

Scientific Poster Presentations, II

Sunday, October 23

Grand Ballroom East

3:30 p.m. – 5:00 p.m.

ENCORE PRESENTATIONS

Abstracts marked with an “E” are Encore Presentations. Encore Presentations have been presented elsewhere or published in abstract form before the 2016 ACCP Annual Meeting.

AWARDS COMPETITION

Finalists for the Best Student Poster, Best Resident and Fellow Poster, and Best Poster awards will be designated by a ribbon pinned to select posters. The winning Best Student Poster, Best Resident and Fellow Poster, and the winning and first runner-up Best Poster authors will present their research during the Best Posters Platform Session from 3:45 p.m. to 5:00 p.m., on Tuesday, October 25, in Regency Ballroom 3.

ORIGINAL RESEARCH

These papers describe quantitative or qualitative findings in basic, clinical, translational, dissemination/implementation, or educational research.

Adult Medicine

5. Fixed-dose tranexamic acid in patients undergoing primary unilateral total hip or knee arthroplasty.

Michelle Kohute, Pharm.D.,¹ *Rachael Durie, Pharm.D., BCPS*,² *Danielle Candelario, Pharm.D., BCPS*¹; (1) Jersey Shore University Medical Center, Neptune, NJ; (2) Rutgers University – Ernest Mario School of Pharmacy, Piscataway, NJ

Cardiovascular

41. Feasibility of apixaban dose adjustment recommendations in atrial fibrillation.

Caitlin Gibson, Pharm.D.,¹ *Carmen B. Smith, Pharm.D., BCPS*,² *Michael Scalse, Pharm.D.*³; (1) Department of Pharmacotherapy, University of North Texas System College of Pharmacy, Fort Worth, TX; (2) St. Louis College of Pharmacy, St. Louis, MO; (3) Department of Pharmacy Practice, Auburn University Harrison School of Pharmacy, Mobile, AL

43. Optimal heparin dosing in the obese and morbidly obese.

Emily Breedlove, Pharm.D.,¹ *Lindsey Hosch, Pharm.D.*,¹ *Lauren Scono, Pharm.D.*,¹ *Chad Knoderer, Pharm.D.*²; (1) Pharmacy, St. Francis Health, Indianapolis, IN; (2) Butler University College of Pharmacy and Health Sciences, Indianapolis, IN

48. Venous thromboembolism prophylaxis in medically ill patients; a mixed treatment comparison meta-analysis.

Abir O. Kanaan, Pharm.D.,¹ *Jennifer L. Donovan, Pharm.D.*,² *Majed Al Yami, Pharm.D., BCPS, ASH-CHC*,³ *Matthew A. Silva, Pharm.D.*²; (1) Meyers Primary Care Institute, Worcester, MA; (2) MCPHS University, Worcester, MA; (3) University of Arizona, Tucson, AZ

Education/Training

68. Assessing first-year pharmacy student and faculty perceptions of objective structured clinical examinations.

Elias Chahine, Pharm.D., BCPS-AQ ID, *Anne Harring, Pharm.D.*, *Jamie Fairclough, MPH, Ph.D.*,

MSPHarm, Dana Brown, Pharm.D., BCPS, Aisha Shokoya, Pharm.D. Candidate; Lloyd L. Gregory School of Pharmacy, Palm Beach Atlantic University, West Palm Beach, FL

72. Student versus residency program perceptions of a high-quality PGY1 residency applicant.
Caitlin Gibson, Pharm.D., Shara Elrod, Pharm.D.; Department of Pharmacotherapy, University of North Texas System College of Pharmacy, Fort Worth, TX

76. Does personality type influence the selection of doctor of pharmacy candidates for a PGY1 residency?

Frank Paloucek, BSPHarm, Pharm.D.,¹ Nicholas Popovich, Ph.D.,² Chintan Patel, Pharm.D.,³ Shaveta Khosla, B.S., M.S.⁴; (1)Department of Pharmacy Practice, University of Illinois at Chicago College of Pharmacy, Chicago, IL; (2)Office of Professional Development (M/C 874), University of Illinois at Chicago College of Pharmacy, Chicago, IL; (3)Department of Pharmacy Practice M/C 886, University of Illinois College of Pharmacy, Chicago, IL; (4)Division of Epidemiology and Biostatistics M/C 924, University of Illinois School of Public Health, Chicago, IL

79. Impact of teaching OSCE implementation on student performance in a pharmacotherapy course.

Kylie Barnes, Pharm.D., Maqual Graham, Pharm.D.; Division of Pharmacy Practice and Administration, University of Missouri Kansas City School of Pharmacy, Kansas City, MO

81. Student-led educational sessions: participant perceptions.

Kristin M. Janzen, Pharm.D.,¹ Lauren Kormelink, Pharm.D.,² Lindsay Saum, Pharm.D., BCPS, CGP,³ Sarah A. Nisly, Pharm.D., BCPS⁴; (1)Butler University College of Pharmacy and Health Sciences & Indiana University Health, Indianapolis, IN; (2)Indiana University Health, Indianapolis, IN; (3)Butler University College of Pharmacy and Health Sciences & St. Vincent Health, Indianapolis, IN

82. Outcomes of a teaching certificate program offered to practicing pharmacists.

Gwendolyn Wantuch, Pharm.D., BCPS, Jaclyn Cole, Pharm.D., BCPS, Melissa Ruble, Pharm.D., BCPS; Department of Pharmacotherapeutics and Clinical Research, University of South Florida, College of Pharmacy, Tampa, FL

83. Evaluation of effectiveness of pharmacist-driven education on inhaler technique for hospitalized patients at a community teaching medical center.

Khushbu Thaker, Pharm.D.,¹ Ashmi Philips, Pharm.D., AAHIVP² Hinal Patel, Pharm.D., BCPS,¹ Thom K. Nguyen, Pharm.D., BCPS, CTTS,² Navin Philips, Pharm.D., B.S.¹; (1)Department of Pharmaceutical Services, Hunterdon Medical Center, Flemington, NJ; (2)Department of Pharmacy Practice and Administration, Rutgers, State University of New Jersey, Piscataway, NJ

Endocrinology

108E. Achieving the composite endpoint of A1C, body weight, and systolic blood pressure reduction with canagliflozin in patients with type 2 diabetes.

Katherine Merton, Ph.D., MBA,¹ Michael Davies, Ph.D.,² Ujjwala Vijapurkar, Ph.D.,³ Doreen Inman, Pharm.D., MBA, BCPS, CDE,¹ Gary Meininger, M.D.³; (1)Janssen Scientific Affairs, LLC, Raritan, NJ; (2) Janssen Scientific Affairs, LLC, Raritan, NJ; (3)Janssen Research & Development, LLC, Raritan, NJ

109E. Reduced hypoglycemia and comparable efficacy with insulin glargine 300 U/mL (Gla-300) versus insulin glargine 100 U/mL (Gla-100) in subjects with T2D achieving different levels of pre-breakfast SMPG.

Timothy Reid, M.D.,¹ Ola Odugbesan, M.D.,² Jasvinder Gill, M.D.,³ Elena Nikonov, M.D.,⁴ Jason Chao, Ph.D.,³ Timothy Bailey, M.D.⁵; (1)Mercy Diabetes Center; (2)North Atlanta Endocrinology and Diabetes; (3)Sanofi US, Inc.; (4)Sanofi, Inc.; (5)AMCR Clinic

110E. Reduced hypoglycemia and comparable efficacy with insulin glargine 300 U/ml in insulin naive subjects with T2D achieving different levels of pre-breakfast SMPG.

Timothy Bailey, M.D.,¹ Jason Chao, Ph.D.,² Jasvinder Gill, M.D.,² Elena Nikonov, M.D.,³ Ola Odugbesan, M.D.,⁴ Timothy Reid, M.D.,⁵ (1)AMCR Clinic; (2)Sanofi US, Inc.; (3)Sanofi, Inc.; (4)North Atlanta Endocrinology and Diabetes; (5)Mercy Diabetes Center

111E. Efficacy and safety of the insulin glargine/lixisenatide fixed-ratio combination versus insulin glargine in patients with T2DM: the LixiLan-L trial (NCT02058160).

