

**The Utah Society of Health System Pharmacists and University of Utah Hospitals and Clinics Present:
Spring 2019 Resident Continuing Pharmacy Education Series**

Target Audience: Pharmacists, pharmacy technicians, and pharmacy students

Date	Time & Location	Presenter	Title, Objectives & ACPE UAN
4/6 Sat.	HSEB 4100B 8:00 am	Camryn Froerer, PharmD Mentor: Jenni Buu, PharmD, BCACP <i>University of Utah College of Pharmacy</i>	<p style="text-align: center;">Wait, there are new cholesterol guidelines? 2018 Cholesterol Guideline Update (0.1CEU)A-0167-0000-19-005-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Contrast key differences between the 2013 and 2018 cholesterol guidelines. 2. Discuss new features of the 2018 cholesterol guidelines including very high risk for future ASCVD events, diabetes-specific risk enhancers. 3. Apply the new recommendations from the 2018 cholesterol guidelines to specific patient case scenarios. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Differentiate antihyperlipidemic agents including statins, PCSK-9 inhibitors, and ezetimibe. 2. Identify which antihyperlipidemic agents may be cost prohibitive for patients. 3. List side effects of the newer antihyperlipidemic medications.
4/6 Sat.	HSEB 4100B 9:00 am	Joe Windscheffel, PharmD Mentor: Adam Smith PharmD, BCCP <i>Clinical Pharmacist, Cardiology University of Utah Health</i>	<p style="text-align: center;">Omega 3 Fatty Acids: Fishy News or Breakthrough Clues? (0.1CEU)A-0167-0000-19-006-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Recognize purified eicosapentanoic acid (EPA) products from EPA+docosahexaenoic acid (EPA+DHA) products. 2. Appraise literature regarding cardiovascular outcomes with omega 3 fatty acid compounds. 3. Apply omega 3 fatty acid evidence to a patient case for cardiovascular risk reduction in patients with hyperlipidemia. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Distinguish prescription omega 3 fatty acid products from omega 3 fatty acid dietary supplements. 2. Identify appropriate uses for omega 3 fatty acid products. 3. Discuss appropriate dosing of icosapent ethyl and EPA+DHA products.
4/6 Sat	HSEB 4100B 10:30 am	Eric Drab, PharmD Mentor: Lisa Arrigo, RPh, BCPS <i>Clinical Pharmacist, Cardiology St. Mark's Hospital</i>	<p style="text-align: center;">An Aspirin A Day Keeps the Doctor Away? Updates On Aspirin Use (0.1CEU)A-0167-0000-19-007-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Identify appropriate candidates for aspirin therapy based on recent literature. 2. Interpret results of recent literature involving aspirin use. 3. Compare the benefits and risks of aspirin as primary prevention in different populations. 4. Review current recommendations for aspirin therapy in special populations such as stroke, prosthetic heart valves, and orthopedic DVT prophylaxis. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Differentiate between primary and secondary prophylactic use of aspirin. 2. Recognize differences in dosing of aspirin based on indication. 3. Review appropriate indications for aspirin use.

4/6 Sat.	HSEB 4100B 11:30 am	Rutvik Joshi, PharmD Mentor: John Dechand, PharmD <i>Clinical Pharmacist, Cardiology University of Utah Health</i>	<p style="text-align: center;">Time to Iron It Out: Fe²⁺ Replacement in Chronic Heart Failure (0.1CEU)A-0167-0000-19-008-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the pathophysiology of iron deficiency anemia. 2. Interpret the most commonly used laboratory values in iron deficiency anemia. 3. Examine current evidence-based literature for the appropriate use of IV iron in patients with heart failure. 4. Formulate evidence-based recommendations for the appropriate use of IV iron in patients with heart failure. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the available intravenous iron products currently used in clinical practice. 2. Identify appropriate routes of administration of iron products. 3. Examine important limitations to the feasibility of IV iron replacement in the outpatient setting.
4/9 Tues.	HSEB 4100B 3:00 pm	Jared Baxa, PharmD Mentor: Jessica Carey, PharmD <i>Clinical Pharmacist, Cardiology University of Utah Health</i>	<p style="text-align: center;">The Blood Thinning “Dual”: Dual or Triple Antithrombotic Therapy in Patients with Recent Cardiac Stent Placement and Atrial Fibrillation? (0.1CEU)A-0167-0000-19-009-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Recognize factors that contribute to bleeding and clot risk in patients post-cardiac stent placement and with a diagnosis of atrial fibrillation. 2. Compare and contrast data from available primary literature. 3. Examine how primary literature has influenced current guideline recommendations. 4. Design appropriate antithrombotic therapy for specific patient case scenarios. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Recognize antiplatelet and anticoagulant medications. 2. Assess which antithrombotic agents may be cost prohibitive to patients. 3. Identify differences in antithrombotic regimens in patient scenarios.
4/9 Tues.	HSEB 4100B 4:00 pm	Anna Arocho, PharmD Mentor: Caitlin Oderda, PharmD, BCPS <i>Pharmacy Clinical Manager St. Mark’s Hospital</i>	<p style="text-align: center;">Special K: The Triple Threat Wonder of Ketamine (0.1CEU)A-0167-0000-19-010-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Evaluate which route(s) of administration of ketamine provides better bioavailability. 2. Interpret ketamine’s use in treatment resistant depression. 3. Analyze ketamine’s use in multimodal pain modalities, specifically as an adjunct to opioid therapy. 4. Examine ketamine’s use in treatment of neuropathic pain. 5. Recognize the potential adverse reactions associated with ketamine use. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Differentiate between dosing of ketamine for analgesia and anesthetic goals. 2. Describe adverse reactions associated with ketamine use. 3. Recognize ketamine is considered a high risk medication.

