**The UNC Pharmacoepidemiology Program**

Presentations at the 29th International Conference on

Pharmacoepidemiology & Therapeutic Risk Management

Montréal, Canada – August 24-28, 2013

|  |
| --- |
| **PRE-CONFERENCE EDUCATIONAL SESSIONS** |
| **Date & Time** | **Session Title** | **Faculty** |
| Saturday, August 241:30 – 6:00 PM | Medical Device Epidemiology | Jessica Jalbert, Kristian Filion, Danica Marinac-Dabic, Veronica Sansing, Ted Lystig, Mary Beth Ritchey, Soko Setoguchi-Iwata, **Michele Jonsson Funk**, Paul Niklewski |

|  |
| --- |
| **MONDAY, AUGUST 26 PRESENTATIONS** |
| **Time** | **Session & Room** | **Title** | **Authors** |
| 10:45 AM | Back to the Future: Methods in Time (Methods 1) *Room: 519 AB* | De-constructing a marginal structural model: Effects of follow-up duration on stabilized weights and findings in a study of myocardial infarction risk in hemodialysis patients | **Alan R. Ellis**, **Lily Wang**, Janet K. Freburger, Abhijit V. Kshirsagar, Wolfgang C. Winkelmayer, **M. Alan Brookhart** |
| 11:30 AM | Part Man - Part Machine, A Device Potpourri*Room: 518 AB* | Long-Term Outcomes of Vaginal Mesh Versus Native Tissue Repair for Anterior Vaginal Wall Prolapse | **Michele Jonsson Funk**, Anthony G. Visco, Alison C. Weidner, **Virginia Pate**, Jennifer M. Wu |
| 11:45 AM | Part Man − Part Machine, A Device Potpourri*Room: 518 AB* | Acute Kidney Injury after Routine Colonoscopy: A Comparative Safety Study of Sodium Phosphate and Polyethylene Glycol | **J. Bradley Layton**, Abhijit V. Kshirsagar, Andrew S. Bomback, Christian Christiansen, Philip J. Klemmer |
| 2:00 PM | Hot Topics in Diabetes: Pancreatitits and Cancer*Room: 520 BE* | Incretin-based drugs and comparative pancreatic cancer risk among older adults*\*Award Winner: Best Student Methods Abstract* | **Mugdha Gokhale**, **Til Stürmer**, **Virginia Pate**, Alison Marquis, Christine Gray, John Buse |
| 2:15 PM | Methods in CER*Room: 519 AB* | Preference-based Instrumental Variable Methods in the Comparative Effectiveness of Osteoporosis (OP) Medications in Women with Postmenopausal Osteoporosis (PMO) | **Jane S. Der**, Cathy Critchlow, Fei Xue |
| 2:15 PM | Respiratory*Room: 518 AB* | Feasibility of Ruling out Small Treatment-Associated Increase in Asthma Mortality Risk | Patricia Tennis, Catherine Johannes, Carlos A. Camargo, Jr., **Til Stürmer**, Stephan Lanes, Jeff Brown, Elizabeth Andrews, Kourtney Davis, Michael Schatz |
| 5:00 PM | Symposium & Workshops*Room: 520 AD* | Strategies To Enhance Validity in the Design of Comparative Effectiveness Studies | Robert J. Glynn, **Til Stürmer**, Jeremy A. Rassen, **M. Alan Brookhart**, Sebastian Schneeweiss |
|  |
| **MONDAY, AUGUST 26 POSTERS** |
| **Session** | **Title** | **Authors** | **#** |
| Classical pharmacoepi | Comparison of Validation Studies for the External Control for Confounding by Body Mass Index and Smoking When Assessing the Effects of Metformin Versus Sulfonylureas on Cancer Incidence | **Jin-Liern Hong, Virginia Pate, Michele Jonsson Funk**, Emily Ko, **Til Stürmer** | 17 |
| Classical pharmacoepi | Comparing the Risk for Breast Cancer in Older Adults Initiating Metformin or Sulfonylureas | **Jin-Liern Hong, Michele Jonsson Funk**, Emily Ko, **Virginia Pate, Til Stürmer** | 18 |
| Classical pharmacoepi | Prevalence of Potentially Inappropriate Medication Prescribing among Older US Adults Using the New 2012 Beers Criteria | Marcela Jirón, **Virginia Pate**, Laura Hanson, **Michele Jonsson Funk**, **Til Stürmer** | 24 |
| Adherence | Antihypertensive Persistence in Older Americans: Intent-To-Treat vs As-Treated Analysis | **Wendy Camelo Castillo,** Ross J. Simpson Jr**, Xiaojuan Li, Virginia Pate, Til Stürmer, Michele Jonsson Funk** | 154 |
| CER | Improving the Validity of CER through Principled Exploration of Data | Anne-Marie Meyer, Huan Liu, **Christina Mack**, William R Carpenter, **M. Alan Brookhart** | 171 |
| CER | Propensity Score Estimation To Address Calendar Time−Specific Channeling in Comparative Effectiveness Research of Second Generation Antipsychotics | **Stacie B. Dusetzina, Christina DeFilippo Mack, Til Stürmer** | 186 |
| CER | Differential diagnostic work-up among initiators of antihypertensive drugs | **Mugdha Gokhale,** Cynthia Girman, Chen Yong, **Virginia Pate, J. Bradley Layton, Xiaojuan Li, Til Stürmer** | 190 |
| Medications in Pregnancy | Use of Glyburide Versus Insulin for Treatment of Gestational Diabetes in the U.S., 2000-2010 | **Wendy Camelo Castillo**, Kim Boggess, **M. Alan Brookhart, Til Stürmer,** Daniel K. Benjamin, Jr, **Michele Jonsson Funk** | 203 |
| AdherencePoster Walk | Predicting persistence with antidepressant treatment at 6 months | **Greta A Bushnell, Til Stürmer, Virginia Pate, Alice D. White,** Sonja Swanson, Deborah Azrael, Matthew Miller | 247 |
| CER Poster Walk | Comparative effects of different combination antiretroviral therapies on the risk for myocardial infarction among HIV patients enrolled in Medicaid: a new user, active comparator cohort study | **Emily S. Brouwer**, Sonia Napravnik, Joseph J. Eron, Jr., Ross J. Simpson, Jr., Brant Stalzer, Michelle Floris Moore, **Til Stürmer** | 253 |

