

**The Utah Society of Health System Pharmacists and University of Utah Hospitals and Clinics Present:  
Spring 2017 Resident Continuing Pharmacy Education Series**

**Target Audience:** Pharmacists, pharmacy technicians, and pharmacy students

<b>Date</b>	<b>Time &amp; Location</b>	<b>Presenter</b>	<b>Title, Objectives &amp; ACPE UAN</b>
3/14 Tue.	HSEB 2600 at 3:00 pm	Meryl Biksacky, PharmD  Mentor: Elyse A. MacDonald, PharmD, MS, BCPS	<p style="text-align: center;"><b>Drug Information Pearls – REMS, Shortages, and VAERS, Oh My! (0.1CEU) A-0167-0000-17-001-L03-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>Describe 3 basic components of a medication guide required by law, and identify 2 ways medication guide components ensure patient safety.</li> <li>Defend the importance of a Risk Evaluation and Mitigation Strategies (REMS) program for an example drug and apply this process to other drugs in the future.</li> <li>Compare and contrast drug shortage information provided by FDA and ASHP.</li> <li>Identify adverse events required by law to be reported to the Vaccine Adverse Event Reporting System (VAERS).</li> <li>Differentiate between VAERS data and data from observational studies designed to investigate reported post-marketing vaccine adverse events.</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>Indicate 3 basic components of a medication guide required by law.</li> <li>Identify whether a specific drug has a REMS program.</li> <li>Compare and contrast the methods for reporting drug shortages to FDA and ASHP.</li> <li>Describe 3 ways to report a vaccine related adverse event to FDA.</li> </ol>
3/14 Tue.	HSEB 2600 at 4:00 pm	Kaitlyn Brown, PharmD  Mentor: Barbara Crouch, PharmD, MSPH	<p style="text-align: center;"><b>Drug-Induced Seizures: Common Causes and Management Principles (0.1CEU) A-0167-0000-17-002-L01-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>Compare the pathophysiology of idiopathic seizures and drug-induced seizures.</li> <li>Identify specific drugs and medication classes most commonly associated with seizures at therapeutic doses and in overdose.</li> <li>Evaluate the efficacy of specific anticonvulsants for treatment of drug-induced seizures.</li> <li>Examine the risks associated with administration of specific anticonvulsants for treatment of drug induced seizures.</li> <li>Develop a pharmaceutical care plan for managing drug-induced seizures.</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>List three drugs associated with seizures in overdose.</li> <li>Review available formulations of benzodiazepines.</li> <li>Differentiate between phenytoin and fosphenytoin.</li> </ol>
3/16 Thur.	HSEB 2600 at 3:00 pm	Morgan Ratté, PharmD  Mentor: Jennifer Babin, PharmD, BCPS	<p style="text-align: center;"><b>When the Going Gets Tough: Managing Opioid-Induced Constipation (0.1CEU) A-0167-0000-17-003-L01-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>Describe the pathophysiology of opioid-induced constipation and recognize contributing factors.</li> <li>Evaluate the use of targeted therapies for management of opioid-induced constipation.</li> <li>Apply evidence-based practices to formulate a treatment strategy for opioid-induced constipation.</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>Define opioid-induced constipation and recognize contributing factors.</li> <li>List brand and generic names of targeted therapies for opioid-induced constipation.</li> <li>Identify the dosage forms and appropriate storage of targeted therapies for opioid-induced constipation.</li> </ol>

