary urge incontinence refractory to oral antimuscarinics: a review of published evidence” (*BMC Urology* 2009, 9:18). He also presented a continuing medical education lecture on adherence associated with chronic medication usage at the Case Management Society of America 2010 meeting.

**Heidi Wirtz, PharmD, MS**

Heidi's interests include pharmacoepidemiology and the development of guidelines and analytic techniques to optimize medication use. She has been working on a project with Beth Devine to evaluate the impact of stepwise implementation of clinical decision support alerts within an electronic health record system on adherence to drug-laboratory monitoring guidelines for antidiabetic and antihyperlipidemic prescriptions among patients with diabetes. Additionally, Heidi and Andy Stergachis collaborated with the Institute for Health Metrics and Evaluation team to design and pilot a novel surveillance system for tracking chronic disease disparities in King County. Heidi is currently working with Denise Boudreau at the Group Health Research Institute on a pharmacoepidemiology project to evaluate the relation between common medication use (such as antibiotics and antidiabetic drugs) and breast cancer recurrence.

**William Wong, PharmD, MS**

Will has been pursuing his interest in cost-effectiveness of pharmacogenomics during his first year. This past year, he had a review of the cost-effectiveness of pharmacogenetic tests accepted for publication in *Pharmacoeconomics*. In addition, he is currently a part of the CANCERGEN team and helped develop target test profiles for emerging genetic tests in oncology. He spent this summer at Genentech doing an internship in the biometrics, health outcomes and payer support department, where he has been developing cost-effectiveness models for pipeline molecules and working on various other projects related to their oncology products. Lastly, this summer Will is also finishing up a meta-analysis project looking at statins and the prevention of Alzheimer's and dementia.



### 2010 PORPP Retreat

1st Row: Lou Garrison, Penny Evans, Mindy Cheng, Heidi Wirtz, Catherine Corbell, Hiep Nguyen, Beth Devine, Kyle Ross, Brian Bresnahan, Ryan Hansen, Jon Watanabe, Shelly Gray, Lisa Bloudek, Preeti Bajaj 2nd Row: Rahber Thariani, Tom Hazlet, Pete Fullerton, David Blough, Tom Baillie, Scott Ramsey, Andy Stergachis, Justin Robertson, Eric Johnson, Bernardo Goulart, Josh Carlson, Josh Roth, David Veenstra, Norio Kasahara, Denise Boudreau, Will Wong, Srikanth Kadiyala, Sean Sullivan, Rafael Alfonso, Bruce Wang

#### PORPP Retreat

On May 7, 2010, thirty-four PORPP students, faculty and staff participated in an all day educational retreat, organized by Associate Professor Beth Devine, and PhD student, Rafael Alfonso at the Talaris Conference Center.

The theme this year was “Preparing for the Future”. To that end, our guest speakers for the morning session were Professor Dan Malone, from the University of Arizona, and Newell McElwee, the Executive Director of U.S. Health Outcomes for Merck & Co. These two professionals spoke on “Career Match—What Are Employers Looking for in a Candidate?”

The students were able to interact with them via Skype and teleconferencing, and the sessions were very informative to the students.

The afternoon session consisted of a panel discussion by scientists and media experts. The discussion gave the students and faculty an insight into disseminating the results of their research through the media - how an interview should be conducted, and how to deal with difficult questions and situations. The panel was chaired by Melinda Young, Assistant Director of Communications for the School of Pharmacy. Other panel members were Mary Guiden, Media Relations Manager, UW Health Sciences Office of News & Information, JoNel Aleccia, health writer, reporter and editor, for MSNBC.com and Larry Kessler, Chair of the Dept. of Health Services.

The afternoon finished off with presentations by Dave Veenstra, Ryan Hansen, Josh Carlson, Rafael Alfonso and Josh Roth. They gave demonstrations of useful tools and macros, available in Excel, to assist the researcher in making tornado diagrams, forest plots and to map probabilistic sensitivity analysis diagrams.

#### Student Publications

##### Rafael Alfonso

**Cheng MM, Alfonso R, Best JH, Garrison LP, Bruhn D, Veenstra DL.** The economic value of reducing medication dosing frequency with drug delivery technologies: an evidence assessment. *Journal of Medical Economics*, 2010; 13 (2): 193-202.