Vanita Aroda, M.D., Ph.D.,¹ Julio Rosenstock, M.D.,² Carol Wysham, M.D.,³ Jeffrey Unger, M.D., ABFM, FACE,⁴ Diego Bellido, M.D.,⁵ Guillermo Gonzalez-Galvez, M.D.,⁶ Hailing Guo, M.Sc., MBA,⁷ Akane Takami, M.D.,⁸ Elisabeth Niemoeller, M.D.,⁹ Elisabeth Souhami, M.D.,¹⁰ Richard Bergenstal, M.D.,¹¹; (1) MedStar Health Research Institute, Hyattsville, MD; (2)Dallas Diabetes and Endocrine Center, Dallas, TX; (3)Rockwood Clinic, Spokane, WA; (4)Catalina Research Institute LLC, Chino, CA; (5)Complejo Hospitalario Univ Ferrol, 15405 Ferrol, A Coruña, Spain; (6)Jalisco Institute of Diabetes & Obesity, Guadalajara, CP 44600, Mexico; (7)BMD Consulting Inc, Somerset, NJ; (8)Sanofi, Tokyo, Japan; (9) Sanofi, Frankfurt, Germany; (10)Sanofi, Paris, France; (11)International Diabetes Center, Minneapolis, MN

112E. Efficacy and safety across the final dose ranges in patients with T2DM receiving insulin glargine/lixisenatide fixed-ratio combination in the LixiLan-L trial (NCT02058160).

Robert Ritzel, M.D.,¹ Josep Vidal, M.D., Ph.D.,² Vanita Aroda, M.D., Ph.D.,³ Yujun Wu, Ph.D.,⁴ Elisabeth Souhami, M.D.,⁵ Elisabeth Niemoeller, M.D.,⁶ Robert R. Henry, M.D.,⁷ (1)Klinikum Schwabing, Städtisches Klinikum München GmbH, Munich, Germany; (2)Department of Endocrinology and Nutrition, Hospital Clinic of Barcelona, Spain; (3)MedStar Health Research Institute, Hyattsville, MD; (4)Biostatistics and Programming, Sanofi-Aventis US, Bridgewater, NJ; (5)Sanofi, Paris, France; (6)Sanofi, Frankfurt, Germany; (7)UC San Diego and Section of Diabetes, Endocrinology, and Metabolism, Veterans Affairs San Diego Healthcare System, Center for Metabolic Research, San Diego, CA

113E. Clinical impact of titratable fixed-ratio combination of insulin glargine/lixisenatide vs each component alone in type 2 diabetes inadequately controlled on oral agents: LixiLan-O trial (NCT02058147).

Julio Rosenstock, M.D.,¹ Ronnie Aronson, M.D.,² Markolf Hanefeld, M.D., Ph.D.,³ Piermarco Piatti, M.D.,⁴ Pierre Serusclat, M.D.,⁵ Xi Cheng, M.D., MPhil,⁶ Tianyue Zhou, Ph.D.,⁷ Elisabeth Niemoeller, M.D.,⁸ Elisabeth Souhami, M.D.,⁹ George Grunberger, M.D.,¹⁰ Melanie Davies, M.D.,¹¹ (1)Dallas Diabetes and Endocrine Center, Dallas, TX; (2)LMC Diabetes & Endocrinology, Toronto, ON, Canada; (3)Center for Clinical Studies, GWT-TUD GmbH, Dresden, Germany; (4)Unità Operativa di Medicina Generale a Indirizzo Diabetologico ed Endocrino-Metabolico, Milan, Italy; (5)Groupe Hospitalier Mutualiste Les Portes du Sud, Vénissieux, France; (6)Sanofi R&D, Beijing, China; (7)Sanofi, Bridgewater, NJ; (8)Sanofi, Frankfurt, Germany; (9)Sanofi, Paris, France; (10)Grunberger Diabetes Institute, Bloomfield Hills, MI; (11)University of Leicester, Diabetes Research Centre, UK

Geriatrics

122. Relationships between antihypertensive medication adherence, age, comorbidities, and blood pressure control in elderly patients with diabetes.

Marsha Raebel, Pharm.D.,¹ Gregory Nichols, Ph.D.,² Wendy Dyer, M.S.,³ Julie Schmittiel, Ph.D.,³ (1)Institute for Health Research, Kaiser Permanente Colorado, Denver, CO; (2)Center for Health Research, Kaiser Permanente Northwest, Portland, OR; (3)Division of Research, Kaiser Permanente Northern California, Oakland, CA

Hematology/Anticoagulation

135. Accuracy of CoaguChek XS in patients with antiphospholipid syndrome (APLS).

James Taylor, Pharm.D.,¹ Chris Richter, Pharm.D.,² Chris Lindamood, Pharm.D.,³ Xinyue Liu, Ph.D.,³ Marc

Zumberg, M.D.,⁴ Bradley Fletcher, M.D., Ph.D.⁵; (1)Department of Pharmacotherapy and Translational Research, University of Florida College of Pharmacy, Gainesville, FL; (2)UF and Shands Hospital; (3) University of Florida College of Pharmacy; (4)Department of Medicine, University of Florida College of Medicine; (5)Department of Medicine, University of Florida College of Medicine, Gainesville, FL

137. Retrospective evaluation of a reduced dose argatroban infusion protocol.

Mark Friedman, BSP Pharm, Pharm.D.,¹ Christy Collins, Ph.D.,² Tamara McMath, MPH, CCRC,³ Elizabeth Wojakowski, Pharm.D. Candidate⁴; (1)Department of Pharmacy Services, OhioHealth Riverside Methodist Hospital, Columbus, OH; (2)OhioHealth Research& Innovations Institute Riverside Methodist Hospital, OhioHealth Riverside Methodist Hospital, Columbus, OH; (3)Ohio Health Research Institute, OhioHealth Riverside Methodist Hospital, Columbus, OH; (4)Department of Pharmacy Services, OhioHealth Riverside Methodist Hospital, Columbus, Ohio, OH

138. Descriptive analysis of thrombophilia testing in an academic medical center.

Nicholas Cox, Pharm.D.,¹ Stacy Johnson, M.D.,¹ Sara Vazquez, Pharm.D., CACP,¹ Ryan Fleming, Pharm.D.,¹ Daniel Witt, Pharm.D., FCCP, BCPS2; (1)University of Utah Health Care, Salt Lake City, UT; (2)Department of Pharmacotherapy, University of Utah College of Pharmacy, Salt Lake City, UT

139. Evaluation of appropriateness of prescribing dabigatran and rivaroxaban in a tertiary care hospital in Singapore.

Fan Siew Wai, BSP Pharm (Hon),¹ Tan Su Ching, BSP Pharm (Hon),¹ William Kristanto, Bachelor of Medicines,² Chan Po Fun, Bachelor of Medicines,³ Yap Eng Soo, Masters of Medicine (Internal Medicine)⁴; (1)Pharmacy Department, National University Hospital, Singapore, Singapore, 119074; (2) Cardiology Department, National University Heart Centre, National University Hospital, Singapore 119074; (3)Cardiology Department, National University Heart Centre, National University Hospital Singapore, Singapore 119074; (4)Haematology-Oncology, National University Cancer Institute, Singapore, National University Hospital Singapore, Singapore 119074

140. Evaluation of a bivalirudin nomogram in adult patients.

Vi Gilmore, Pharm.D.,¹ John Lindsley, Pharm.D.,² Jessica Crow, Pharm.D.; (1)Department of Pharmacy, Johns Hopkins Hospital, Baltimore, MD; (2)Department of Pharmacy, Johns Hopkins Hospital, Baltimore, MD

141. Comparison of hospital length of stay in patients treated with direct oral anticoagulants or parenteral agents plus warfarin for venous thromboembolism.

Catherine A. Saint, Pharm.D., Michelle R. Castelli, Pharm.D., *Andrew J. Crannage, Pharm.D., BCPS*, Zachary A. Stacy, Pharm.D., BCPS, Erin K. Hennessey, Pharm.D., BCPS; St. Louis College of Pharmacy/ Mercy Hospital St. Louis, St. Louis, MO

Infectious Diseases

167. Comparison of the effectiveness and safety of inhaled colistin to intravenous colistin in eradication of respiratory carbapenem-resistant *Acinetobacter baumannii* - a tertiary medical center experience in Taiwan.

