



# SCHOOL OF PHARMACY

UNIVERSITY *of* WASHINGTON

Pharmaceutical Outcomes Research & Policy Program

*Fall 2009*



### June 2009 PORPP Graduates and Faculty

1st Row, Graduates: Lisa Bloudek, Eldon Spackman, Elizabeth James, James Cross, Jelena Zurovac, Jonathan Watanabe 2nd Row, Faculty: Srikanth Kadiyala, Graduate: Patrick Gillard, Faculty: Sean Sullivan, Tom Hazlet, Lou Garrison, Brian Bresnahan, Beth Devine, David Blough

### Recent Graduates

#### Master of Science

**Jelena Zurovac**, B.A., 2003 Smith College, Ph.D. Economics, University of Washington  
Masters Thesis: "The Determinants of Measles Vaccination Coverage in Resource-Poor Countries."  
Status: Mathematica Policy Research, Inc.

**Jonathan Watanabe**, Pharm.D., 2007, University of Southern California  
Masters Thesis: "Cost Analysis of Interventions for Antimuscarinic Refractory Patients with Overactive Bladder."  
Status: University of Washington PORPP Ph.D. Program

#### Doctor of Philosophy

**James T. Cross**, B.S. 1997, Tufts University, M.S. 1998, University of California (Davis).  
Dissertation: "A Case Study and Policy Analysis of Novel Quantitative Methods for Drug Benefit-Risk Assessment in Regulatory Decision-Making." Status: Genentech, Integrated Safety Risk Manager, San Francisco, CA

**Elizabeth James**, B.S. 1998, Texas A&M University, Pharm.D. 2004, University of Texas (Austin).  
Dissertation: "Evaluation of Prescription Drug Pay-for Performance Program: Impact on Prescribing Trends, Budgets, and Patient Outcomes." Status: Uniform Medical Plan, Seattle, WA

**D. Eldon Spackman**, B.A. 2002, M.A. 2006, University of Calgary.  
Dissertation: "Health Economics Research in Alzheimer's Disease: Support for Dependence as a Health Outcome and the Development of a Model Evaluating the Cost-Effectiveness of Screening." Status: York University, Center for Health Economics, York, U.K.

#### Post-Doctoral Fellows

**Jonathan Campbell**, Ph.D., Assistant Professor, University of Colorado  
**Josh Carlson**, Ph.D., University of Washington

## Incoming Students

### Ph.D.

#### **Preeti Bajaj, B.S. 2005, Johns Hopkins University**

Preeti received her degree in biomedical engineering, intending to become a scientist and contribute to the development of innovative therapies and medical products. As a pharmaceutical research and development management consultant she has become interested in furthering her education in the areas of pharmacoepidemiology and pharmacoeconomics. She hopes to return to the pharmaceutical industry and conduct pharmacoeconomic studies and analyses.

#### **Hiep Nguyen, B.S. 2000, University of California (Irvine), MPH 2005, Yale University**

Hiep has worked as an outcomes researcher for the past 3 years in an industry setting. During this time he has gained experience in health economics, patient-reported outcomes, psychometrics, and other analytical procedures. However, he has felt that his work environment is limited in allowing him to acquire the full range of evaluative methods in this area. He looks forward to honing his skills and becoming a much more effective outcomes researcher.

#### **Jonathan Watanabe, B.S. 1998, University of Washington, Pharm.D. 2007, University of Southern California, M.S. 2008, University of Washington**

Jonathan, as our first Allergan Post-Doc Fellow, received his M.S. degree, and decided to continue his educational journey and pursue his Ph.D. degree in our program. Jonathan hopes to become an active participant and leader in health care policy initiatives. His interests include cost analysis, global pricing strategies and pharmacoeconomic planning.