##### Joseph Babigumira

**Babigumira JB, Sethi AK, Smyth KA, Singer ME** , Cost effectiveness of facility-based care, home-based care and mobile clinics for provision of antiretroviral therapy in Uganda. *Pharmacoeconomics*, 2009;27(11):963-73

##### Mindy Cheng

**Cheng MM, Alfonso R, Best JH, Garrison LP, Bruhn D, Veenstra DL.** The economic value of reducing medication dosing frequency with drug delivery technologies: an evidence assessment. *Journal of Medical Economics*, 2010; 13 (2): 193-202.

##### Catherine W. Corbell

**Corbell C,** et al. 2010. Cost and access to acyclovir in eight sub Saharan African countries. *Sexually Transmitted Diseases* 37(8):488-93

##### Ryan Hansen

**Hansen RN, Campbell JD, Sullivan SD.** Association between antiepileptic drug switching and epilepsy-related events. *Epilepsy & Behavior*. 2009 Aug;15(4):481-5.

##### Cara McDermott

**Ramsey S, Blough D, McDermott C, Clarke L, Bennett R, Burke W, Newcomb P.** Will Knowledge of Gene-based Colorectal Cancer Disease Risk Influence QOL and Screening Behavior? Findings from a Population-based Study. *Public Health Genomics*. 2010 Jan 1; 13 (1).

**Ramsey SD, McCune JS, Blough DK, McDermott CL,** Clarke L, Malin J, Sullivan SD. Colony Stimulating Factor Prescribing Patterns Among Cancer Patients Receiving Chemotherapy. *American Journal of Managed Care*, in press.

**Kyle Ross**

Chang YM, **Ross K**, Biodiversity, Intellectual Property Rights and North-South Trade, 2009 *Economics Bulletin*, Vol. 29 no.2 pp. 993-1003

**Joshua Roth**

**Roth JA, Garrison LP, Burke W, Ramsey SD, Carlson R, Veenstra DL.** Stakeholder Perspectives on a Risk-Benefit Framework for Genetic Testing. *Public Health Genomics*. 2010; DOI: 10.1159/000290452.

**Veenstra DL, Roth JA, Garrison LP, Ramsey SD, Burke W.** A Formal Risk-Benefit Framework for Genomic Tests: Facilitating the Appropriate Translation of Genomics Into Clinical Practice. *Genetics in Medicine*. In Press.

**Rahber Thariani**

**Thariani R,** Yager P (2010) Imaging of Surfaces by Concurrent Surface Plasmon Resonance and Surface Plasmon Resonance-Enhanced Fluorescence. *PLoS ONE* 5(3): e9833 (2010)

**William B. Wong, Josh J. Carlson, Rahber Thariani, David L. Veenstra,** Cost Effectiveness of Pharmacoeconomics: A Critical and Systematic Review; *Pharmacoeconomics* (In Press)

**Jonathan Watanabe**

**Watanabe JH,** Campbell JD, Ravelo A, Chancellor MB, Kowalski J, **Sullivan SD.** Cost Analysis of Interventions for Antimuscarinic Refractory Patients With Overactive Bladder. *Urology*. 2010 Apr 28. [Epub ahead of print]

**Watanabe JH,** Treatment success for overactive bladder with urinary urge incontinence refractory to oral

antimuscarinics: a review of published evidence (*BMC Urology* 2009, 9:18)

**Master of Science in Biomedical Regulatory Affairs**

This year saw the first graduating class from the Masters of Science in Biomedical Regulatory Affairs program. Those in our first cohort of thirteen graduates are: Yaling Chan, Christina Goodwin, Theresa Iseman, Sohail Jarrhian, Margaret King, Kristen Klasey, Bryan Morris, Gina Query, Isabelle Ragueneau-Majlessi, Matt Rael, Sara Shum, Dennis Thireault, and Zhantao Yang. We have six more students who expect to finish after Fall quarter, as well as a returning class of 20 who will finish next spring. We have seen a good deal of interest in the program with an increase in the number of applicants for 2010-11, as well as seeing many very high caliber applicants. We have accepted 21 of the 37 applicants and are looking forward to another good year in the program. We continue to refine classes and schedules as we learn what works best for our students as well as the program.