Yun-Ting Peng, M.S., Ya-Ting Chuang, M.S.; Department of Pharmacy, Wan Fang Hospital, Taipei Medical University, Taipei, Taiwan

174. Identification of known and potentially novel resistance determinants by comprehensive whole genome transcriptome sequencing of a large collection of fluconazole-resistant clinical isolates of *Candida albicans*.

Andrew Nishimoto, Pharm.D.,¹ Michael Dickens, Ph.D.,² Qing Zhang, B.S.,³ David Rogers, Pharm.D., Ph.D.; (1)Department of Clinical Pharmacy, University of Tennessee Health Science Center, Memphis, TN; (2)High Performance Research Computing, Texas A&M University, College Station, TX; (3) University of Tennessee College of Pharmacy, Memphis, TN

177. Comparison of outcomes utilizing three different severity scores for *Clostridium difficile* infections.

Natalie Giron, Pharm.D.,¹ Christopher Paciullo, Pharm.D., BCCCP, FCCM;² Colleen Kraft, M.D.,³ Kristen O'Brien, Pharm.D.;⁴ (1)University of Pittsburgh Medical Center, Pittsburgh, PA; (2)Department of Pharmaceutical Services, Emory University Hospital, Atlanta, GA; (3)Emory University School of Medicine, Atlanta, GA; (4)Mercer University College of Pharmacy, Atlanta, GA

180. Morphologic changes enhance discovery of the pharmacological effects of antibiotic treatment on *Clostridium difficile*.

Bradley Endres, Ph.D.,¹ Ali Memariani, B.S.,² Eugenie Basseres, Ph.D.,¹ M. Jahangir Alam, Ph.D.,¹ Ioannis Kakadiaris, Ph.D.,² Kevin Garey, Pharm.D., M.S.¹; (1)Pharmacy Practice and Translational Research, University of Houston College of Pharmacy, Houston, TX; (2)Department of Computer Science, University of Houston, Houston, TX

182. Challenging the challenge of beta-lactam allergies: Before-after study assessing multidisciplinary interventions to improve allergy documentation and antibiotic selection.

Steven Krey, Pharm.D.,¹ Lee Skrupky, Pharm.D., BCPS;¹ Jeff Waise, Pharm.D., MBA;¹ Ashley Purohit, Pharm.D., MBA²; (1)Department of Inpatient Pharmacy, Aurora BayCare Medical Center, Green Bay, WI; (2)Department of Inpatient Pharmacy, Aurora Health Care, Milwaukee, WI

184. Vancomycin pre-dialysis serum concentrations - a possible predictor of mortality in gram-positive bacteremic hemodialysis patients?

Kerry Anne Rambaran, Pharm.D.,¹ Kristen Fuhrmann, Pharm.D., BCPS-AQ ID, AAHIVP;² Charles F. Seifert, Pharm.D., FCCP, BCPS¹; (1)School of Pharmacy, Texas Tech University Health Sciences Center, Lubbock, TX; (2)Department of Pharmacy, UMC Health System, Lubbock, TX

187. Identification of risk factors associated with urinary tract infections caused by ESBL organisms in a community hospital.

Tiffany Dickey, Pharm.D.,¹ Bradley Gann, Pharm.D.,² Victoria Seaton, Pharm.D.¹; (1)College of Pharmacy, University of Arkansas for Medical Sciences, Fayetteville, AR; (2)College of Pharmacy, University of Arkansas for Medical Sciences, Fayetteville, AR

190. Use of fidaxomicin compared to vancomycin or metronidazole for initial treatment of *Clostridium difficile* infection in a community hospital.

Bobby Jacob, Pharm.D.,¹ Angela O. Shogbon, Pharm.D., BCPS,² Samuel K. Peasah, Ph.D., MBA, RPh,³ Adam Bressler, M.D.,⁴ Michelle Vu, Pharm.D. Candidate 20181; (1)College of Pharmacy, Mercer University, Atlanta, GA; (2)Mercer University College of Pharmacy, Atlanta, GA; (3)Department of Pharmacy Practice, Mercer University College of Pharmacy, Atlanta, GA; (4)DeKalb Medical Center

193. Impact of a computerized physician order entry set on adherence to *C. difficile* infection treatment guidelines and clinical outcomes.

Jeffrey Aeschlimann, Pharm.D.,¹ Emily Polidoro, B.S.,² Erik Swanson, B.S.²; (1)Department of Pharmacy Practice, UConn School of Pharmacy, Storrs, CT; (2)UConn Health/John Dempsey Hospital, UConn School of Medicine, Farmington, CT

Other

218. Tranexamic acid use in the total hip and total knee arthroplasty population at an academic medical center: a retrospective review of postoperative outcomes.

Brianne Kaufman, Pharm.D.,¹ Julie Murphy, Pharm.D., FASHP, FCCP, BCPS;² Natalie Tuttle, Pharm.D., BCPS,¹ Daniel Gehling, M.D.³; (1)University of Toledo Medical Center; (2)University of Toledo College of Pharmacy and Pharmaceutical Sciences; (3)Department of Orthopedic Surgery, University of Toledo Medical Center

Pharmacokinetics/Pharmacodynamics/Drug Metabolism/Drug Delivery

254. Intravenous midazolam safety during short, outpatient procedures in individuals taking concurrent enzyme-inhibiting medications.

Carolyn Brackett, B.S., Pharm.D.,¹ Rohan Modi, M.D.,² Alan Chen, M.D.,² Loren Brook, M.D., M.S.,² Samuel Jersak, M.D., M.S.,² Kyle Porter, Ph.D.,³ Somashekar Krishna, M.D., MPH,⁴ Darwin Connell, M.D., M.S.,⁴ Marty Meyer, M.D., MPH⁴; (1)College of Pharmacy, Ohio State University, Columbus, OH; (2) Department of Internal Medicine, Ohio State University Wexner Medical Center, Columbus, OH; (3) Center for Biostatistics, Ohio State University, Columbus, OH; (4)Department of Gastroenterology, Hepatology and Nutrition, Ohio State University Wexner Medical Center, Columbus, OH

Pulmonary

267. Adherence to GOLD guidelines in the inpatient COPD population.

Melissa Lipari, Pharm.D., BCACP¹ Amber Lanae Smith, Pharm.D., BCPS,² Pramodini Kale-Pradhan, Pharm.D., FCCP³ Sheila Wilhelm, Pharm.D., FCCP, BCPS⁴; (1)Pharmacy Practice, Wayne State University, Eugene Applebaum College of Pharmacy & Health Sciences and St. John Hospital and Medical Center, Detroit, MI; (2)Pharmacy Practice, Wayne State University, Eugene Applebaum College of Pharmacy & Health Sciences and Henry Ford Hospital, Detroit, MI; (3)Department of Pharmacy Practice, Wayne State University, Eugene Applebaum College of Pharmacy & Health Sciences and St. John Hospital and Medical Center, Detroit, MI; (4)Department of Pharmacy Practice, Wayne State University, Eugene Applebaum College of Pharmacy & Health Sciences and Harper University Hospital, Detroit, MI

Rheumatology

273. Cytokine markers of disease activity and drug response in juvenile idiopathic arthritis.

Ryan Funk, Pharm.D., Ph.D.,¹ Marcia Chan, Ph.D.,² Mara Becker, M.D., MSCE³; (1)Department of Pharmacy Practice, University of Kansas, Kansas City, KS; (2)Division of Allergy, Asthma & Immunology, Children's Mercy Kansas City, Kansas City, MO; (3)Department of Pediatrics, Division of Rheumatology, Children's Mercy Kansas City, Kansas City, MO

CASE REPORTS

These papers update and expand therapeutic insights and possibilities, or generate research hypotheses. Although narrative in nature, these abstracts stress the "evidence" for the authors' conclusions by describing the process followed to understand the findings and possible mechanisms involved in the patient's case, how the patient was evaluated and treated, and a specific description of the outcome.