### M.S.

#### **Lisa Bloudek, B.S. 2005, Pharm.D. 2009, University of Washington**

Lisa enters the masters program through the MS/PharmD track-in option available to University of Washington PharmD students in their third year. She hopes to broaden her education in the areas of pharmacoeconomic evaluation and policy and become involved at the industry level to provide quality care to patients. Lisa continues to work with PEBB Plan Management in the development of a Medication Therapy Management program for Uniform Medical Plan Enrollees taking polypharmacy. She presented a poster titled "*Prevalence of polypharmacy among Washington State employee health plan enrollees*" at the AMCP Annual Meeting in Orlando, Florida in March 2009.

#### **Patrick Gillard, B.S. 2003, Wheaton College, Pharm.D. 2009, University of Washington, Allergan Fellowship**

Patrick is the recipient of the third Allergan Post-Doc Fellowship awarded to University of Washington students. Patrick's thesis aims to establish the relationship between two migraine-specific measures of health and the EuroQual-5D questionnaire in adults with chronic migraine. Patrick has completed research in the therapeutic area of post-stroke spasticity. He has also worked as part of the research team on the Bill and Melinda Gates Foundation Grant on the cost-effectiveness of measles

vaccination innovations. Patrick was author on a poster presented at the 2<sup>nd</sup> Global Vaccine Congress titled: "*Identifying Potential Vaccination Innovations for Measles in Developing Countries: Horizon Scanning and Technical Assessment*" this past year. He will also be a contributing author to two posters to be presented at the 70<sup>th</sup> annual assembly of the American Academy of Physical Medicine and Rehabilitation this Fall. At this conference, Patrick will also give a podium presentation, titled: "*Hygiene and Dressing Disability Associated with Greater Caregiver Time Among Patients with Upper Limb Post-Stroke Spasticity.*"

#### **Justin Robertson, B.S. 2006, Baylor University, Ph.D. student, Economics, University of Washington**

Justin is joining PORPP in order to pursue an MS in Pharmaceutical Outcomes Research. He is currently a PhD student in the Department of Economics at the University of Washington. He did his undergraduate studies at Baylor University where he received a BS in Mathematics. While an undergraduate, Justin participated in a math Research Experience for Undergraduates (REU) program at the University of Washington. During the REU, he conducted research on the inverse conductivity problem on discrete electrical networks and wrote a research paper on the topic. In economics, his interests lie in health economics, public finance, and information economics. Working in PORPP will help him broaden his understanding of pharmaceutical policy and decision making, and will aid him in pursuing his long-term career goal of becoming a professor at a major research university.

#### **William Wong, B.S. 2003, M.S. 2004, Pharm.D. 2009, University of California (San Diego)**

William is enrolled in our master's program. He will be studying health economics and policy as well as pharmaceutical outcomes research. He wishes to provide effective care to patients, not only at the clinical level, but also by applying economic and policy principles to health care.

### Post-Doctoral Fellows

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

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

Kyle graduated in May 2009 with his Ph.D. in Economics from Kansas State University. His dissertation is broadly titled *Three Essays in Applied Microeconomics and Their Implications for Policymakers*. It includes an essay on biodiversity and intellectual property rights, one examining David Beckham's and other factors' impact on MLS attendance and one exploring the interaction of moral hazard with market power. His first essay "Biodiversity, Intellectual Property Rights and North-South Trade" is published in *Economics Bulletin*. Kyle has a B.S. in Biology from Kansas State University and attended medical school at UT Southwestern for two years. He is looking forward to combining his economic and health backgrounds through pharmaceutical outcomes research. He is currently beginning to work on a project to expand and further refine the evaluation of how major payers implement fundamental principles of health technology assessment (HTA) processes.



### **2009 ISPOR Student Competition: UW 3rd Place Winners**

From left: Caitlyn Wilke (ISPOR Student Council Chair), Dong Churl Suh (Judge), UW students: Katie Gries, Jonathan Watanabe, Rafael Alfonso and Eldon Spackman. Zeba Kahn (Student Council Advisor), Steve Marx (Judge).

