The Utah Society of Health System Pharmacists, University of Utah Hospitals and Clinics & VA Medical Center Present: 2013 Resident Continuing Pharmacy Education Series

Target Audience: Pharmacists, pharmacy technicians, pharmacy students, and other health professionals.

Date	Time & Location	Presenter	Title, Objectives & ACPE UAN
3/20 Wed.	HSEB 2600 at 3:00 pm	Jordan Burger, PharmD, MBA (Mentor: Shantel Mullin, PharmD, BCPS)	**Not Worth SCIP-ping: A Review of the Surgical Care Improvement Project** 0167-0000-13-007-L04 -P/T Pharmacist Objectives: 1. Understand the background and purpose of the Surgical Care Improvement Project (SCIP). 2. Explain the core measures covered under SCIP. 3. Plan the appropriate timing of prophylactic antibiotics pre-operatively and discontinuation of prophylactic antibiotics post-operatively. 4. Assess the proper selection of prophylactic antibiotic based on surgical procedure. 5. Select the recommended venous thromboembolism prophylaxis options based on surgical procedure. Technician Objectives: 1. Define the purpose of the Surgical Care Improvement Project (SCIP). 2. Describe the background and goals of SCIP. 3. Identify the core measures covered under SCIP. 4. Name three approved prophylactic pre-operative antibiotics under SCIP.
3/20 Wed.	HSEB 2600 at 4:00 pm	Ian Ford, PharmD (Mentor: Heidi Simons, PharmD)	**TPN Boot Camp: Emphasizing Pharmacy's Role in Parenteral Nutrition** - 0167-0000-13-005-L04 -P/T Pharmacist Objectives: 1. Assess a patient's nutritional needs. 2. Design a patient-specific parenteral nutrition regimen. 3. Recommend strategies for individualizing parenteral nutrition based on a patient's medical history. 4. Develop an appropriate monitoring plan for a patient on parenteral nutrition. 5. Explain how to prevent and manage complications associated with parenteral nutrition Technician Objectives: 1. List 5 reasons a patient may be started on parenteral nutrition. 2. Identify the components of parenteral nutrition and their primary functions in meeting a patient's nutritional needs. 3. Describe the difference between 2-in-1 and 3-in-1 admixtures and the components of each
3/21 Thurs.	HSEB 2600 at 3:00 pm	Tyler Sledge, PharmD (Mentor: Nick Lonardo, PharmD)	**Medicating the Bionic Patient: A Review of Mechanical Cardiovascular Support Devices in Critically Ill Patients and the Pharmacotherapy Associated with Their Use** - 0167-0000-13-016-L04 -P/T Pharmacist Objectives: 1. Describe the function and indications of selected cardiovascular support devices including ventricular assist device, Impella, and extracorporeal membrane oxygenation 2. Illustrate complications and associated pharmacotherapy from cardiovascular support devices in the critically ill population 3. Analyze pharmacokinetic changes in critically ill patients with cardiovascular support devices 4. Formulate strategies to optimize drug therapy during treatment with cardiovascular support devices Technician Objectives: 1. Illustrate the need for pharmacy intervention in regards managing patients with cardiovascular support devices 2. Explain common pharmacologic interventions that occur secondary to implantation of a cardiovascular support device 3. Describe three complications that can occur from implantation of a cardiovascular support device