**PORPP Endowed Prize Recipient**

The winning paper for the 2009 PORPP Endowed Prize was written by Josh Roth. The title of his paper was: "Advanced Non-Small Cell Lung Cancer Cetuximab Treatment Decision Model: Chemotherapy + Cetuximab vs. Chemotherapy Only vs. Cetuximab Treat-to-Rash Strategy in First-Line Treatment of Stage IIIB/IV NSCLC".

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.



**First Graduating Master's of Science Class in Biomedical Regulatory Affairs, June 2010**

First Row: Kristen Klasey, Gina Query, Hiu Man (Sara) Shum, Yaling Chan, Dr. Jean Feagin (faculty)  
Second Row: Zhantao Yang, Dr. Tom Hazlet (faculty), Kyun Chung, Dennis Thireault, Sara Magee (faculty).

## Faculty Recent Grants

### Denise Boudreau

Principal Investigator, **Commonly Used Medications and Breast Cancer Recurrence**, National Cancer Institute  
9/1/2007-7/31/2012

Principal Investigator, **Antidepressant Treatment and Risk of Obesity**, National Institute of Mental Health, 7/1/2009-6/30/2012

Principal Investigator, **Identifying Malunion and Nonunion Fractures with Automated Data: Validation of Codes**, AMGEN, 8/1/2009-11/30/2010

### Brian Bresnahan

Principal Investigator, **Approaching Comparative Effectiveness Research in Molecular Imaging: A Systematic Evaluation of Evidence for FDG-PET/CT in Oncology**, Society of Nuclear Medicine, Period: 2010 – 2011

### Beth Devine

Principal Investigator, **Evaluating Electronic Prescribing in a Community-based Integrated Health System**, Agency for Healthcare Research and Quality (K-08) 2006-2011

### Louis Garrison

Principal Investigator, **Cost Effectiveness Evaluation of the Impact of Potential Vaccine Innovations on Measles Vaccines Programs and Global Health** 2007-2009, Bill and Melinda Gates Foundation

Principal Investigator, **Economic Value of Innovative Treatments Over the Product Life Cycle: Trastuzumab for Metastatic and Early Breast Cancer in Europe**, 2007-2009, Roche

### Shelly Gray

Co-Investigator. **Alzheimer's Disease Patient Registry**, 2009-2013, NIA

### Scott Ramsey

Principal Investigator, **A Study of Cancer Diagnosis as a Risk Factor for Personal Bankruptcy**, in response to NCI Challenge Grant RFA

Principal Investigator, **Center for Comparative Effectiveness Research in Cancer Genomics - CANCERGEN** NCI "GO" grant RFA

Co Investigator, **ADVancing Innovative Comparative Effectiveness research-cancer diagnostics** ADVICE NCI "GO" grant RFA

### Andy Stergachis

Principal Investigator, **Assessment of the Safety of Antimalarial Drug Use During Early Pregnancy**. 2010-13. Malaria in Pregnancy Consortium via the Bill and Melinda Gates Foundation.

Principal Investigator **Pandemic Influenza Planning: Strengthening Business and Research Continuity**. 2009-10. UW School of Public Health.

Principal Investigator, **Global Medicines Program**. 2010-13. Department of Global Health, UW.

Principal Investigator, **Supplement to Strengthening Pharmaceutical Systems (SPS) for Namibia Activities**. 2010. Management Sciences for Health via cooperative agreement award from USAID.

Principal Investigator, **Assessing and Improving Communications for Reporting Adverse Events Associated with Influenza Vaccine Administration**. 2009-10. CDC as a Pilot Project Awarded by the Northwest Preparedness and Emergency Response Research Center.