Neurology

478. Copper deficiency related neuropathy in a gastric bypass patient: a case report.

Emily Murray, Pharm.D. Candidate, Jody Rocker, Pharm.D., BCPS, Susan C. Fagan, Pharm.D., BCPS, FCCP; University of Georgia College of Pharmacy

Nutrition

479. Avoiding patient harm with parenteral nutrition during electrolyte shortages: a case study.

Eric Brown, Pharm.D.,¹ Nicole McClellan, Pharm.D.,² Gayle Minard, M.D.,³ George Maish III, M.D.,³ Roland Dickerson, Pharm.D.⁴; (1)University of Tennessee Health Science Center; (2)Regional One Health; (3)Department of Surgery, University of Tennessee Health Science Center, Memphis, TN; (4) Department of Clinical Pharmacy, University of Tennessee Health Science Center, Memphis, TN

Other

480. Expanding practice: a case report of a pharmacist and social worker–led palliative consult at end of life.

Renee Holder, Pharm.D., Regina Tosca, MSW, Hunter Groninger, M.D.; Section of Palliative Care, MedStar Washington Hospital Center, Washington, DC

Psychiatry

482E. Depakote as an alternative treatment for benzodiazepine withdrawal and anxiety in an elderly patient with a history of chronic benzodiazepine use.

Hina Patel, Pharm.D., MBA,¹ Stephanie Parker, Pharm.D.,² Jennifer R. Bean, Pharm.D., BCPP, BCPS²; (1) Department of Pharmacy, University of Tennessee College of Pharmacy; (2) Veterans Affairs Tennessee Valley Healthcare System, Murfreesboro, TN

Substance Abuse/Toxicology

483. An anticlimactic phosphodiesterase inhibitor ingestion.

Christian Lintner, BSPharm,¹ Jill Topeff, Pharm.D.,¹ Alisha Floan, Pharm.D.,¹ Shin Kwon, Pharm.D.,² Abby Montague, M.D.,¹ Jon Cole, M.D.¹; (1)Minnesota Regional Poison Center; (2)Hennepin County Medical Center

CLINICAL PHARMACY FORUM

These papers describe the development, delivery, justification, or documentation of new or innovative clinical pharmacy services; they may be descriptive and need not contain an evaluative component.

Adult Medicine

306. Implementation of a transition of care program in a multi-hospital health system.

Sandy Moreau, Pharm.D., BCPS,¹ Karan Raja, Pharm.D.,² Jennifer Sternbach, Pharm.D., BCPS, BCACP,³ Jennifer Costello, Pharm.D., BCPS, BC-ADM,⁴ Jessica Nodzon, Pharm.D., BCPS,⁵ Sheetal Patel, Pharm.D., BCPS,⁶ Hoytin Lee Ghin, Pharm.D., BCPS,⁷ Ellen Secaras, RPh,⁸ Indu Lew, Pharm.D.,⁹ Todd Butala, Pharm.D.¹⁰; (1)Department of Pharmacy Practice and Administration, Ernest Mario School of Pharmacy, Rutgers, State University of New Jersey, Piscataway, NJ; (2)Department of Pharmacy, Clara Maas Medical Center, NJ; (3)Department of Pharmacy, Clara Maass Medical Center, NJ; (4)Department of Pharmacy, Saint Barnabas Medical Center, NJ; (5)Department of Pharmacy, Community Medical Center, Toms River, NJ; (6)Department of Pharmacy, Newark Beth Israel Medical Center, NJ; (7)Department of Pharmacy, Monmouth Medical Center, NJ; (8)RWJBarnabas Health, Oceanport, NJ; (9)RWJBarnabas Health, Oceanport, NJ; (10)Monmouth Medical Center Southern Campus, NJ

Critical Care

319. Critical Care PRN membership needs assessment/benefits survey.

Jenna L. Foster, Pharm.D., BCPS, BCCCP¹ Pamela L. Smithburger, Pharm.D., M.S., BCPS,² Scott Bolesta, Pharm.D., BCPS, FCCM,³ Kamila A. Dell, Pharm.D., BCPS,⁴ Drayton Hammond, Pharm.D., MBA, BCPS, BCCCP,⁵ Christen Freeman, Pharm.D., MBA⁶; (1)Department of Pharmaceutical Services and Clinical Nutrition, Palmetto Health Richland, Columbia, SC; (2)Pharmacy and Therapeutics, University of Pittsburgh School of Pharmacy, Pittsburgh, PA; (3)Department of Pharmacy Practice, Wilkes University, Wilkes-Barre, PA; (4)Department of Pharmacotherapeutics and Clinical Research, University of South Florida College of Pharmacy, Tampa, FL; (5)Department of Pharmacy Practice, University of Arkansas for Medical Sciences, Little Rock, AR; (6)Pharmacy Department, DCH Regional Medical Center, Tuscaloosa, AL

320. Impact of tele-ICU pharmacy services across a healthcare system.

Desiree Kosmisky, Pharm.D., Sonia Everhart, Pharm.D., BCPS, BCCCP, Nehal Thakkar, M.D., Michael Reif, M.D., Kimberly Purtill, RN, M.S., CCRN-E; Virtual Critical Care, Carolinas HealthCare System, Mint Hill, NC

321. Safe use of inhaled epoprostenol for inter-hospital transport of patients with severe acute respiratory distress syndrome.

Christopher Paciullo, Pharm.D., BCCCP, FCCM,¹ Tish Kuban, RPh, MBA,² Bruce Bray, RRT, RCP,³ James Blum, M.D., FCCM⁴; (1)Department of Pharmaceutical Services, Emory University Hospital, Atlanta, GA; (2)Department of Pharmaceutical Services, Emory University Hospital; (3)Department of Respiratory Care, Emory University Hospital; (4)Department of Anesthesiology, Emory University School of Medicine, Atlanta, GA

322. Pharmacists as essential members of the intensive care unit team: development of 24/7 critical care clinical pharmacy services.

Julia Balazh, Pharm.D., Nicole Maltese Dietrich, Pharm.D., Evan Telford, Pharm.D., Andrew Hendrickson, Pharm.D., Don Reeder, Pharm.D., Andrew Franck, Pharm.D.; North Florida/South Georgia Veterans Health System, Gainesville, FL

SYSTEMATIC REVIEWS/META-ANALYSIS

These papers describe systematic reviews adhering to the guidelines and definitions established by Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).

Infectious Diseases

490. Acute kidney injury with concomitant piperacillin/tazobactam and vancomycin: systematic review.

Drayton Hammond, Pharm.D., MBA, BCPS, BCCCP¹ Melanie Smith, Pharm.D.,² Sarah Hayes, Pharm.D.,³ Chenghui Li, Ph.D.,⁴ Katherine Lusardi, Pharm.D.,⁵ P. Brandon Bookstaver, Pharm.D., FCCP, BCPS, AAHIVP⁶; (1)Department of Pharmacy Practice, University of Arkansas for Medical Sciences, Little Rock, AR; (2)Department of Pharmacy, Medical University of South Carolina; (3)Fairview Health Services and University of Minnesota Medical Center; (4)Department of Pharmacy Practice, Pharmaceutical Evaluation and Policy Division, University of Arkansas for Medical Sciences College of Pharmacy; (5)University of Arkansas for Medical Sciences; (6)Department of Clinical Pharmacy & Outcomes Sciences, University of South Carolina College of Pharmacy, Columbia, SC

Neurology

495E. Systematic literature review of droxidopa in clinical trials for neurogenic orthostatic hypotension (nOH) in parkinsonism.

Jack J. Chen, Pharm.D.,¹ Khashayar Dashtipour, M.D., Ph.D.,² Stephanie Tashiro, MPH,² Ivan Portillo, MLIS³; (1)College of Pharmacy, Marshall B. Ketchum University, Fullerton, CA; (2)Department of Neurology, Loma Linda University, Loma Linda, CA; (3)Marshall B. Ketchum University, Fullerton, CA

496E. Systematic literature review of quetiapine for hallucinosis/psychosis in Parkinson's disease (PD).