#### **Bruce Wang, PhD** *Post-Doctoral Fellow*

Bruce Wang completed his Ph.D in Economics at University of Washington in 2007. His dissertation was entitled "Structural Breaks and Regime Switching Models: Theoretical Extensions and Applications." The chapters of his dissertation covered real exchange rates, unemployment, and colorectal cancer. He brings his expertise in Applied Econometrics to create cost-effectiveness models in Pharmacy. Currently he is working with Sean Sullivan, Lou Garrison and others on a Department of Defense project to study the cost-effectiveness of treating obesity in the military population. Prior to his current role, Bruce was a Macroeconomic Strategist at Goldman Sachs in New York. Previous positions include work in commercial banking, venture capital, and internet startups. He received his BA in Economics from Columbia University in 2002.

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

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

Rafael is currently working with Sean Sullivan and Lou Garrison on the development of obesity models to determine the cost-effectiveness and the budget impact of different treatment options, focusing on the surgical alternatives. The previous projects, with Sean Sullivan, assessing the comparative effectiveness of one GLP-1 inhibitor for diabetes in the US (liraglutide) compared to other therapies currently available, led to the presentation of 2 different posters during the last ISPOR international meeting in Orlando, and 2 publications (Cardiovascular diabetology and Pharmacotherapy). An additional poster was also accepted at the same meeting in Orlando, reviewing the evidence of the cost-effectiveness of reduced dosing in adherence for chronic conditions. As a member of the

Latin American Consortium of ISPOR, he is working very actively on the 2<sup>nd</sup> Latin American ISPOR meeting in September in Rio de Janeiro, where he will be teaching a short course in health utilities, moderating a session, and presenting 3 posters (Lipid Lowering agents consumption in Colombia 2000-2006, Insulin titration algorithms in Latin America, and Adherence to glimepiride in type 2 diabetics in Colombia). Finally, he has been awarded with the UW Warren G. Magnuson Scholar Award 2009-2010.

##### **Joseph Babigumira, MD, MS**

Joseph presented three poster and podium presentations this past year. They include the following: "*Costs of Unsafe Abortions in Uganda*" was presented on the podium at the Population Reference Bureau 3<sup>rd</sup> Annual Research Conference in Dublin, Ireland, January 15-16, 2009; "*The Potential Economic Impact of Unsafe Abortions in Uganda*" was presented on the podium at the 2009 Population Reference Bureau Policy Communications Conference in Washington DC, June 11 2009; "*Assessing Disease Burden for Measles Using a Clinical and Health Outcomes approach: A Focus on Lower-Income Countries*" was presented as a poster at the International Society of Pharmaceutical and Outcomes Research (ISPOR) 14<sup>th</sup> Annual International Meeting in Orlando, Florida, May 16-20, 2009.

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

Mindy's prior research "Optimizing CAD Diagnosis in China With CT Angiography" was recently published in the May/June 2009 issue of *Journal of Cardiovascular Computed Tomography*. Currently, she is working on a project evaluating the value of less frequent medication dosing. Mindy's planned dissertation research is to study the value of orphan drugs for treating rare cancers and to develop a quality grading system for assessing clinical evidence of orphan drugs.

### **Bernardo Goulart, MD**

Bernardo is a third-year medical oncology fellow at the Fred Hutchinson Cancer Center and also a second-year Master's student at PORPP. His research interests include clinical outcomes and cost-effectiveness of cancer therapies, especially for lung and head and neck cancers. He is currently working on a SEER-Medicare survival analysis of lung cancer patients exposed to newly approved cancer drugs. He will also present a poster of a systematic review of Patient Reported Outcomes in advanced non-small-cell lung cancer at the Latin America ISPOR meeting in September of 2009.

### **Katie Gries, PharmD**

#### ***Allergan Post-Doctoral Fellow 2008-2010***

Katie is completing her second year of the UW/Allergan fellowship and finishing up her Master's thesis; Psychometric Evaluation of the Visual Function Questionnaire-25 and the Visual Function Questionnaire Utilities Index in Age-Related Macular Degeneration. During the past year she had two posters accepted; *Symptom burden and activity limitation in dry-eye patients seeking ophthalmologists care* at the American Academy of Ophthalmology annual meeting and *Characterization of treatment success for overactive bladder with urinary urge incontinence refractory to oral antimuscarinics* at the American Urology Association Annual Meeting.