### Sean Sullivan

Principal Investigator, **ARRA CHASE K12 Training**, 2010-2013

Co-Principal Investigator, **ARRA PHARMACY—Advice**, 2009-2011

Co-Principal Investigator, **Obesity Economics Research Center. Department of Defense** (David Flum, co-PI). Nov 2008 – October 2010

Principal Investigator, **The Impact of Benefit Design Changes on Drug Use and Outcomes in Patients with Asthma**. July 2009-Dec. 2010

Co-Principal Investigator, **Advancing Innovative Comparative Effectiveness Research—Cancer Diagnostics**. NCI "GO" Grant RFA

Co-Investigator, **CER Administrative Supplement-Workforce Development (ARRA)**, 2009-2011

### David Veenstra

Principal Investigator, **Risk-Benefit Framework for Genetic Tests**, 2009-2011, CDC

Principal Investigator, **Center for Cancer Genomic Evaluations of Comparative Effectiveness (CANCERGEN)**, 2009-2011, Fred Hutchinson Cancer Research Center

Co-Investigator, **Center for Genomics and Healthcare Equality**, 2010-2015, NIH/NHGRI

Co-Investigator, **Pharmacogenetics in Rural and Underserved Populations**, 2010-2015, NIGMS

## Faculty Recent Publications

### David Blough

- Zeliadt SB, Moinpour CM, **Blough DK**, Penson DF, Hall IJ, Smith JL, Ekwueme DU, Thompson IM, Keane TE, **Ramsey SD**. Preliminary treatment considerations among men with newly diagnosed prostate cancer. *Am J Manag Care*. 2010 May 1;16(5):e121-30.
- **Blough DK**, Hubbard S, McFarland LV, Smith DG, Gambel JM, Reiber GE. Prosthetic Cost Projections for Service Members with Major Limb Loss from the Vietnam and OIF/OEF Conflicts. Accepted for publication in *J Rehab Research and Development*, Jan 1010.

- **Ramsey S, Blough D**, McDermott C. Will Knowledge of Gene-Based Colorectal Cancer Disease Risk Influence Quality of Life and Screening Behavior? *Public Health Genomics*. 2010 (13): 1-12.
- Fesinmeyer MD, Mehta V, **Blough D**, Tock L, **Ramsey SD**. Effect of radiotherapy interruptions on survival in Medicare enrollees with local and regional head-and-neck cancer. *Int J Radiat Oncol Biol Phys*. 2010 Feb 2.

#### **Denise Boudreau**

- Chubak J, **Boudreau DM**, Fishman PA, Elmore JG. Cost of breast-related care in the year following false positive screening mammograms. *Medical Care*. 2010 Aug 14. [Epub ahead of print].
- Campbell CI, Weisner CM, LeResche L, Ray GT, Saunders K, Sullivan MD, Banta-Green C, Merrill JO, Silverberg MJ, **Boudreau D**, Satre DD, Von Korff M. Age and sex trends in long-term opioid analgesic use for non-cancer pain. In press at *AJPH*.
- Chubak J, **Boudreau DM**, Rulyak SJ, Mandelson MT. Colorectal cancer risk in relation to antidepressant medication use. In press at *International Journal of Cancer*.
- **Boudreau DM**, Yu O, Johnson J. Statin Use and Cancer Risk: A Comprehensive Review. *Expert Opin Drug Saf*. 2010 Apr 9. [Epub ahead of print]

#### **Brian Bresnahan**

- **Bresnahan, BW**, Neumann, PJ, Carlson, R, **Garrison, LG, Sullivan, SD**, Findings related to assessing value for private U.S. health plans. *Am J Pharmacy Benefits*, June 2010.
- **Bresnahan, BW**, Kiyak, HA, Masters, S, et al., Quality of life and economic burdens of malocclusion in U.S. Medicaid patients. *J Am Dental Assoc*. Forthcoming 2010.
- **Bresnahan, BW**, Economic evaluation in radiology: reviewing the literature and examples in oncology. *Acad Rad*. Forthcoming 2010.