3/21 Thurs.	HSEB 2600 at 4:00 pm	Zubin Bhakta, PharmD (Mentor: Dave Young, PharmD)	**Inhaled Antibiotics – Who. What, Where, When, Why & How?** - 0167-0000-13-017-L04 -P/T Pharmacist Objectives: 1. Identify 4 disease states in which inhaled antibiotics have been studied – WHO 2. Describe 4 of the adverse effects which are common with inhaled antibiotic therapies –WHAT & WHERE 3. Outline the evidence for the use of inhaled antibiotics in various patient populations – WHEN (eg, Tobi/tip, colistin, vancomycin, aminoglycosides) 4. Evaluate the appropriateness of inhaled antibiotics in specific patient populations - WHY Technician Objectives: 1. List different antibiotics which have been studied as inhaled therapies – WHAT 2. Describe the mechanism of various nebulizer devices utilized for inhaled antibiotics – WHERE & HOW 3. Determine proper storage environment for commonly utilized inhaled antibiotics - HOW
3/27 Wed.	HSEB 5100c at 3:00 pm	Adya Mishra, PharmD (Mentor: Benson Sederholm, PharmD, BCPS)	**Myasthenia Gravis: Where Nerve and Muscle Meet – How Can We Help?** - 0167-0000-13-001-L01 -P/T Pharmacist Objectives: 1. Examine the pathophysiology of myasthenia gravis 2. List medications that can exacerbate myasthenia gravis 3. Compare various treatment options for myasthenia gravis 4. Design a therapeutic plan for the treatment of myasthenia gravis Technician Objectives: 1. Describe the pathophysiology of myasthenia gravis 2. List three medications used to treat myasthenia gravis 3. Understand the role of various treatment options to treat myasthenia gravis
3/27 Wed.	HSEB 5100c at 4:00 pm	Harmony Bowles, PharmD (Mentor: Jeff Gilreath, PharmD, BCOP)	**Tired of being tired: Cancer Related Fatigue** - 0167-0000-13-004-L01 -P/T Pharmacist Objectives: 1. Recognize signs and symptoms of cancer related fatigue (CRF) and how they affect patient quality of life 2. Discuss risk factors that increase the severity or frequency of CRF 3. Compare and contrast commonly used medications in oncology which may contribute to CRF 4. Formulate a treatment plan using both non-pharmacological and pharmacological interventions for patients with CRF 5. Counsel patients on the use and adverse effects of pharmacological agents used to treat CRF Technician Objectives: 1. Recognize signs and symptoms of cancer related fatigue (CRF) 2. List risk factors that increase the severity or frequency of CRF 3. Recognize commonly used medications in oncology which may contribute to CRF 4. List medications that are used to treat CRF
3/28 Thurs.	HSEB 2110 at 3:00 pm	Joshua Pecoraro, PharmD (Mentor: Thu Tran, PharmD)	**First that, now this! Post-Transplant Lymphoproliferative Disorders** - 0167-0000-13-008-L01 -P/T Pharmacist Objectives: 1. Explain the role of Epstein-Barr Virus (EBV), B-cells, and T-cells in PTLD pathogenesis 2. Delineate the pathogenic disparities in early versus late PTLD 3. Differentiate therapeutic strategies for PTLD based on clinical disease characteristics 4. Identify when cytotoxic chemotherapy is warranted for PTLD and synthesize an appropriate regimen and monitoring plan Technician Objectives: 1. Recognize how immunosuppression after transplants places patients at risk for cancer 2. Describe the basic role of T-cells and B-cells in PTLD 3. Explain why only B-cells are sensitive to rituximab