|  |
| --- |
| **TUESDAY, AUGUST 27 PRESENTATIONS** |
| **Time** | **Session & Room** | **Title** | **Authors** |
| 8:30 AM | PS, I Love You (Methods 2)*Room: 519 AB* | The Comparative Renal Safety of Statins: Shifting Reference Group when Propensity Score Matching Multiple Treatment Comparisons | **J. Bradley Layton, Michele Jonsson Funk, Til Stürmer, Richard Wyss, M. Alan Brookhart** |
| 9:15 AM | PS, I Love You (Methods 2)*Room: 519 AB* | Effects of Aggregation of Medical Codes on the Performance of the High-Dimensional Propensity Score (hd-PS) Algorithm | **Hoa V. Le, Charles Poole, M. Alan Brookhart**, Victor J. Schoenbach, Kathleen J. Beach, **Til Stürmer** |
| 9:15 AM | Pediatrics*Room: 520 AD* | Effectiveness of Rotavirus Vaccines in Preventing Rotavirus Gastroenteritis Related Hospitalizations in Privately-Insured US Children, 2007-2010 | **Catherine A Panozzo**, Sylvia Becker-Dreps, **Virginia Pate**, David J. Weber, **Michele Jonsson Funk**, **Til Stürmer**, **M. Alan Brookhart** |
| 10:15 AM | Potential Bias in CVD Studies*Room: 520 BE* | Do Statins Reduce Short-Term Mortality among Patients Hospitalized with Perforated Peptic Ulcers? | **Jennifer L Lund**, Morten Schmidt, **Til Stürmer**, Anders Hammerich Riis, Henrik Toft-Sørensen |
| 10:15 AM | Methods 3*Room: 519 AB* | Considerations for Creating a Calendar Time Instrumental Variable in Specific Settings of Nonexperimental Comparative Effectiveness Research | **Christina D Mack**, **M. Alan Brookhart**, Robert Glynn, **Til Stürmer** |
| 10:30 AB | Methods 3*Room: 519 AB* | Improvement of 1:M Matching Using an Adaptive Algorithm: Proof of Concept | **Til Stürmer, Richard Wyss, Virginia Pate**, Kenneth J. Rothman |
| 10:45 AM | Sweet spot on CER*Room: 520 AD* | The Effect of Intravenous Iron Supplementation Practices on Infection Risk in Hemodialysis Patients | **M. Alan Brookhart**, Janet Freburger, **Alan Ellis, Lily Wang**, Abhijit Kshirsagar |
| 11:00 AM | Vaccines: Benefits, Risks; Reducing the Unknowns*Room: 524 AB* | When Marginal Structural Model Assumptions Fail: An Illustration Using Influenza Vaccine Effectiveness | **Leah McGrath**, Abhijit V. Kshirsagar, Stephen R. Cole**, Lily Wang**, David J. Weber, **Til Stürmer, M. Alan Brookhart** |
| 11:00 AM | Methods 3*Room: 519 AB* | Comparing disease risk scores with propensity scores when evaluating newly introduced treatment therapies | **Richard Wyss, M. Alan Brookhart**, Robert J. Glynn, **Virginia Pate, Til Stürmer** |
| 11:15 AM | Methods 3*Room: 519 AB* | Evidence of Free Sample Use among New Users of Branded Statins | **Xiaojuan Li, Til Stürmer, J. Bradley Layton, Mugdha Gokhale, M. Alan Brookhart.** |