#### **Josh Carlson**

- **Carlson JJ, Sullivan SD, Garrison LP**, Neumann PJ, **Veenstra DL**. Linking payment to health outcomes: A taxonomy and examination of performance-based reimbursement schemes between healthcare payers and manufacturers. *Health Policy*. Mar 10, 2010 [Epub ahead of print]
- **Carlson JJ, Garrison LP, Sullivan SD**. Paying for Outcomes: Innovative Coverage and Reimbursement Schemes for Pharmaceuticals. *Journal of Managed Care Pharmacy*. 15(8): 683-7, 2009
- **Carlson JJ, Garrison LP, Ramsey SD, Veenstra DL**. Epidermal Growth Factor Receptor Genomic Variation in NSCLC Patients Receiving Tyrosine Kinase Inhibitor Therapy: a Systematic Review and Meta-Analysis. *J Cancer Res Clin Oncol*. 135(11):1483-93, 2009

#### **Beth Devine**

- **Devine EB**, Patel R, Dixon DR, **Sullivan SD**. Assessing attitudes toward electronic prescribing adoption in

primary care: A survey of prescribers and staff. (accepted at *Inform Prim Care*)

- **Devine EB, Alfonso R, Sullivan SD**. Comparative effectiveness of biologic therapies in rheumatoid arthritis: An indirect comparisons approach. (accepted at *Pharmacotherapy*)
- Jansen JP, Fleurence R, **Devine EB**, Itzler R, Barrett A, Hawkins N, Lee K, Boersma C, Cappelleri JC. Interpreting indirect treatment comparisons and network meta-analysis for health care decision-making: Report of the ISPOR Task Force on Good Research Practices – Part 1. (in press at *Value in Health*)
- **Devine EB**, Chan LN, **Babigumira J**, Kao H, Drysdale T, Reilly D, McNeely M, **Sullivan SD**. Acquired Coagulopathy in Post-Surgical Patients: A Pilot Study to Determine the Impact on Clinical and Economic Outcomes. (in press at *Pharmacotherapy*)

#### **Louis Garrison**

- **Garrison LP**. Rewarding Value Creation to Promote Innovation in the Oncology: The Importance of Considering the Global Product Life Cycle. *The Oncologist* 15 (suppl 1):49-57, 2010.
- Towse A and **Garrison LP**. Can't Get No Satisfaction? Will Pay for Performance Help? Toward an Economic Framework for Understanding Performance-Based Risk-Sharing Agreements for Innovative Medical Products, *Pharmacoeconomics* 28(2):93-102, 2010
- **Garrison LP**, Mansley EC, Abbott TA, **Bresnahan BW**, Hay JW, Smeeding J. Good Research Practices in Cost-Effectiveness Analyses: A Societal Perspective: The ISPOR Drug Cost Task Force Report—Part II. *Value in Health* 13(1): 8-13, 2010.
- Best JH and **Garrison LP**. Economic Evaluation of Capecitabine as Adjuvant or Metastatic Therapy in Colorectal Cancer. *Expert Review of Pharmacoeconomics & Outcomes Research* 10(2): 103-115. April 2010

#### **Shelly Gray**

- **Gray SL**, Walker R, Dublin SA, Haneuse S, Crane PK, Breitner JCS, Bowen J, McCormick W, Larson EB. Histamine 2 receptor antagonist use and dementia risk. *J Am Geriatr Soc in press*
- **Gray SL**, Larson J, LaCroix AZ, Robbins J, Cauley JA, Manson JE, Chen Z. Proton Pump Inhibitor Use, Hip Fracture and Change in Bone Density in Postmenopausal Women: Results from the Women's Health Initiative. *Arch Intern Med* 2010;170:765-771.
- Sonnen JA, Larson EB, Walker R, Haneuse S, Crane PK, **Gray SL**, Breitner JCS, Montine TJ. Non-selective non-steroidal anti-inflammatory drugs are associated with dose-dependent increased neuropathologic feature of Alzheimer's disease. *Neurology In press*
- Reiner A, LaCroix, **Gray SL**, Aragaki A, Kooperberg C. Inflammation and thrombosis biomarkers and risk of incident frailty and disability in postmenopausal women. *Am J Med* 2009; 122:947-54. PMC2754604