### **Ryan Hansen, PharmD**

Ryan recently completed a study on the costs of epilepsy-related care associated with switching FDA-approved bioequivalent anti-epilepsy products. This research was presented in a poster at the International Society of Pharmaceutical and Outcomes Research (ISPOR) 14<sup>th</sup> Annual International Meeting in Orlando, Florida, May 18-20, 2009. His case-control study evaluating the association between seizure events and these switches was recently accepted for publication in *Epilepsy & Behavior*. In addition, he is working with Sean Sullivan and Jon Campbell on early-stage disease modeling in asthma and with Patrick Gillard on utility mapping in chronic migraine patients.

### **Elizabeth James, PharmD**

Elizabeth was the recipient of the American Foundation for Pharmaceutical Education Fellowship for 2007-2008. She is currently finalizing her dissertation research on "*Evaluation of a Prescription Drug Pay-For-Performance Program: Impact on Prescribing Trends, Budget & Patient Outcomes*".

### **Norio Kasahara, MPH**

Norio's first year in PORPP has covered fundamentals of public health in search of sustainable methods of health outcomes assessment. Knowledge and skills acquired through the program have been contributing to his summer internship on health economic analysis for a global pharmaceutical company in Japan. Following on his last mission in Afghanistan contracted by the Japan International Cooperation Agency (JICA), Norio has been actively involved in Japan's health project formulation for Afghanistan. The project is currently in a development stage,

aiming to uplift the health status of Afghan people by providing primary healthcare services while it helps the health system develop capacity to sustain improved health.

### **Joshua Roth, MHA**

Josh has been pursuing his interest in health technology assessment during his first year in the PORPP program. He has been involved in an ongoing CDC-funded project to apply risk-benefit analysis methods to evaluate the clinical utility of genetic tests. In the course of this project, Josh developed a risk-benefit analysis model to aid stakeholders in evaluating the impact of warfarin pharmacogenomic testing on the rate of clinical events during warfarin therapy. Josh has also been involved in a project with the Partnership for Personalized Medicine to develop an economic model to evaluate the comparative effectiveness of using a biomarker-based approach to inform treatment decisions in advanced non-small cell lung cancer.

### **D. Eldon Spackman, MS**

Eldon is completing his dissertation and plans to present his defense this fall. He was the recipient of the AFPE Foundation Fellowship award for 2009.

### **Catherine Waweru-Corbell, MSc**

Catherine is currently working on her dissertation proposal. Her primary research question is to examine the association between zidovudine, an antiretroviral drug used in human immunodeficiency virus (HIV) and anemia events in an HIV population in Namibia, a southern African country. She will use her study outcomes to conduct a cost-effectiveness analysis of two HIV treatment strategies involving zidovudine. Her work will entail traveling to Namibia in the course of the year to collect data.

### **Heidi Wirtz, PharmD, MS**

Heidi is working with Brian Bresnahan to compare and contrast decision tree and Markov models as techniques of decision analysis for health care economic evaluation. Heidi was also a recipient of the Achievement Rewards for College Scientists (ARCS) Foundation Fellowship for 2009-2011.

## **Student Publications**

### **Rafael Alfonso**

**Sullivan SD, Alfonso-Cristancho R, Conner C, Hammer M, Blonde L.** Long-term outcomes in patients with type 2 diabetes receiving glimepiride combined with liraglutide or rosiglitazone. *Cardiovasc Diabetol.* 2009 Feb 26;8:12.

**Kapur VK, Alfonso-Cristancho R.** Just a good deal or truly a steal? Medical cost savings and the impact on the cost-effectiveness of treating sleep apnea. *Sleep.* 2009 Feb 1;32(2):135-6.