3/16 Thur.	HSEB 2600 at 4:00 pm	Anthony Trovato, PharmD  Mentor: Erin Bailey, PharmD, BCOP	<p align="center"><b>Vaccines in Patients with Functional and Anatomical Asplenia (0.1CEU) A-0167-0000-17-004-L01-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify what conditions constitute anatomical and functional asplenia.</li> <li>2. Review which vaccines are recommended in asplenic patients.</li> <li>3. Recognize which vaccines should not be given simultaneously in asplenic patients.</li> <li>4. Compare vaccine timing recommendations in asplenic patients from various organizations.</li> <li>5. Design vaccine schedules for 2 asplenic patients.</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify proper storage and preparation of the vaccines used in asplenic patients.</li> <li>2. Recognize which vaccines should not be given simultaneously in asplenic patients.</li> <li>3. Distinguish which brand name vaccines correspond to the appropriate generic vaccines.</li> </ol>
3/18 Sat.	HSEB 2600 at 9:00 am	Irene Pan, PharmD  Mentor: Laura Shane McWhorter, PharmD, BCPS, BC-ADM, CDE, FASCP, FAADE	<p align="center"><b>Time to Get Psyched: An Overview of Old and New Antipsychotic Agents (0.1CEU) A-0167-0000-17-005-L01-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Compare and contrast first generation and second generation antipsychotic agents and their mechanisms of action.</li> <li>2. Describe common side effects and warnings associated with antipsychotic agents.</li> <li>3. Analyze evidence for the use of the newest FDA-approved antipsychotic agents.</li> <li>4. Select appropriate pharmacotherapy based on co-morbidities, side effects, formulation and monitoring requirements.</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify common side effects for first generation antipsychotics and second generation antipsychotics.</li> <li>2. List brand and generic names for newly approved antipsychotic agents.</li> <li>3. Compare the cost of antipsychotic medications.</li> </ol>
3/18 Sat.	HSEB 2600 at 10:00 am	Emma Jones, PharmD  Mentor: Dan Witt, PharmD, FCCP, BCPS	<p align="center"><b>aDAPtIng to the New Guideline: Updates on Duration of Dual Antiplatelet Therapy (0.1CEU) A-0167-0000-17-006-L01-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify patients indicated for DAPT.</li> <li>2. Compare and contrast the various P2Y<sub>12</sub> inhibitors.</li> <li>3. Assess the appropriateness of DAPT based on the current literature.</li> <li>4. Accurately calculate an individualized DAPT score.</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Recognize dosing regimens of P2Y<sub>12</sub> inhibitors.</li> <li>2. Define shorter, standard and longer duration of DAPT.</li> <li>3. Select the corresponding generic name of P2Y<sub>12</sub> inhibitor given the brand name.</li> </ol>
3/18 Sat.	HSEB 2600 at 11:00 am	Heidi Pigott, PharmD  Mentors: Christine Jamjian, PharmD, AAHIVP	<p align="center"><b>The Fall of the “EFV”pire and the “Integrase”tion of INSTIs: Updates to the HIV Guidelines (0.1CEU) A-0167-0000-17-007-L02-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Review updates to the DHHS HIV guidelines for Treatment-Naïve.</li> <li>2. Compare and contrast newly recommended regimens with alternative regimens.</li> <li>3. Apply patient-specific criteria to select an appropriate HIV regimen.</li> <li>4. Design a comprehensive monitoring plan for a patient with HIV.</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify at least 3 single tablet regimens.</li> <li>2. List 1 benefit with new drug, tenofovir alafenamide.</li> <li>3. Recall which regimens can be switched to tenofovir alafenamide.</li> <li>4. Employ strategies to help switch patients to newly recommended regimens from alternative regimens.</li> </ol>