### Scott Ramsey

- **Ramsey SD, Blough D**, McDermott C, Clarke L, Bennett R, Burke W, Newcomb P. Will knowledge of gene-based colorectal cancer disease risk influence quality of life and screening behavior? Findings from a population-based study. *Public Health Genomics*. 2010;13:1–12. NIHMSID: 102310.
- **Ramsey SD**, Schickedanz A. How Should We Define Value in Cancer Care? *The Oncologist*. 2010;15 (Supplement 1): 5-10. PMID: 20237209.
- **Ramsey SD**, Zeliadt SB, **Blough DK**, Kerri L, Buchwald D. Cancer Care of American Indians and Alaska Natives and Other Racial Groups Enrolled in Public and Private Insurance Plans. *Poverty & Public Policy*. 2010;2 (1):Article 3. [PMCID: PMC Journal In Process.]
- Fesinmeyer MD, Mehta V, **Blough D**, Tock L, **Ramsey SD**. Effect of Radiation Therapy Interruptions on Survival in Medicare Enrollees with Local and Regional Head and Neck Cancer. *Int J Rad Onc Bio Phys*. 2010 Feb 2 [Epub ahead of print]. PMID: 20133084.

### Andy Stergachis

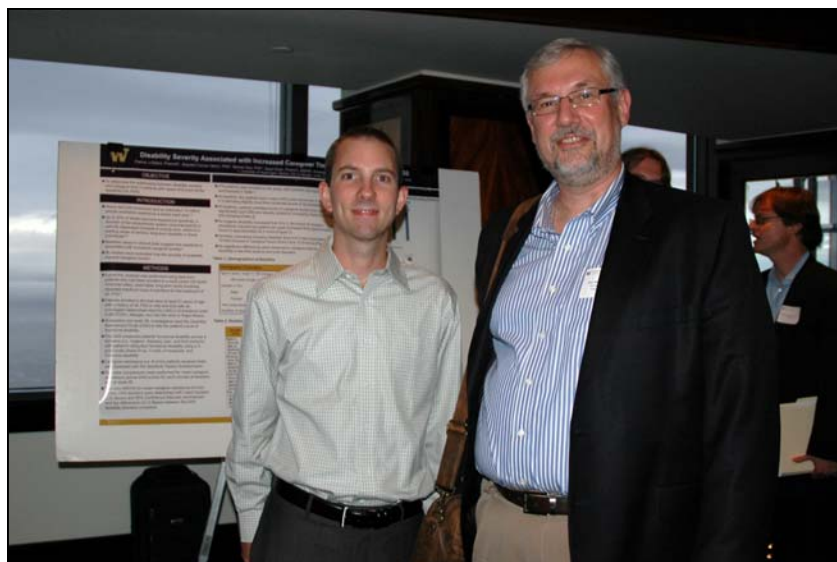
- Paige S, Jones M, D'Ambrosio L, Taylor W, Bonnie D, Loehr M, **Stergachis A**. Building community partnerships through a pandemic influenza exercise series in King County, WA. *Public Health Reports*. 2010;125:488-93.
- **Wawaru C, Stergachis A**, Ndase P, Barnes L, Ndowa F, Celum C. Cost, Availability, and Guidelines for Acyclovir for Treatment of Genital Herpes in Eight Sub-Saharan African Countries. *Sexually Transmitted Diseases*. Published ahead of print. [http://journals.lww.com/stdjournal/Abstract/publishahead/Genital\\_Ulcer\\_Disease\\_Treatment\\_Policies\\_and.99167.aspx](http://journals.lww.com/stdjournal/Abstract/publishahead/Genital_Ulcer_Disease_Treatment_Policies_and.99167.aspx)
- Olsen S, Pal S, **Stergachis A**, Couper M. An analysis of pharmacovigilance activities in 55 low- and middle income countries. *Drug Safety*. 2010;33:689-703.
- **Stergachis A**, Bartlein R, Dodoo A, Nwokike J, Kachur SP. A situational analysis of pharmacovigilance plans in

### Sean Sullivan

- **Carlson JD, Sullivan SD, Garrison LP**, Neumann PJ, and examination of performance-based reimbursement schemes between healthcare payers and manufacturers. In press, *Health Policy* 2010
- **Sullivan SD**. US Health Care Reform: A Work in Progress *European Journal of Health Economics* 2010 11(2):117-118
- Luce BR, Drummond MF, Jonsson B, Neumann PJ, Schwartz JS, Seibert U, **Sullivan SD**. EBM, HTA, and CER: Clearing the Confusion. *The Milbank Quarterly* 2010 88(2):256-276.
- Neumann PJ, Drummond MF, Jonsson B, Luce BR, Schwartz JS, Seibert U, **Sullivan SD**. Are key principals for improved health technology assessment supported and used by HTA organizations? *International Journal of Technology Assessment in Health Care* 2010 26(1):71-78.