### **Joseph Babigumira**

**Castelnuovo B, Babigumira J, Lamorde M, Muwanga A, Kambu A, Colebunders R.** Improvement of the patient flow in a large urban clinic with high HIV seroprevalence in Kampala, Uganda. *International Journal of STD & AIDS* 2009; 20: 123-124

**Babigumira J, Sethi A, Smyth K, Singer M.** Clinics for



### 2009 PORPP Retreat

1st Row: Katie Gries, Penny Evans, Jelena Zurovac, Mindy Cheng, Catherine Waweru, Lisa Bloudek, Heidi Wirtz, Jamie Cross, Eldon Spackman, Andy Stergachis, Brian Bresnahan, Bernardo Goulart  
 2nd Row: Tom Baillie, Lou Garrison, Pete Fullerton, Tom Hazlet, Denise Boudreau, Josh Roth, Norio Kasahara, Srikanth Kadiyala, Beth Devine, Rafael Alfonso, Jon Campbell, Eric Johnson, Joseph Babigumira, David Blough, Sean Sullivan, Elizabeth James, Josh Carlson, David Veenstra

Provision of Antiretroviral Therapy in Uganda. In Press, *Pharmacoeconomics*

#### Mindy Cheng

**Cheng MM**, Lu B, Hu SS, Marelli C, Higashi MK, Patel PA, Li J, **Veenstra DL**. Optimizing CAD Diagnosis in China With CT Angiography. *Journal of Cardiovascular Computed Tomography* 2009; 3:153-8.

#### James Cross

**Cross JT** and **Garrison LP**. Briefing Report-- Challenges and opportunities for improving benefit-risk assessment of pharmaceuticals from an economic perspective. Office of Health Economics, London, UK. August 2008.

#### 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.

#### Kyle Ross

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

#### D. Eldon Spackman

**Spackman DE**, **Veenstra DL**. A cost-effectiveness analysis of currently approved treatments for HBeAg-positive chronic hepatitis B. *Pharmacoeconomics*. 2008;26(11):937-49.

**Campbell JD**, **Spackman DE**, **Sullivan SD**. Health economics of asthma: assessing the value of asthma interventions. *Allergy*. 2008 Dec;63(12):1581-92

#### Catherine Waweru-Corbell

**Waweru C**. Antiretroviral prophylaxis to reduce breast-milk HIV-1 transmission. *N Engl J Med*. Oct 23 2008;359 (17):1845-1846

### PORPP Retreat

On April 24, 2009, thirty-three PORPP students, faculty and staff participated in an all day educational retreat, organized by Associate Professor Beth Devine, at the Talaris Conference Center. The guest speakers included Bryan Luce, PhD, Senior Vice-President of Science Policy for United Bio-Source Corporation; Mitchell Higashi, PhD, Vice President of Global Health Outcomes for GE Healthcare and a PORPP alumni, and Tom McWhinnie, Deputy Director for the Center for Education and Development, VA Puget Sound Health Care. The topics discussed ranged from an update on the UW Global Health programs, to "U.S. Health Policy Report: View from Washington DC", "Global Challenges for New Technology Reimbursement" and "What Kind of Leader Am I?" to "Testing My Skills as a Mentor". The workshop sessions pitted the students against the faculty in trying to ascertain the best decision in an ethically difficult student/faculty/publication question. The feedback session was lively and the debate went very well, with Dean Tom Baillie weighing in regarding the ethical issues that were being discussed. The retreat ended with a Fiesta Reception and the weather cooperated so we were able to enjoy the beautiful Talaris grounds.

**Faculty**  
**Recent Grants**

**Denise Boudreau**

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

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

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

**Brian Bresnahan**

**Cost-effectiveness of imaging diagnostics for liver metastases from colon cancer** (April 2009) Challenge Grant Submitted to NIH

**Resource over utilization due to serious alcohol related injuries** (PI: Bahman Sayyar Roudsar, MD, UT Southwestern) (Aug 2009 - Feb 2010, NIH grant)

**Beth Devine**

EB Devine (Co-Principal Investigator with Chan) ZymoGenetics **Acquired Coagulopathy in Hospitalized Patients: A Pilot Study to Determine the Impact on Clinical and Economic Outcomes** 2008-2009

**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

**Eric Johnson**

Scientific lead for the **DEcIDE Network at the Effective Healthcare Program's Scientific Resource Center**, sponsored by AHRQ.