Jack J. Chen, Pharm.D.,¹ Khashayar Dashtipour, M.D., Ph.D.,² Lilian Massihi, M.D.,² Stephanie Tashiro, MPH,² Ivan Portillo, MLIS³; (1)College of Pharmacy, Marshall B. Ketchum University, Fullerton, CA; (2) Department of Neurology, Loma Linda University, Loma Linda, CA; (3)Marshall B. Ketchum University, Fullerton, CA

497E. The role of microdose lithium in patients with Alzheimer's disease - a systematic review.

Jose Valdes, Pharm.D.,¹ Jessica Greenwood, B.A.,² Erika Canizares, RN,³ Huy Pham, B.S.,³ Melissa Espinosa, B.S.³; (1)Department of Pharmacy Practice, Nova Southeastern University College of

Pharmacy, Palm Beach Gardens, FL; (2)Nova Southeastern University College of Pharmacy, Doral, FL; (3)Nova Southeastern University College of Pharmacy

Substance Abuse/Toxicology

501. Effectiveness of pharmacy-based needle/syringe exchange program in injecting drug users: a systematic review and meta-analysis.

Tahir Khan, Ph.D.,¹ *Ratree Sawangjit, Ph.D.*,² *Nathorn Chaiyakunapruk, Ph.D.*³; (1)School of Pharmacy, Monash University Malaysia, Selangor, Malaysia; (2)School of Pharmacy, Monash University Malaysia, Malaysia; (3)School of Pharmacy, Monash University Malaysia

502. Patient outcomes for phenobarbital use with or without benzodiazepines in alcohol withdrawal syndrome: systematic review.

Jordan Rowe, Pharm.D.,¹ *Drayton Hammond, Pharm.D., MBA, BCPS, BCCCP*,² *Tessa Wiley, Pharm.D.*,³ *Kristen Lee, Pharm.D.*,⁴ *Sandra Kane-Gill, Pharm.D., M.Sc., FCCM, FCCP*⁵; (1)University of Tennessee Medical Center - Knoxville; (2)Department of Pharmacy Practice, University of Arkansas for Medical Sciences, Little Rock, AR; (3)Nebraska Medicine; (4)Orlando Regional Medical Center; (5)Department of Pharmacy and Therapeutics, University of Pittsburgh School of Pharmacy, Pittsburgh, PA

RESIDENTS AND FELLOWS RESEARCH IN PROGRESS

These papers describe in-progress hypothesis-driven research in basic, clinical, translational, dissemination/implementation, or educational research.

ADR/Drug Interactions

345. The reduction of racial/ethnic and other patient characteristic disparities associated with adverse drug events.

Brittany Duke, Pharm.D.,¹ *Elizabeth Squire, M.A.*²; (1)Division of Health Care Quality, Office of Disease Prevention and Health Promotion, US Department of Health and Human Services, Rockville, MD; (2) Office of Disease Prevention and Health Promotion, US Department of Health and Human Services

346. A prospective evaluation of statin usage on HbA1c control in type 2 diabetes mellitus in an outpatient setting.

Mohamed A. Hammad, MPharm, BCPS, Ph.D. Candidate,¹ *Dzul Azri Mohamed Noor, MPharm., Ph.D.*,¹ *Syed Azhar Syed Sulaiman, Pharm.D.*,¹ *Nor Azizah Aziz, M.D., Dip. Int. Med, MRCP*² *Tarek M. Elsayed, MPharm., Ph.D. Candidate*³; (1)Clinical Pharmacy Department, School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia; (2)Endocrinology Clinics, Penang General Hospital, Penang, Malaysia; (3)Pharmacy Practice Department, Kulliyah of Pharmacy, International Islamic University Malaysia, Kuantan, Malaysia

347. Prevalence of selective serotonin reuptake inhibitors (SSRIs) drug-drug interactions in U.S. outpatient settings.

Haifa Fadil, M.S.,¹ *Leanne Lai, Professor*²; (1)Department of Sociobehavioral and Administrative Pharmacy NOVA Southeastern University, Fort Lauderdale, FL, NOVA Southeastern University, Davie, FL; (2)Department of Sociobehavioral and Administrative Pharmacy Nova Southeastern University College of Pharmacy, Department of Sociobehavioral and Administrative Pharmacy Nova Southeastern University College of Pharmacy, Fort Lauderdale, FL

Adult Medicine

348. Comparison of melatonin and zolpidem for sleep in a community hospital: an analysis of patient perception and inpatient outcomes.

Robyn Stoianovici, Pharm.D., *Luigi Brunetti, Pharm.D., MPH*, *Christopher Adams, Pharm.D.*; Department of Pharmacy, Robert Wood Johnson University Hospital Somerset, Somerville, NJ

349. Evaluation of time to first therapeutic aPTT in non-obese versus obese patients during the treatment of venous thromboembolism with unfractionated heparin.

Katherine L. March, Pharm.D.,¹ Carrie S. Oliphant, Pharm.D., FCCP, BCPS-AQ Cardiology,² Brennan J. Herrmann, M.S.³; (1)Department of Clinical Pharmacy, Methodist University Hospital, Memphis, TN; (2)Department of Pharmacy, Methodist University Hospital, Memphis, TN; (3)Methodist University Hospital

350. Evaluation of prophylactic antibiotic regimens on recurrence and mortality in spontaneous bacterial peritonitis.

Shelley Glaess, Pharm.D.,¹ Rebecca L. Attridge, Pharm.D., M.Sc., BCPS,² Rebecca L. Brady, Pharm.D.,¹ Russell T. Attridge, Pharm.D., M.Sc., BCPS³; (1)University of the Incarnate Word Feik School of Pharmacy, San Antonio, TX; (2)University of Texas Health Science Center at San Antonio, San Antonio, TX; (3)South Texas Veterans Health Care System, Audie L. Murphy Division, San Antonio, TX

Ambulatory Care

351. Assessing the ability of warfarin-treated patients to predict their INR.

Kathleen McNamara, Pharm.D.,¹ James D. Hoehns, Pharm.D., BCPS, FCCP,² Matthew J. Witry, Pharm.D.³; (1)Northeast Iowa Family Practice, IA; (2)University of Iowa College of Pharmacy and Northeast Iowa Family Practice Center, Waterloo, IA; (3)University of Iowa College of Pharmacy, Iowa City, IA

352. Limiting warfarin tablet strengths at a VA medical center.

Ashley Thomas, Pharm.D.; VA, Tennessee Valley Healthcare Systems VA, Nashville, TN

353. Evaluation of outcomes by clinical pharmacy specialists compared to a nephrology specialty service in patients with difficult to manage hypertension.

Catlin Grisham-Takac, Pharm.D.,¹ Crystal Brown, Pharm.D., BCPS, Adebola Adesoye, Pharm.D., BCPS,³ Rick Weideman, Pharm.D., BCPS⁴; (1)VA North Texas Healthcare System, Dallas, TX; (2)Department of Pharmacy Practice, Texas Tech University Health Science Center- School of Pharmacy, Dallas, TX; (3) VA North Texas Health Care System, Dallas, TX

354. Lost in transition.

Danielle Longo, Pharm.D., Elizabeth Phillips, BSPHarm, Pharm.D., CACP, BCACP; University Health Care Center, Upstate University Hospital, Syracuse, NY

355. Assessing the state of comprehensive medication management practice within primary care clinics.

Deborah L. Pestka, Pharm.D.,¹ Lindsay Sorge, Pharm.D., MPH, BCACP,² Caitlin K. Frail, Pharm.D., M.S., BCACP,² Kylee Funk, Pharm.D., BCPS,² Mary T. Roth, Pharm.D., MHS,³ Ronald Hadsall, Ph.D., M.S.,² Todd D. Sorensen, Pharm.D.²; (1)Social and Administrative Pharmacy, University of Minnesota College of Pharmacy, Minneapolis, MN; (2)Pharmaceutical Care and Health Systems, University of Minnesota College of Pharmacy, Minneapolis, MN; (3)UNC Eshelman School of Pharmacy, Chapel Hill, NC