3/28 Thurs.	HSEB 2110 at 4:00 pm	Kinjal Parikh, PharmD (Mentor: Jeff Gilreath, PharmD, BCOP)	**Beyond the Barrier: A Review of Intrathecal Chemotherapy for CNS Involvement of Malignancy** - 0167-0000-13-011-L01 -P/T Pharmacist Objectives: 1. Identify 3 different cancers treated with intrathecal (IT) chemotherapy 2. Differentiate between treatment vs. prophylaxis dosing and frequency of IT chemotherapy 3. Explore 2 routes of IT chemotherapy administration and review associated complications 4. Select appropriate supportive care agents and treatments for IT-related toxicities Technician Objectives: 1. Understand indications, dosing, and frequency of intrathecal (IT) chemotherapy 2. Recognize medications that are safe for IT administration and appropriate precautions utilized 3. Describe potential toxicities and complications of IT chemotherapy
4/10 Wed.	HSEB 2600 at 3:00 pm	Megan Holsopple, PharmD, BCPS (Mentor: Erin Fox, PharmD)	**Biologicals, Biosimilars, & Bioequivalence – The Future of Full Interchangeability** - 0167-0000-13-022-L03 -P/T Pharmacist Objectives: 1. Define and give examples of biosimilar products 2. Apply bioequivalence concepts from FDA to biosimilar products 3. Discuss limitations in determining bioequivalence between biologicals and biosimilars 4. Summarize FDA legislation offering the possibility of full interchangeability for biosimilar medications 5. Provide a recommendation for interchanging a biological and biosimilar product based on available data Technician Objectives 1. Define the following terms: biosimilar and biogeneric 2. Understand bioequivalence conceptsIdentify limitations in the application of bioequivalence concepts to biosimilar products 3. Recognize FDA legislation that impacts determination of biosimilar bioequivalence 4. Recognize FDA legislation that impacts the determination of biosimilar bioequivalence
4/10 Wed.	HSEB 2600 at 4:00 pm	Kelly Fritz, PharmD (Mentor: Dan Sageser, PharmD, BCOP)	**Finding the Right Pair of Genes: Pharmacogenomics for Pharmacists** - 0167-0000-13-009-L01 -P/T Pharmacist Objectives: 1. Define pharmacogenetics and pharmacogenomics and identify the differences between them. 2. Describe three types of mutations and corresponding medication examples that apply to pharmacogenomics. 3. Apply pharmacogenomic knowledge to a breast cancer example. 4. Evaluate the future applications of pharmacogenomics in the practice of pharmacy. Technician Objectives: 1. Define pharmacogenetics and pharmacogenomics. 2. Identify two disease states using genetic information for medication use. 3. Recognize two medications developed from pharmacogenomics.
4/11 Thurs.	HSEB 2120 at 3:00 pm	Kiersten Johnston, PharmD (Mentor: Heather Nyman, PharmD, BCPS)	**CKD-EPI: One Equation to Rule Them All?** - 0167-0000-13-010-L01 -P/T Pharmacist Objectives: 1. Summarize the timeline and progression from clinical use of the Cockcroft-Gault through MDRD and CKD-EPI equations 2. Compare and contrast the Cockcroft-Gault, MDRD, and CKD-EPI equations 3. Apply estimations of renal function to assist with dosing medications 4. Given a patient case, recommend which equation (if any) is most appropriate to estimate renal function Technician Objectives: 1. Recognize why renal function is important to medication therapy 2. State the limitations of using equations to estimate renal function 3. Given an estimate of renal function, identify impaired v. non-impaired function

4/11 Thurs.	HSEB 2120 at 4:00 pm	Matthew Gillespie, PharmD, BCPS (Mentor: Lonnie Smith, PharmD)	**Alemtuzumab: What is Its Role as an Induction Agent in Renal Transplantation?** –0167-0000-13-012-L01 -P/T Pharmacist Objectives: 1. Review the purpose of induction immunosuppression in transplantation 2. Examine the properties of alemtuzumab 3. Appraise current literature on the use of alemtuzumab as an induction agent in renal transplantation 4. Evaluate the place in therapy of alemtuzumab for induction Technician Objectives: 1. Identify current antibody induction agents used in renal transplantation 2. Compare the costs of a typical course of induction with alemtuzumab to other antibody agents 3. Describe how to properly prepare alemtuzumab prior to administration
Saturday Session Requires Online Registration by 4/10/13 to reserve your seat since seating is limited! Go to www.ushp.org to register.			
4/13 Sat.	HSEB 1730 at 8:30 am (please arrive by 8:15 to sign in for this event)	Truong Nguyen, PharmD (Mentor: Karen Gunning, PharmD, BCPS)	**Hey-Yo, ACO, Where Should All This Money Go?** - 0167-0000-13-015-L04 -P/T Pharmacist Objectives: 1. Define Accountable Care Organization (ACO) 3. Distinguish between the different ACO organizational structures and payment models 4. Contrast the differences between a medical home and an ACO 4. Identify concerns with developing a Medicaid ACO 5. Propose strategies where pharmacists can impact the success of the ACO Technician Objectives: 1. Define Accountable Care Organization (ACO) 2. Distinguish between the different ACO organizational structures 3. Propose strategies where pharmacy technicians can impact the success of the ACO
4/13 Sat.	HSEB 1730 at 9:45 am	Diane Ogborn, PharmD (Mentor: Trip Hoffman, PharmD and Lynda Oderda, PharmD)	**Testosterone Therapy: For Grand Slams or for Grandpas?** -- 0167-0000-13-002-L01 -P/T Pharmacist Objectives: 1. Differentiate between normal aging changes and the symptoms of low testosterone 2. Identify the potential benefits of testosterone replacement in senior men 3. Evaluate the risks of testosterone replacement in senior men 4. Select three key counseling points for each dosage form of testosterone 5. Assess the role of the pharmacist in dispensing testosterone replacement therapy Technician Objectives: 1. Identify three potential benefits of testosterone replacement in senior men 2. State one major risk of testosterone replacement in senior men 3. Discuss the risks of testosterone exposure of caregivers, family members, or medical staff 4. List the available dosage forms of testosterone