Co-investigator in Kaiser Permanente's new **Center for Effectiveness and Safety Research (CESR)**.

**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**

**Malaria in Pregnancy (MiP) Consortium**. Walter Kuile, Principal Investigator, Bill & Melinda Gates Foundation Role: PI of UW Subcontract and Chair of the International Safety Working Group.

**Strengthening Pharmaceutical Systems**. Keene D, Principal Investigator, Management Sciences for Health (MSH) 2007-2012. Cooperative agreement award from USAID to MSH. Role: PI of UW Subcontract and Lead Partner Organization for Pharmacovigilance.

**Collaborative Drug Therapy Agreements for the Distribution and Dispensing of Antiviral Drugs to Self-Isolated or Self-Quarantined Persons**. Stergachis, Principal Investigator 2009. WA State Department of Health via US CDC Pandemic Preparedness Award.

**Sean Sullivan**

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

Co-Investigator, **Cost of acquired coagulopathy in hospital surgical patients** (Lingtak Chan and Beth Devine, Co-PI's). Nov 2008- August 2009.

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

**David Veenstra**

Principal Investigator, **Risk-Benefit Framework for Genetic Tests**, 2009-2010, CDC

Principal Investigator, **Dosing Frequency and Outcomes**, 2008-2009, Amylin Pharmaceuticals

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

**Faculty**

**Recent Publications**

**David Blough**

**Blough DK, Ramsey SD, Sullivan SD, Yusen R**. The Impact of Using Different Imputation Methods for Missing Quality of Life Scores on the Estimation of the Cost-Effectiveness of Lung Volume Reduction Surgery. *Health Economics* 2009 Jan;18(1):91-101.

Smith DH, **Johnson ES**, Thorp ML, Petrik A, Yang X, **Blough DK**. Outcomes predicted by phosphorous in chronic kidney disease: a retrospective CKD-inception cohort study. *Nephrol Dial Transplant*. 2009 Aug 11. Epub ahead of print

**Denise Boudreau**

**Boudreau DM**, Von Korff M, Rutter CM, Saunders K, Ray GT, Sullivan MD, Campbell C, Merrill JO, Silverberg MJ, Banta-Green C, Weisner C. Trends in Long-term Opioid Therapy for Chronic Non-Cancer Pain. In press at *Pharmacoepidemiol Drug Saf*.

**Boudreau DM**, Koehler E, Rulyak SJ, Haneuse S, Harrison R, Mandelsohn MT. Cardiovascular medication use and risk of colorectal cancer? *Cancer Epidemiol Biomarkers Prev*. 2008;17:3076-80.

### **Brian Bresnahan**

**Garrison L**, Mansley E, Abbott T, **Bresnahan B**, Hay J, Smeeding J. Good Research Practices for Measuring Drug Costs in Cost-Effectiveness Analyses: A Societal Perspective: The ISPOR Drug Cost Task Force Report – Part II (Forthcoming 2009)

### **Jon Campbell**

**Hansen RH**, **Campbell JD**, **Sullivan SD**. A case-control study to assess the association of anti-epileptic drug switching and seizure related events. *Epilepsy & Behavior* 2009; 15: 481-485.

**Campbell JD**, **Ramsey SD**. The costs of treating breast cancer in the United States: a synthesis of published evidence. *Pharmacoeconomics* 2009; 27: 199-209.

### **Josh Carlson**

**Carlson JJ**, Kowdley KV, **Sullivan SD**, **Ramsey SD**, **Veenstra DL**. An evaluation of the potential cost-effectiveness of non-invasive testing strategies in the diagnosis of significant liver fibrosis. *J Gastroenterol Hepatol*. 2009 May;24(5):786-91.