| 11:15 AM | Sweet spot on CER*Room: 520 AD* | Choice of Scale for Assessment of Comparative Treatment Effect Heterogeneity | **Michele Jonsson Funk, Virginia Pate, Til Stürmer** |
| 1:00 PM | Plenary Session*Room: 517D* | The Patients Voice in Benefit & Risk | Nancy Santanello, Kate Lapane, Ethan Basch, **Nabarun Dasgupta**, John Ware, Neil Minkoff, **Til Stürmer** |
| 4:30 PM | Symposium Session*Room: 520 AD* | Importance of Sensitivity Analyses for Design Decisions in Comparative Effectiveness Research | Cynthia J. Girman, Doug Faries, Xiaochun Li, Timothy Lash, **Til Stürmer** |
| 4:30 PM | Symposium Session*Room: 520 CF* | New Approaches To Account for Selection Bias and Confounding by Frail Health Status | Sascha Dublin, Michael Jackson, Tracey Marsh, Soko Setoguchi-Iwata, **Wendy Camelo Castillo**, **M. Alan Brookhart** |
|  |
| **TUESDAY, AUGUST 27 POSTERS** |
| **Session** | **Title** | **Authors** | **#** |
| Methods | Comparison of Comorbidity Ascertainment using the End-Stage Renal Disease Medical Evidence Form 2728 versus Medicare Claims Data | **Anne M. Butler**, Abhijit V. Kshirsagar, **Lily Wang, M. Alan Brookhart** | 10 |
| Methods | Measures of “exposure Needed for One Additional Patient To Be Harmed” in Population-Based Case-Control Studies | Jesper Hallas, Rene Depont Christensen, **Til Stürmer**, Anton Pottegård | 18 |
| Methods | Doubly Robust Estimator: Effects of Variable Selection into Component Models on Efficiency | **Michele Jonsson Funk, Virginia Pate, Til Stürmer** | 21 |
| Methods | Comparison of Covariate Selection Approaches for Propensity Score (PS) Derivation for Multiple Health Outcomes of Interest (HOIs): An Empirical Example | Ann Marie McNeill, Cynthia J. Girman, Zhiwen Liu, Robert J. LoCasale, **Richard Wyss**, Ying Su, **Til Stürmer** | 33 |
| Methods | Comparison of a Targeted Maximum Likelihood Estimator to Other Estimation Techniques for the One Year Risk of Myocardial Infarction among New Users of High vs. Low Potency Statins | **Jonathan V. Todd, Michele Jonsson Funk, J. Bradley Layton, Virginia Pate, M. Alan Brookhart** | 41 |
| Database | Safety Signal Surveillance Study of Adverse Events of Special Interest for Intradermal Influenza Vaccine Using THIN Database | Shujun Gao, **Catherine A. Panozzo**, Larissa Mege, Marie Miossec, Alena Khromava | 182 |
| Database Poster Walk | Potentially missing prescription medication claims in administrative databases: angioedema prior to new angiotensin receptor blocker use | **J. Bradley Layton, Mugdha Gokhale, Xiaojuan Li, Til Stürmer, M. Alan Brookhart** | 256 |
| PediatricsPoster Walk | Trends in Oral Antidiabetic Medication Use Among Children and Adolescents: 2003-2010 | **Mona Cai, M. Alan Brookhart** | 266 |