Cardiovascular

356. Early steroid administration and clinical outcomes in acute decompensated heart failure.

Leo Buckley, Pharm.D.,¹ Prami Nadpara, Ph.D.,² Perry Taylor, Pharm.D.,³ Benjamin Van Tassel, Pharm.D.¹; (1)Virginia Commonwealth University; (2)Virginia Commonwealth University School of Pharmacy, Richmond, VA; (3)Department of Pharmacy, Virginia Commonwealth University Health System, Richmond, VA

357. Rationale and design of the End-Stage Renal Disease and Heart Failure: Anakinra Response Trial (E-HART).

*Leo Buckley, Pharm.D.*¹ Dayanjan Wijesinghe, Ph.D.,¹ Jason Kidd, M.D.,¹ Justin Canada, M.S.,¹ Salvatore

Carbone, M.S.,¹ Sophanit Dessie, M.D., Yahya Fatani, M.D.,¹ Dinesh Kadariya, M.D.,¹ Cory Trankle, M.D.,¹ Antonio Abbate, M.D., Ph.D.,¹ Benjamin Van Tassell, Pharm.D.¹; (1)Virginia Commonwealth University

358. Evaluating the difference in time to unintended healthcare encounter in patients with atrial fibrillation and heart failure treated with sotalol compared to amiodarone.

Nirali Naik, Pharm.D.; UF Health Jacksonville

359. Appropriateness of IV to PO conversions in heart failure diuretic therapy and impact on readmission rates.

Jennifer Hoh, Pharm.D., B.S. Chemistry, Kody Merwine, Pharm.D., B.S. Chemistry, B.S. Biology, Joanne Heil, Pharm.D., BCPS-AQ Cardiology; Department of Pharmacy, Thomas Jefferson University Hospital, Philadelphia, PA

360. Clinical factors predicting bleeding and effectiveness associated with direct-acting oral anti-coagulants for the treatment of deep-vein thrombosis and pulmonary embolism.

Carlo Iasella, Pharm.D., James Coons, Pharm.D.; University of Pittsburgh, Pittsburgh, PA

361. Use of medications that potentially interfere with blood pressure control among patients with resistant hypertension on ≥ 4 antihypertensive drugs.

Andrew Hwang, Pharm.D.,¹ Chintin Dave, Pharm.D.,² Steven M. Smith, Pharm.D., MPH, BCPS³; (1) Departments of Pharmacotherapy & Translational Research and Community Health & Family Medicine, University of Florida Colleges of Pharmacy and Medicine; (2)Department of Pharmaceutical Outcomes & Policy, University of Florida College of Pharmacy; (3)Departments of Pharmacotherapy & Translational Research and Community Health & Family Medicine, University of Florida Colleges of Pharmacy and Medicine, Gainesville, FL

362. Impact of pharmacist transitional care management telephone calls on hospital readmission rates within a cardiology service.

Stephanie Yager, Pharm.D., Lindsay Arnold, Pharm.D., Victoria Liu, Pharm.D.; Department of Pharmacy, Boston Medical Center, Boston, MA

Critical Care

363. Comparison of 3-factor versus 4-factor prothrombin complex concentrate with regard to blood product use during hospitalization.

Jessica DeAngelo, Pharm.D., MBA,¹ Daniel Jarrell, Pharm.D.,¹ Richard Cosgrove, Pharm.D.,¹ James Camamo, Pharm.D.,¹ Christopher Edwards, Pharm.D.,² Asad E. Patanwala, Pharm.D.²; (1)Department of Pharmacy, Banner University Medical Center Tucson, AZ; (2)Pharmacy Practice and Science, University of Arizona College of Pharmacy, Tucson, AZ

364. Prediction of invasive candidiasis in a veteran population (PIVET): validation of the Candida score.

Tommye Guidry, Pharm.D., Whitney Elliott, Pharm.D., BCPS, Amanda Gillion, Pharm.D., BCPS, Steven Woods, M.D., Muthiah Muthiah, M.D.; VAMC, Memphis, TN

Education/Training

365. Physician knowledge, comfort level, and self-efficacy on the appropriate use of new oral anticoagulants: a targeted needs assessment.

Rachel Renwick, Pharm.D.,¹ Andrea S. Franks, Pharm.D., BCPS²; (1)University of Tennessee Medical Center, Knoxville, TN; (2)Department of Clinical Pharmacy, University of Tennessee Health Science Center, College of Pharmacy, Knoxville, TN

366. Assessing the use of entrustable professional activities during early practice experiences in a doctor of pharmacy program.

Laura A. Rhodes, Pharm.D.,¹ Macary Weck Marciniak, Pharm.D., BCACP, BCPS, FAPhA,¹ Jacqueline McLaughlin, Ph.D.,² Kim I. Leadon, Med,¹ Joy Tucker, MSW,¹ Nicole R. Pinelli, Pharm.D., M.S.¹; (1) UNC Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC; (2) UNC Eshelman School of Pharmacy, University of North Carolina at Chapel Hill Eshelman School of Pharmacy, Chapel Hill, NC

367. Identifying student learning competencies for urban underserved practice using a Delphi process.

Chris Johnson, Pharm.D., B.S., Andrew Traynor, Pharm.D., BCPS; Department of Pharmacy Practice, Concordia University Wisconsin School of Pharmacy, Mequon, WI

368. Evaluating the impact of APPE rotations on pharmacy student attitudes and perceptions toward interprofessional practice.

Cora Housley, Pharm.D.,¹ Rebecca Shilling, Pharm.D. Candidate 2017,² Seth Heldenbrand, Pharm.D.,² Nalin Payakachat, Ph.D.,³ Ashley Castleberry, Pharm.D., MAEd,² Schwanda Flowers, Pharm.D.,³ Drayton Hammond, Pharm.D., MBA, BCPS, BCCCP²; (1)University of Missouri Health Care; (2)University of Arkansas for Medical Sciences; (3)College of Pharmacy, University of Arkansas for Medical Sciences, Little Rock, AR

Endocrinology

369. Evaluation of the risks and benefits of combination incretin therapy (GLP-1 agonists with DPP-4 inhibitors) in patients with type 2 diabetes.

Estela Lajthia, Pharm.D.,¹ John Bucheit, Pharm.D.,¹ Evan Sisson, Pharm.D., MSHA,² Pramit Nadpara, Ph.D.,³ Lauren Caldas, Pharm.D.,¹ Michael Murchie, M.D.⁴; (1)Department of Pharmacotherapy & Outcomes Science, VCU School of pharmacy, Richmond, VA; (2)Department of Pharmacotherapy and Outcomes Science, Virginia Commonwealth University School of Pharmacy, Richmond, VA; (3)Virginia Commonwealth University School of Pharmacy, Richmond, VA; (4)Crossover Healthcare Ministry Free Clinic, Richmond, VA

Geriatrics

370. Reduction of medication regimen complexity in geriatric patients: the effect on quality of life and functional capacity.

Emily Brysch, Pharm.D.,¹ Kimberly Cauthon, Pharm.D., CGP, BC-ADM,² G. Blair Sarbacker, Pharm.D., BCACP;¹ Bethany Kalich, Pharm.D., BCPS-AQ Cardiology³; (1)University of the Incarnate Word Feik School of Pharmacy, San Antonio, TX; (2)South Texas Veterans Health Care System, San Antonio, TX; (3)University of Texas Health Science Center at San Antonio, San Antonio, TX

Hematology/Anticoagulation

371. Initiation of target-specific ORAL anticoagulants for atrial fibrillation and venous thromboembolism: IMPACT on time to hospital discharge.