**Carlson JJ**, **Garrison LP**, **Ramsey SD**, **Veenstra DL**. Epidermal growth factor receptor genomic variation in NSCLC patients receiving tyrosine kinase inhibitor therapy: a systemic review and meta-analysis. *J Cancer Res Clin Oncol*. 2009 May 9.

### **Beth Devine**

**Devine EB**, Hoang S, Wilson-Norton JL, Lawless NM, Fisk AW. Strategies to Optimize Medication Use in the Physician Group Practice: The Role of the Clinical Pharmacist. *J Amer Pharm Assoc* 2009;49(2):181-91

**Devine EB**. The art of obtaining grants. *Am J Health-Syst Pharm* 2009;66:580-7

**Devine EB**, Wilson-Norton JL, Lawless NM, Hollingworth W, **Hansen RN**, Fisk AW, **Sullivan SD**. Implementing an Ambulatory e-Prescribing System: Strategies Employed and Lessons Learned to Minimize Unintended Consequences. In: Henriksen K, Battles JB, Keyes MA, Grady ML, editors. *Advances in patient safety: New directions and alternative approaches*. Vol. 4. Technology and Medication Safety. AHRQ Publication No. 08-0034-4. Rockville, MD: Agency for Healthcare Research and Quality; August 2008

### **Jacqueline Gardner**

**Gardner J**, Miller L, Downing D, Le S, **Blough D**, Shotorbani S, Pharmacist prescribing of hormonal contraceptives: results of the Direct Access Study. *J Am Pharm Assoc* (2003) 2008 Mar-Apr; 48 (2):212-21; 5p following 221

### **Louis Garrison, Jr.**

Bauch CT, Szusz E, **Garrison LP**. Scheduling of measles vaccination in low-income countries. Forthcoming in *Vaccine*.

**Garrison LP**. On the benefits of modeling using QALYs for societal resource allocation: the model is the message. *Value in Health*, March 12 Suppl 1:S26-7, 2009.

### **Eric Johnson**

**Johnson ES**, Thorp ML, Platt RW, Smith DH. Predicting

the risk of dialysis and transplant among patients with CKD: A retrospective cohort study. *American Journal of Kidney Diseases* 2008;52: 653-660.

### **Srikanth Kadiyala**

Freeman J, **Kadiyala S**, Bell J, Martin D. Does lack of medical insurance affect health care utilization and health outcomes in non-elderly adults? A Systematic Review of Studies Conducted in the United States. *Medical Care*, October 2008, 46(10), 1023-1032.

**Kadiyala S**, Are U.S. Cancer Screening Patterns Consistent with Guideline Recommendations with respect to Age of Screening Initiation?, *BMC Health Services Research*, Forthcoming.

### **Scott Ramsey**

**Ramsey SD**, Scoggins J. Commentary: Practicing on the Tip of an Information Iceberg? Evidence of Underpublication of Registered Clinical Trials in Oncology. *The Oncologist* 2008; 13(9): p. 925-9. PMID: PMC2675281.

**Ramsey SD**, Zeliadt SB, Arora NK, Potosky AL, **Blough DK**, Hamilton AS, Van Den Eeden SK, Oakley-Girvan I, Penson DF. Access to Information Sources and Treatment Considerations among Men with Local Stage Prostate Cancer. *Urology*. 2009 July 8 (Epub ahead of print). NIHMSID: 130886.

**Ramsey SD**, **Blough DK**, **Sullivan SD**. A Forensic Evaluation of the National Emphysema Treatment Trial Using the Expected Value of Information Approach. *Med Care* 2008 May; 46(5):542-8.

### **Andy Stergachis**

Dellicour S, Walter Kuile F, **Stergachis A**. Pregnancy Exposure Registries for Assessing Antimalarial Drug Safety in Pregnancy in Malaria Endemic Countries. *PLoS Medicine*. 2008. Vol. 5, No. 9, e187 doi:10.1371/journal.pmed.0050187.

Andrews EB, Arellano FM, Avorn J, **Stergachis A**... et al. Guidelines for good pharmacoepidemiology practices (GPP). *Pharmacoepidemiol Drug Saf*. 2008:200-8.