3/21 Tue	HSEB 2110 at 3:00 pm	Jessica Carey, PharmD  Mentor: Teshia Sorensen, PharmD, BCPS	<p style="text-align: center;"><b>Pulmonary Arterial Hypertension (PAH) (0.1CEU) A-0167-0000-17-008-L01-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Define the hemodynamic parameters used to diagnose PAH.</li> <li>2. Recognize screening and monitoring parameters for PAH specific therapy.</li> <li>3. Demonstrate knowledge of safety measures for administration of PAH specific therapy in the inpatient setting.</li> <li>4. Formulate an appropriate treatment plan for a Group 1 PAH patient naive to PAH specific therapy.</li> <li>5. Identify two FDA-labeled indications for riociguat (Adempas).</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. List PAH specific therapy agents included in R.E.M.S Programs.</li> <li>2. Distinguish PAH specific therapy agents by mechanism of action.</li> <li>3. Identify two FDA-labeled indications for riociguat (Adempas).</li> </ol>
3/21 Tue	HSEB 2110 at 4:00 pm	Laura Steffens, PharmD  Mentor: Russell Benefield, PharmD, BCPS	<p style="text-align: center;"><b>Busting Through the Blood Brain Barrier: Antibiotics in Bacterial Meningitis Therapy (0.1CEU) A-0167-0000-17-009-L01-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. List several barriers to antibiotic penetration into the central nervous system for treatment of infection.</li> <li>2. Describe the physiology of various areas of the brain in the setting of meningitis compared to an uninflamed state.</li> <li>3. Evaluate a specific antibiotic's potential to cross the blood brain barrier based on its physiochemical properties.</li> <li>4. Analyze literature critically with regards to methodological strengths and weaknesses of cerebral spinal fluid pharmacokinetic studies and how this translates to clinical application.</li> <li>5. Develop clinical recommendations for antibiotic treatment for a patient with bacterial meningitis.</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify antibiotics that come as premixed bags, with a mini-bag or Advantage system, or need to be compounded by the IV center.</li> <li>2. Demonstrate the importance of timing of antibiotic administration in patients presenting with bacterial meningitis and medication delivery implications.</li> <li>3. Recognize look-alike sound-alike issues with the cephalosporin antibiotic drug class to avoid medication errors.</li> </ol>
3/23 Thu	HSEB 2110 at 3:00 pm	Leila Khurshid, PharmD  Mentor: Jeanette Bean, PharmD, BCPS	<p style="text-align: center;"><b>Weighing In: Enoxaparin and DOAC Dosing in Obesity (0.1CEU) A-0167-0000-17-010-L01-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Recognize and define the pharmacokinetic changes in obesity.</li> <li>2. Evaluate the risks of inadequately dosing enoxaparin or DOACs in an obese patient.</li> <li>3. Apply dosing and monitoring strategies for enoxaparin in an obese patient.</li> <li>4. Outline evidence and recommendations regarding direct oral anticoagulants (DOACs) in obesity.</li> <li>5. Formulate an appropriate treatment plan given a patient case.</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Recognize and define the pharmacokinetic changes in obesity.</li> <li>2. Explain the significance of under-dosing a patient with an anticoagulant.</li> <li>3. Estimate an appropriate dose of enoxaparin given a patient case.</li> <li>4. Evaluate the role of direct oral anticoagulants (DOACs) in obesity.</li> <li>5. Interpret a patient case to determine risk factors and potential benefit of anticoagulation.</li> </ol>

3/23 Thu	HSEB 2110 at 4:00 pm	Darren Seegmiller, PharmD  Mentor: Braden Adamson, PharmD	<p style="text-align: center;"><b>2016 IDSA Guidelines Update: HAP/VAP. <i>Hasta la vista, HCAP!</i> (0.1CEU) A-0167-0000-17-011-L01-P/T</b></p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Outline the recent clinical recommendations provided in the 2016 HAP/VAP guidelines.</li> <li>2. Identify the risk factors associated with multi drug resistant pathogens (MDR) in patients with HAP/VAP.</li> <li>3. Design an empiric medication regimen for a patient with HAP/VAP.</li> <li>4. Assess the need for antibiotic de-escalation and discontinuation.</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Compare and contrast medications available to treat patients with HAP/VAP.</li> <li>2. Define the following terms: HAP, VAP, empiric antibiotic therapy, de-escalation.</li> <li>3. Identify two common pathogens empiric therapy is directed towards.</li> </ol>
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**\*A=application-based CE**

**Registration, Info & Fees:** All presentations are one hour. The cost is \$45 for pharmacists and \$15 for technicians to attend regardless of the number of hours or sessions attended, and this fee can be paid online at [www.ushp.org](http://www.ushp.org). No RSVP is required for the weekday sessions, but registration for the Saturday event on March 18, 2017 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](http://www.ushp.org) and join online.

**Credit Hours:** Through attending this program, up to 11.0 contact hours (0.11 CEUs) can be attained. Participants must be a member of USHP, sign in at each program, register and pay for the series, and complete evaluation forms. You must register and pay for the CE Series by 3/24/17. A link to the evaluations will only be sent to those who have registered and paid beginning on 3/25/17. Electronic evaluations must be completed by April 14, 2017 to receive CE credit

**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 Sara deHoll ([sara.hiller@hsc.utah.edu](mailto:sara.hiller@hsc.utah.edu)) or Stacy Prelewicz ([stacy.prelewicz@hci.utah.edu](mailto:stacy.prelewicz@hci.utah.edu))



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