### David Veenstra

- **Carlson JJ, Sullivan SD, Garrison LP**, Neumann PJ, **Veenstra DL**. Linking payment to health outcomes: A taxonomy and examination of performance-based reimbursement schemes between healthcare payers and manufacturers. *Health Policy*. 2010 Mar 10. [Epub ahead of print]
- **Cheng MM, Alfonso R**, Best JH, **Garrison LP**, Bruhn D, **Veenstra DL**. The economic value of reducing medication dosing frequency with drug delivery technologies: an evidence assessment. *J Med Econ*. 2010 Mar 29. [Epub ahead of print] PMID: 20334490
- Conti R, **Veenstra DL**, Armstrong K, Lesko LJ, Grosse SD. Personalized Medicine and Genomics: Challenges and Opportunities in Assessing Effectiveness, Cost-Effectiveness, and Future Research Priorities. *Med Decis Making*. 2010 Jan 4. [Epub ahead of print] PMID: 20086232
- Best JH, **Garrison LP**, Hollingworth W, **Ramsey SD**, **Veenstra DL**. Preference values associated with stage III colon cancer and adjuvant chemotherapy. *Qual Life Res*. 2010 Jan 19. [Epub ahead of print] PMID: 20084462



Kyle Ross, PhD, Eli Lilly Post-Doctoral Fellow, 2009-2011 and Don Buesching, PhD, Global Health Outcomes, Eli Lilly Company at the 2009 CAB Meeting

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## Faculty & Staff

**David Au**, MD, MPH, Affiliate Assistant Professor

**David Blough**, PhD, Research Associate Professor

**Denise Boudreau**, PhD, Affiliate Associate Professor

**Brian Bresnahan**, PhD, Adjunct Research Assistant Professor

**Josh Carlson**, MPH, PhD, Research Assistant Professor

**Brian Custer**, PhD, Affiliate Assistant Professor

**Emily Beth Devine**, PharmD, MBA, PhD, Research Associate Professor, Adjunct Appointment in the Dept. of Biomedical and Health Informatics

**Penny L. Evans**, Program Operations Specialist

**D.S. (Pete) Fullerton**, PhD, Affiliate Professor

**Jacqueline Gardner**, PhD, Professor Emeritus

**Lou Garrison**, PhD, Professor, Associate Director

**Shelly Gray, PharmD**, Professor

**Thomas Hazlet**, PharmD, DrPH, Associate Professor

**Will Hollingworth**, PhD, Affiliate Assistant Professor

**Eric Johnson**, MPH, PhD, Affiliate Assistant Professor

**Srikanth Kadiyala**, MA, PhD, Assistant Professor

**Todd Lee**, PharmD, PhD, Affiliate Assistant Professor

**Donald Patrick**, PhD, Adjunct Professor

**Scott Ramsey**, MD, PhD, Adjunct Professor, Director, Cancer Outcomes Research Program, Fred Hutchinson Cancer Research Center

**David Smith**, RPh, MHA, PhD, Affiliate Assistant Professor

**Andy Stergachis**, PhD, Adjunct Professor

**Sean Sullivan**, PhD, Professor of Pharmacy, Medicine, and Public Health and Community Medicine; Director, PORPP

**David Veenstra**, PharmD, PhD, Professor, Director, Graduate Programs

### **Pharmaceutical Outcomes Research and Policy Program**

Department of Pharmacy, University of Washington

Box 357630, Seattle, WA 98195-7630

Phone: 206-616-1383, Fax: 206-543-3835

Email: [pennye@uw.edu](mailto:pennye@uw.edu)

URL: <http://depts.washington.edu/porpp>