### **Sean Sullivan**

Watkins JB, **Sullivan SD**. The payer's dilemma: recognizing the uncertainty of clinical and economic evidence and product launch. *J Managed Care Pharmacy* 2009 Mar;15(2):167-170.

Ogale SS, Lee TA, Au DH, **Boudreau DM**, **Sullivan SD**. Cardiovascular Events Associated With Ipratropium Bromide in COPD. *Chest* 2009 Apr 10 epub ahead of print.

**Sullivan SD**, Watkins JB, Sweet B, **Ramsey SD**. The use of health technology assessment in health care decisions in the United States. *Value in Health* 2009 Jun;12 Suppl 2:S39-44.

**Sullivan SD**, **Alfonso-Cristancho R**, Conner C, Hammer M, Blonde L. A simulation of the comparative long-term effectiveness of liraglutide and glimepiride monotherapy in type 2 diabetes. In press *Pharmacotherapy*

### **David Veenstra**

**Garrison Jr LP**, **Veenstra DL**. The Economic Value of Innovative Treatments over the Product Life Cycle: The Case of Targeted Trastuzumab Therapy for Breast Cancer. *Value Health*. 2009 Jul 14. [Epub ahead of print]

Meckley LM, Wittkowsky AK, Rieder MJ, Rettie AE, **Veenstra DL**. An analysis of the relative effects of VKORC1 and CYP2C9 variants on anticoagulation related outcomes in warfarin-treated patients. *Thromb Haemost*. 2008 Aug;100(2):229-39

### **PORPP Endowed Prize Recipients**

The two winning papers for the 2008 PORPP Endowed Prize were written by Steven Bradley and Mindy Cheng. Steven's paper was titled: "Cost-Consequences of Ultrafiltration for Acute Heart Failure: A Decision Model Analysis" and the title of Mindy's paper was "Optimization of CAD Diagnosis in China With CT Angiography".

The 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. The \$1000 prize was shared by the two recipients.

### **Gifts**

PORPP would like to acknowledge our many supporters of this past year. Our accomplishments would not have been possible without these generous educational grants and gifts.

- Abbott Laboratories
- Academy of Managed Care Pharmacy
- Allergan
- Amgen
- Bayer Healthcare
- Ronald Caldwell, MS, PhD
- Beth Devine, PharmD, MBA, PhD
- Eli Lilly & Company
- Foundation for Managed Care Pharmacy
- Jacqueline Gardner, PhD
- Johnson & Johnson
- GE Foundation
- Genentech
- Thomas Hazlet, PharmD, DrPH
- Mitchell Higashi, MBA, PhD
- Todd Lee, PharmD, PhD
- Dan Malone, PhD
- Northwest Pharmacy Benefits & Medical Directors Group
- Novartis Pharmaceuticals
- Sarika Ogale, PhD
- Pfizer Inc.
- PhRMA Foundation
- Shelby Reed, PhD
- Roche Pharmaceuticals
- Sanofi-Aventis
- Sean Sullivan, PhD
- PORPP Health Technology Fund (Eli Lilly, GE Healthcare, Genentech, GlaxoSmithKline, Novartis, Ortho-McNeil, Pfizer, Roche, Sanofi-Aventis)

### **Master's Program in Biomedical Regulatory Affairs**

The Master of Science in Biomedical Regulatory Affairs is entering its second year. The program addresses a need expressed by industry for well-trained professionals in the medical products regulatory field. The degree aims to serve those who wish to advance their careers in the medical products industry or those entering the field from related areas. The first cohort of 21 (9 women) students has completed its first year and most have identified their practicum site. The second cohort of 24 (18 women) will start courses in the fall. The students are a diverse group, both from training (including medicine, nursing, pharmacy, law) and national origin (including Belarus, Burkina Faso, Canada, China, Democratic Republic of Congo, India, Japan and Kenya, and Taiwan).

### **Faculty & Staff**

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