Kim Vo, Pharm.D.,¹ Nathan Fewel, Pharm.D., BCPS,² Amanda Basto, Pharm.D., BCPS,² Mia Ta, Pharm.D., BCPS,² Eileen Stock, Ph.D.³; (1)Department of Pharmacy, CTVHCS, Temple, TX; (2)Pharmacy, CTVHCS, Temple, TX; (3)CTVHCS

372. Evaluation of chromogenic factor X levels in the transition from argatroban to warfarin.

Monique Conway, Pharm.D.,¹ Kristen T. Pogue, Pharm.D., BCPS-AQ CV,² Sarah Hanigan, Pharm.D., BCPS,² Bonnie Kaminsky, Pharm.D., BCPS,² Michael P. Dorsch, Pharm.D., M.S., BCPS-AQ CV²; (1) Department of Pharmacy, University of Michigan Health System, Ann Arbor, MI; (2)University of Michigan Hospitals and Health Centers, Ann Arbor, MI

373. Prothrombin complex concentrate use for urgent warfarin reversal compared to historical control.

Hua Chen, Pharm.D.,¹ James Coons, Pharm.D.²; (1)University of Pittsburgh Medical Center, Pittsburgh, PA; (2)University of Pittsburgh, Pittsburgh, PA

HIV/AIDS

374. Probiotics for increasing CD4 counts in HIV patients: a systematic review and meta-analysis.

Mohamed Jalloh, Pharm.D.,¹ Philip Gregory, Pharm.D.,² Darren Hein, Pharm.D.,³ Aleah Rodriguez, Pharm.D.,¹ Lindsay Slowiczek, Pharm.D.,¹ Zara Risoldi Cochrane, Pharm.D.²; (1)Center for Drug Information and Evidence-Based Practice, Creighton University, Omaha, NE; (2)Center for Drug Information & Evidence-Based Practice, Creighton University, Omaha, NE; (3)School of Pharmacy and Health Professions, Creighton University, Omaha, NE

Infectious Diseases

375. Infection-related readmission following traumatic splenic injury.

Samie Sabet, Pharm.D.,¹ Shawna King, Pharm.D.,² Shelby Anderson, Pharm.D. Candidate³; (1) Pharmacy Practice, Texas Tech University Health Sciences Center School of Pharmacy, Amarillo, TX; (2) Pharmacy, Northwest Texas Healthcare System, Amarillo, TX; (3)Texas Tech University Health Sciences Center School of Pharmacy, Amarillo, TX

376. Incidence of acute kidney injury in patients receiving intravenous vancomycin in combination with piperacillin-tazobactam or cefepime.

Paul Boylan, Pharm.D., Rebecca Cofsky, Pharm.D.; Pharmacy Department, Reading Hospital, West Reading, PA

377. Evaluation of antibiotic utilization in an emergency department pre and post implementation of a formal pharmacist-driven culture review.

Megan Geurds, Pharm.D.,¹ Chris Tawwater, Pharm.D.,¹ Jennifer L. Grelle, Pharm.D.²; (1)School of Pharmacy, Texas Tech University Health Science Center, Abilene, TX; (2)Texas Tech University Health Sciences Center School of Pharmacy, Amarillo, TX

378. *Clostridium difficile* infection incidence, recurrence, and health outcomes in the national veterans health administration from 2003 to 2014.

Jacqueline Argamany, Pharm.D.,¹ Kelly Reveles, Pharm.D., Ph.D.²; (1)College of Pharmacy, University of Texas at Austin, San Antonio, TX; (2)University of Texas at Austin College of Pharmacy and University of Texas Health Science Center School of Medicine, San Antonio, TX

379. Concomitant gastric acid suppressant use and *Clostridium difficile* infection outcomes in a national cohort of veterans, 2003 to 2014.

Jacqueline Argamany, Pharm.D.,¹ Kelly Reveles, Pharm.D., Ph.D.²; (1)College of Pharmacy, University of Texas at Austin, San Antonio, TX; (2)University of Texas at Austin College of Pharmacy and University of Texas Health Science Center School of Medicine, San Antonio, TX

380. Derivation and validation of a clinical prediction rule for recurrent *Clostridium difficile* infection in a national cohort of veterans.

Jacqueline Argamany, Pharm.D.,¹ Kelly Reveles, Pharm.D., Ph.D.²; (1)College of Pharmacy, University of Texas at Austin, San Antonio, TX; (2)University of Texas at Austin College of Pharmacy and University of Texas Health Science Center School of Medicine, San Antonio, TX

381. HIV-HCV co-infection: pharmacy interventions and outcomes at an urban academic medical center.

Sarah Michienzi, Pharm.D., Renata Smith, Pharm.D., Rodrigo Burgos, Pharm.D.; Department of Pharmacy Practice Section of Infectious Disease Pharmacotherapy, University of Illinois at Chicago College of Pharmacy, Chicago, IL

Medication Safety

382. Utilization and complication of total parenteral nutrition in adult patients: subsequent educational protocol and policy development.

*Emily Bailey, Pharm.D.,*¹ *Mimi Liu, Pharm.D., MBA/HSA,* *Robert Howitt, Pharm.D., BCPS,* *Janie Faris, Pharm.D., BCPS, BCCCP;* Pharmacy, Carilion Roanoke Memorial Hospital, Roanoke, VA

383. Hendrich II fall risk model: why are patients still falling?

*Hao Nguyen, Pharm.D.,*¹ *Victoria L. Do, Pharm.D.,*¹ *Robert Ready, RN, MN,*² *Gary Blanchard, M.D.,*² *Abir O. Kanaan, Pharm.D.*³; (1)Saint Vincent Hospital/MCPHS University, Worcester, MA; (2)Saint Vincent Hospital, Worcester, MA; (3)MCPHS University, Worcester, MA

384. Development and validation of a pharmacy-driven multifactorial fall risk trigger tool.

*Victoria L. Do, Pharm.D.,*¹ *Joseph J. Sawicki Jr, Pharm.D.,*² *Uyen P. Nguyen, Pharm.D.,*² *Jennifer Y. Lee, Pharm.D., BCPS,*² *Robert Ready, RN, MN,*² *Matthew A. Silva, Pharm.D., BCPS,*³ *Abir O. Kanaan, Pharm.D.*³; (1)Saint Vincent Hospital/MCPHS University, Worcester, MA; (2)Saint Vincent Hospital, Worcester, MA; (3)MCPHS University, Worcester, MA

Pediatrics

385. Incidence of bronchopulmonary dysplasia following caffeine prophylaxis in extremely premature neonates.

Todd Hershberger, Pharm.D. Candidate 2017, *Varsha Bhatt-Mehta, M.S. (CRDSA), Pharm.D., FCCP;* College of Pharmacy, University of Michigan, Ann Arbor, MI

386. Evaluation of sildenafil treatment guidelines in neonates with pulmonary artery hypertension associated with bronchopulmonary dysplasia.

*Parin Shah, Pharm.D. Candidate,*¹ *Varsha Bhatt-Mehta, M.S. (CRDSA), Pharm.D., FCCP*²; (1)University of Michigan College of Pharmacy, Ann Arbor, MI; (2)College of Pharmacy, University of Michigan, Ann Arbor, MI

Pharmacoepidemiology

387. Prescribing patterns of thiazide diuretics.

*Genevieve Hale, Pharm.D., BCPS,*¹ *Suhaib Muflih, Pharm.D., Ph.D. Candidate,*² *Sarah Alameddine, Pharm.D.,*¹ *Nile M. Khanfar, Ph.D., MBA*¹; (1)College of Pharmacy, Nova Southeastern University, Palm Beach Gardens, FL; (2)Sociobehavioral and Administrative Pharmacy/ College of Pharmacy, Nova Southeastern University, Plantation, FL

Pharmacogenomics/Pharmacogenetics

388. Measuring knowledge and attitudes regarding the use of pharmacogenetic testing among patients and prescribers: diffusion of innovation theory.

*Suhaib Muflih, Pharm.D., Ph.D. Candidate,*¹ *Barry A. Bleidt, Ph.D., Pharm.D.,*² *Nile Khanfar, Ph.D., MBA,*³ *Ioana Popovici, Ph.D.*⁴; (1)Sociobehavioral and Administrative Pharmacy/ College of Pharmacy, Nova Southeastern University, Plantation, FL; (2)Sociobehavioral and Administrative Pharmacy Department, College of Pharmacy, Nova Southeastern University, Fort Lauderdale, FL; (3)College of Pharmacy, Nova Southeastern University, Palm Beach Gardens, FL; (4)Sociobehavioral and Administrative Pharmacy, Nova Southeastern University, FL

389. Feasibility of implementing a personalized approach to chronic pain management using cytochrome P450 2D6 genotype in a primary care clinic.