|  |  |
| --- | --- |
| **UNC ALMUNI RECEPTION** | Please join us for the UNC Alumni reception on at the Sarah B. Bar of InterContinental Hotel, 360 Saint Antoine Street Ouest, on Tuesday evening from 6:45 – 7:30 PM prior to the ICPE Social Event |

|  |
| --- |
| **WEDNESDAY, AUGUST 28 PRESENTATIONS** |
| **Time** | **Session & Room** | **Title** | **Authors** |
| 9:00 AM | Effective Choices (CER) | Changing Patterns of Use of Osteoporosis (OP) Medications in the Years Post Launch: Implications for Comparative Effectiveness Research (CER) | Cynthia D. O'Malley, **Diane Reams**, **Julie C. Lauffenburger**, **Jane Der**, **Lily Wang**, **M. Alan Brookhart**, Cathy W. Critchlow |
| 9:45 AM | Around the World in 90 Minutes*Room: 518 AB* | Comparative Patterns of Testosterone Testing and Initiation in the United States and United Kingdom | **J. Bradley Layton**, **Dongmei Li**, **Lily Wang**, Christoph R. Meier, Julie Sharpless, **Til Stürmer**, Susan S. Jick, **M. Alan Brookhart** |
| 1:45 PM | Usefulness of Data Sources for CNS Drugs & Diseases*Room: 518 AB* | Generic versus Branded Bupropion: Hindsight using Administrative Data | **Stacie B. Dusetzina**, Bradley N. Gaynes, **Til Stürmer**, **Michele Jonsson Funk, M. Alan Brookhart**, Haiden A. Huskamp |
| 2:00 PM | Sticky Treatments & Sticky Outcomes*Room: 520 AD* | Relationship between Adherence to Preventive Therapies and Mortality Post-Acute Myocardial Infarction (AMI): Is the 80% Cutpoint Appropriate? | **Julie C. Lauffenburger**, Gang Fang |
| 2:15 PM | Methods 4*Room: 519 AB* | Acute Kidney Injury in Statin Initiators: Treatment Effect Heterogeneity over the Propensity Score Distribution | **J. Bradley Layton**, **M. Alan Brookhart, Michele Jonsson Funk**, Ross J. Simpson, Jr., **Virginia Pate, Til Stürmer**, Abhijit V. Kshirsagar |
|  |
| **WEDNESDAY, AUGUST 28 POSTERS** |
| **Session** | **Title** | **Authors** | **#** |
| Drug Utilization / Health Services Research | Characteristics of Selective Serotonin Re−Uptake Inhibitor (SSRI) Initiators 1999−2009 | **Greta A. Bushnell, Til Stürmer, Virginia Pate, Alice D. White**, Sonja Swanson, Deborah Azrael, Matthew Miller | 49 |
| Biologics | Hospitalization and Skilled Nursing Care Are Predictors of Influenza Vaccination: Evidence of Confounding by Frailty | **Leah McGrath**, Abhijit V. Kshirsagar, Steve R. Cole, **Lily Wang,** David J. Weber, **Til Stürmer,** **M. Alan Brookhart** | 91 |
| Drug Utilization / Health Services Research | Combination Antihypertensive Therapy in Older Americans | **Xiaojuan Li, Wendy Camelo-Castillo, Virginia Pate**, **Til Stürmer**, Christine L. Gray, Ross J. Simpson Jr., Soko Setoguchi-Iwata, Laura C. Hanson, **Michele Jonsson Funk** | 111 |
| Drug Utilization / Health Services Research | Variation in 12-Lead Electrocardiography for Chest Pain Patients Transported in North Carolina by Emergency Medical Service | **Montika Bush**, Lawrence T. Glickman, Antonio R. Fernandez, J. Lee Garvey, Seth W. Glickman | 125 |
| Drug Utilization / Health Services Research | Changes in Antibiotic Prescribing in Infants and Young Children in Denmark, 1999-2011 | **Alan C. Kinlaw, Til Stürmer,** Henrik T. Sørensen, **Jennifer L. Lund** | 239 |

|  |
| --- |
| Featuring collaborations with the following institutions: |
| Aarhus University, DenmarkAmgenAstraZenecaBoston UniversityCarolinas Medical CenterColumbia University Duke University  | GlaxoSmithKline Harvard UniversityMassachusetts General HospitalMerckQuintiles Outcome RTI Health SolutionsSanofi Pasteur  | Southern California Permanente Stanford UniversityUnited BioSourceUniversity of Basel, SwitzerlandUniversity of ChileUniversity of KentuckyUniversity of Southern Denmark |

**Connect with UNC Pharmacoepidemiology**

Facebook Page: facebook.com/UncPharmacoepidemiology

Twitter: @UNC\_RxEpi

LinkedIn group: UNC Pharmacoepidemiology