4/13 Sat.	HSEB 1730 at 11:00 am (Followed by time to purchase lunch on your own.)	Jenni Buu, PharmD (Mentor: Patricia Jerant PharmD, BCPS)	**Mind Over Mother: Use of Antiepileptic Drugs in Women of Child-Bearing Age** - 0167-0000-13-006-L01 -P/T Pharmacist Objectives: 1. Review the risks of antiepileptic drugs (AEDs) in women of child-bearing age and women who are pregnant. 2. Assess possible drug interactions between AEDs and oral contraceptives. 3. Evaluate the latest evidence regarding the safety of AED use in pregnancy. 4. Discuss the safety of AED use in breastfeeding. 5. Demonstrate the role of the pharmacist in recommending appropriate use of AEDs in women of child-bearing age. Technician Objectives: 1. Identify the risks of AEDs in women of child-bearing age and women who are pregnant. 2. Recognize possible drug interactions between AEDs and oral contraceptives. 3. Discuss the safety of AED use in pregnancy and breastfeeding.
4/13 Sat.	HSEB 1730 at 1:00 pm	Emily Hays, PharmD, BCPS (Mentor: Karen Gunning, PharmD, BCPS)	**Improving Transitions of Care with Clinical Pharmacy Services** - 0167-0000-13-003-L04 -P/T Pharmacist Objectives: 1. Develop a systematic approach to identifying patient groups at increased risk of an adverse drug event during care transitions 2. Formulate an appropriate plan of care for transitioning a patient from the inpatient setting back to the community setting 3. Evaluate outcomes associated with patient and caregiver education throughout the continuum of care 4. Justify the need for pharmacy services during care transitions by demonstrating improved quality of care and reduced costs Technician Objectives: 1. Identify patient groups at increased risk of an adverse drug event during care transitions 2. Describe the impact of patient and caregiver education on readmission rates 3. Demonstrate the value of integrating pharmacy services into care transitions
4/13 Sat.	HSEB 1730 at 2:15 pm	Jennifer Skousen, PharmD (VAMC) (Mentor: Terri Evans, PharmD)	**You don't know JAK: New Oral Disease Modifying Therapy for Rheumatoid Arthritis** - 0167-0000-12-018-L01-P/T Pharmacist Objectives: 1. Review the pathophysiology, epidemiology, and clinical course of rheumatoid arthritis 2. Describe current FDA-approved treatment options for rheumatoid arthritis 3. Explain the mechanism of action of Janus Kinase Inhibitors 4. Analyze the evidence from clinical trials leading to FDA approval for tofacitinib 5. Identify and mitigate safety issues with use of this medication including adverse effects, laboratory monitoring requirements, dose adjustments, and drug interactions Technician Objectives: 1. Describe the benefits and risks of this medication 2. Identify dosage forms and storage concerns 3. Recognize serious side effects associated with use of tofacitinib, including black box warnings 4. Understand that a medication guide is required for patients when dispensing this medication
4/13 Sat.	HSEB 1730 At 3:30 pm	Morgan Garcia, PharmD (VAMC) (Mentor: Abby Atherton, PharmD, BCPS, BCPP and Chris Stock, PharmD)	**Pay Attention: Not Only Children Suffer from ADHD** - 0167-0000-12-020-L01-P/T Pharmacist Objectives: 1. Review the diagnostic criteria for ADHD 2. Discuss the impact ADHD has on behaviors, emotions, social life, and academics 3. Identify common comorbid conditions and the possible effects on ADHD treatment 4. Examine medications that could possibly worsen or exacerbate ADHD 5. Explore the non-pharmacologic treatments available 6. Develop knowledge of appropriate dose, side effects, and distinguishing features of the available medications used in the treatment of ADHD Technician Objectives: 1. State the common symptoms of adult ADHD 2. List medications that can be used to treat adult ADHD 3. Review common side effects of the medications used to treat ADHD