D. Max Smith III, Pharm.D., *Amanda Eley, MHA,* *Julie Johnson, Pharm.D., BCPS, FCCP, FAHA,* *Larisa H. Cavallari, Pharm.D., BCPS, FCCP,* *Kristin Weitzel, Pharm.D., CDE, FAPhA;* Department of Pharmacotherapy and Translational Research and Center for Pharmacogenomics, College of Pharmacy, University of Florida, Gainesville, FL

390. Potential value of preemptive panel-based pharmacogenetic testing in patients undergoing cardiac catheterization.

*Scott Mosley, Pharm.D.,*¹ Xinyue Liu, Ph.D.,² Kristin Weitzel, Pharm.D., CDE, FAPhA,³ Amanda Elsey, MHA,¹ Almut Winterstein, RPh, Ph.D., FISPE,² Julie Johnson, Pharm.D., BCPS, FCCP, FAHA,¹ Larisa H. Cavallari, Pharm.D.¹; (1)Department of Pharmacotherapy and Translational Research and Center for Pharmacogenomics, College of Pharmacy, University of Florida, Gainesville, FL; (2)Pharmaceutical Outcomes and Policy, University of Florida College of Pharmacy, Gainesville, FL

Pharmacokinetics/Pharmacodynamics/Drug Metabolism/Drug Delivery

391. Assessment of adhesion response to 3D printed materials for ophthalmic device development.

*Maryam Alband, MPharm,*¹ Richard M H Lee, M.Sc. FRCOphth,² Matthew Penny, Ph.D.,¹ Stephen T Hilton, Ph.D.,¹ Steve Brocchini, Ph.D.¹; (1)UCL School of Pharmacy; (2)UCL Institute of Ophthalmology

392. Impact of once-weekly rifapentine and isoniazid on the steady-state pharmacokinetics of dolutegravir in healthy volunteers.

*Kristina Brooks, Pharm.D.,*¹ Jomy George, Pharm.D.,¹ Alice Pau, Pharm.D.,² Anela Kellogg, MSN, RN,³ Mary McLaughlin, RN, BSN,⁴ Maryellen McManus, RN, MPH,⁴ Joseph A. Kovacs, M.D.,⁵ Parag Kumar, Pharm.D.¹; (1)Clinical Pharmacokinetics Research Laboratory, Pharmacy Department, NIH Clinical Center, Bethesda, MD; (2)Division of Clinical Research, National Institute of Allergy and Infectious Diseases (NIAID), Bethesda, MD; (3)Clinical Monitoring Research Program, Frederick National Laboratory for Cancer Research, Leidos Biomedical Research, Inc., Bethesda, MD; (4)Laboratory of Immunoregulation, NIAID, Bethesda, MD; (5)AIDS Section, Critical Care Medicine Department, NIH Clinical Center, Bethesda, MD

393. Pharmacokinetic and screening studies of the interaction between mononuclear phagocyte system and nanoparticle formulations and colloid forming drugs.

*Andrew Lucas, Pharm.D., M.S.,*¹ Leah Herity, B.S., Zack Kornblum, B.S., Andrew Madden, Pharm.D., Alberto Gabizon, M.D., Ph.D., Alexander Kabanov, Ph.D., DSc, Rose Ajamie, B.S., David Bender, Ph.D., Palaniappan Kulanthaivel, Ph.D., Manuel Sanchez-Felix, Ph.D., Henry Havel, Ph.D., William C. Zamboni, Pharm.D., Ph.D.³; (1)Department of Pharmacotherapy and Experimental Therapeutics, University of North Carolina at Chapel Hill Eshelman School of Pharmacy, Chapel Hill, NC; (2)University of North Carolina at Chapel Hill School of Pharmacy Division of Pharmacotherapy and Experimental Therapeutics, Chapel Hill, NC

Psychiatry

394. Risk factors for utilization of acute care services for lithium toxicity.

*Lauren J. Heath, Pharm.D.,*¹ Sarah J. Billups, Pharm.D.,² Kerri Gaughan, Pharm.D.,¹ Kristen Gardner, Pharm.D.,¹ Daniel Dugan, Pharm.D.,¹ Sheila R. Botts, Pharm.D.¹; (1)Department of Pharmacy, Kaiser Permanente Colorado, Aurora, CO; (2)University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences

Transplant/Immunology

395. Effect of statins on influenza vaccine antibody concentrations in lung transplant patients.

*Amanda Condon, Pharm.D.,*¹ Christine Garmoe, Pharm.D. Candidate,² Mary Hayney, Pharm.D., MPH²; (1)Department of Pharmacy, UW Health, Madison, WI; (2)School of Pharmacy, University of Wisconsin-Madison, Madison, WI

396. Efficacy of oral fosfomycin in transplant recipients with renal dysfunction.

Luiza Kerstenetzky, Pharm.D., Margaret Jorgenson, Pharm.D., BCPS, Jillian Fose, Pharm.D., BCPS; University of Wisconsin Hospitals and Clinics (UW Health), Madison, WI

Scientific Poster Presentations, III

397. ApoL1 and MYH9 genetic polymorphisms among the Hispanic kidney allograft recipients. *Youngil Chang, M.S., Pharm.D.*,¹ *Tariq Shah, M.D.*,² *David Min, Pharm.D.*³; (1)College of Pharmacy, Western University of Health Sciences, Pomona, CA; (2)Multi-Organ Transplant Center, St. Vincent Medical Center, Los Angeles, CA; (3)Western University of Health Sciences, College of Pharmacy and National Institute of Transplantation, Los Angeles, CO

398. Association of genetic polymorphisms in the renin-angiotensin system and post-transplant anemia among Hispanic kidney transplant recipients.

Youngil Chang, M.S., Pharm.D.,¹ *Eunah Cho, Pharm.D.*,² *Tariq Shah, M.D.*,³ *Jaewook Yang, Pharm.D., Ph.D.*, *BCPS*,⁴ *David Min, Pharm.D.*⁵; (1)Mendez National Institute of Transplantation Foundation, Mendez National Institute of Transplantation Foundation, Los Angeles, CA; (2)Western University of Health Sciences; (3)Multi-Organ Transplant Center, St. Vincent Medical Center, Los Angeles, CA; (4) School of Pharmacy, Sahmyook University, Seoul, Republic of Korea; (5)Western University of Health Sciences, College of Pharmacy and National Institute of Transplantation, Los Angeles, CO

399. Survival benefit of renal transplantation in octogenarians with ESRD.

Moses Demehin, Pharm.D.,¹ *Bharath Ravichandran, Pharm.D.*,² *Tracy Sparkes, Pharm.D.*,² *Beje Thomas, M.D.*,² *Abdolreza Haririan, M.D.*,² *Brian Masters, Pharm.D.*²; (1)University of Pittsburgh Medical Center, Pittsburgh, PA; (2)University of Maryland Medical Center, Baltimore, MD

Women's Health

400. Neonatal and maternal effects of buprenorphine and methadone in the treatment of opioid-maintained pregnant women.

Christina Inteso, Pharm.D.,¹ *Alicia B. Forinash, Pharm.D.*, *FCCP, BCPS, BCACP*,¹ *Abigail Yancey, Pharm.D.*,¹ *Rebecca L. Bragg, Pharm.D., BCPS*,¹ *Elizabeth Frisse, M.D.*,² *Judy Thompson, RN, CRRC*,² *Collin Miller, MSW*,² *Jaye Shyken, M.D.*²; (1)St. Louis College of Pharmacy, St. Louis, MO; (2)St. Louis University/SSM Health St. Mary's, St. Louis, MO

STUDENTS RESEARCH IN PROGRESS

These papers describe in-progress hypothesis-driven research in basic, clinical, translational, dissemination/implementation, or educational research.

Pediatrics

448. Pharmacist involvement in pediatric summer camps for patients with chronic kidney disease. *Tracy Hagemann, Pharm.D.*,¹ *Jordan Perrine, B.S.*²; (1)University of Tennessee College of Pharmacy; (2) University of Tennessee Health Science Center College of Pharmacy