4/15 Mon.	HSEB 2600 At 3:00 pm	David Denio, PharmD (Mento: Chris Stock, PharmD)	**Is My Patient a Dope? Implications of Drug Testing** - 0167-0000-12-019-L04-P/T Pharmacist Objectives: 1. Explain the reasoning behind drug testing 2. Identify when drug testing is most valuable 3. Review the most common false readings 4. Compare and contrast testing methods (blood, urine, hair, saliva and EMIT, LC-MS/GC-MS) 5. Discuss implications of test results Technician Objectives: 1. Explain the reasoning behind drug testing 2. Explain when a test may not be useful 3. Identify two medications that can give false positive readings 4. Identify the different modes of drug testing
4/15 Mon.	HSEB 2600 At 4:00 pm	Jessica Hopper, PharmD (Mentor: Melissa Young, PharmD)	**Diabetes Pipeline: Future Tools to Consider Adding to the Tool Box?** - 0167-0000-12-021-L01-P/T Pharmacist Objectives: 1. Identify the physiological basis of new potential medications for diabetes. 2. Analyze the evidence for the new medications and the clinical trials that may get them approved. 3. Identify benefits and risks associated with each new medication. 4. Discuss the role each medication might play in the management of type 2 diabetes. Technician Objectives: 1. Identify two new potential medications for the treatment of type 2 diabetes 2. Understand the niche that each new medication may fill 3. Describe the benefits and risks associated with each new medication 4. Identify dosage form and storage concerns for each of the new medication
4/17 Wed	HSEB 2600 At 3:00 pm	Ryan McTish, PharmD (Mentor: Nick Lonardo, PharmD)	**Anyone Have a Band-Aid?: An Approach to the Management of Surgical Bleeding** - 0167-0000-12-014-L04-P/T Pharmacist Objectives: 1. Describe the physiology of hemostasis and fibrinolysis 2. Analyze the benefits of minimizing surgical blood loss 3. Perform a pre-operative bleeding risk assessment 4. Recommend a safe and effective plan for holding and initiating antithrombotic therapy 5. Evaluate the use of hemostatic medications and blood products to control surgical bleeding Technician Objectives: 1. Discuss the physiological mechanisms of hemostasis 2. Recognize antithrombotic medications that increase risk for surgical bleeding 3. Identify medications used to control surgical bleeding
4/17 Wed.	HSEB 2600 At 4:00 pm	Matthew Rim, PharmD (Mentor: Jim Ruble, PharmD, JD)	**Lessons Learned from the Worst Compounding Misdeeds in 2012: A Review of FDA Regulations, Utah Pharmacy Practice Act and Rule, and USP** - 0167-0000-12-130-L03-P/T Pharmacist Objectives: 1. Evaluate the meningitis outbreak caused by products from New England Compounding Center from a legal standpoint 2. Evaluate FDA regulations and Utah Pharmacy Practice Act and Rule for guidance on compounding 3. Describe USP 797 guidance for sterile compounding and extended dating 4. Recommend the best practice for compounding sterile preparations in hospitals Technician Objectives: 1. Understand the causes of the meningitis outbreak 2. Identify laws and regulations for compounding safety 3. Describe USP 797 guidance for sterile compounding and extended dating. 4. Recognize responsibilities of compounding personnel

Registration, Info & Fees: All classes are one hour. The cost is $45 for pharmacists and $20 for technicians to attend regardless of the number of hours attended, and this fee can be paid online at www.ushp.org. No RSVP is required for the weekday sessions, but registration for the Saturday event on 4/13 is required to ensure a sufficient number of handouts are printed. Seating is limited. To receive CE (Continuing Education) credit, you must be a USHP member. If you are interested in joining USHP, please visit our website www.ushp.org and join online.

Credit Hours: Through attending this program, up to 22.0 contact hours (0.22 CEUs) can be attained. Participants must be a member of USHP, sign in at each program, complete evaluation forms, complete and pass the post-test with a 75% or better, and complete an Attendance Verification Form at the conclusion of all programs. A statement of credit will be issued to participants within 60 days of the completion of the series.

Special Accommodations: If you are in need of any special accommodation, please contact us a minimum of 2 days prior to the program in order to make arrangements at the below listed contact.

Commercial Support: No commercial support was received for this program.

Questions? Contact Shantel Mullin at shantel.mullin@hsc.utah.edu or (801) 587-3966.

The Utah Society of Health-System Pharmacists is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.