4/11 Thurs.	HSEB 4100B 3:00 pm	Breanna Clark, PharmD Mentor: Lonnie Smith, PharmD, FAST <i>Pharmacy Manager, Specialty Pharmacy Services University of Utah Health</i>	<p style="text-align: center;">Lifesaving qualities of a deadly infection: Transplanting HCV positive organs into naïve recipients (0.1CEU)A-0167-0000-19-011-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Explain the trends of HCV infection and the impact of HCV on the organ donor pool. 2. Interpret the laboratory tests utilized for donor designation and determination of HCV positivity. 3. Evaluate the ethical considerations in transplanting an organ from an HCV positive donor into an HCV naïve recipient. 4. Describe the advancements in HCV treatment which have allowed for more successful treatment of HCV. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Explain the potential impact utilization of organs from HCV positive donors could have on supply and demand of organs. 2. Evaluate the ethical considerations in transplanting an organ from an HCV positive donor into an HCV naïve recipient. 3. Describe the impact organs from HCV positive donors may have on overall healthcare expenditures. 4. Predict the barriers to HCV medication therapies patients may face after transplant.
4/11 Thurs.	HSEB 4100B 4:00 pm	Elizabeth Kramer, PharmD Mentors: Russell Benefield, PharmD, BCPS – AQ ID <i>Clinical Pharmacist, Infectious Disease University of Utah Health</i> Tonya Smith, PharmD, BCPS <i>Clinical Pharmacist, Oncology University of Utah Health</i>	<p style="text-align: center;">ESBL Live: Meropenem versus Piperacillin/Tazobactam, the ultimate battleTreatment of Bacteremia Caused by ESBL-producing Enterobacteriaceae Update (0.1CEU)A-0167-0000-19-012-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Define Enterobacteriaceae resistance mechanisms to beta-lactams. 2. Describe changes in microbiology laboratory methods that influence the interpretation of sensitivity reports for ESBL-producing organisms. 3. Differentiate between ESBL, CRE, and AmpC producing Enterobacteriaceae. 4. Evaluate a culture and sensitivity report to determine the presence of an ESBL. 5. Design a treatment plan for a patient with bacteremia from and ESBL-producing organism. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Identify drugs commonly reserved for ESBL-organisms. 2. List look-alike sound-alike medications with drugs commonly reserved for ESBL-organisms 3. Given a patient case, calculate the amount of medication needed to prepare a dose of a medication used for ESBL-producing organism.
4/13 Sat.	HSEB 4100B 8:00 am	Natalie Morlan, PharmD Mentor: Laura Shane- McWhorter, PharmD, BCPS, BC-ADM, CDE, FASCP, FAADE <i>Professor (Clinical) Emeritus of Pharmacotherapy University of Utah Health</i>	<p style="text-align: center;">Are Essential Oils Really Essential? (0.1CEU)A-0167-0000-19-013-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Discuss the epidemiology of and trends in essential oil use. 2. Identify issues regarding the regulation and FDA classification of essential oils. 3. Formulate a strategy for locating and interpreting literature on the safety and efficacy of essential oils. 4. Provide adequate patient counseling regarding the use of essential oils. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Recognize commonly used essential oils. 2. Discuss current law regarding technician counseling on essential oil use. 3. Provide adequate patient counseling regarding the use of essential oils under the direction of a pharmacist.

4/13 Sat.	HSEB 4100B 9:00 am	Meredith Oliver, PharmD Mentor: Hanna Raber, PharmD, BCPS, BCACP <i>Clinical Pharmacist, Ambulatory Care University of Utah Health</i>	<p style="text-align: center;">Is 40 the new 20? Updates on HPV Vaccination. (0.1CEU)A-0167-0000-19-014-L06-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Recall the types of warts and cancers for which the 9-valent HPV vaccine has activity. 2. Analyze the safety and effectiveness of the 2-, 4- and 9-valent HPV vaccines throughout history. 3. Evaluate the literature to support or refute the FDA’s expanded age indication for the 9-valent PHV vaccine in your patient. 4. Discuss strategies to address reimbursement and prior authorization processes related to the 9-valent HPV vaccine. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Identify the FDA’s expanded age indication for the 9-valent HPV vaccine. 2. Describe the appropriate vaccine schedule for the 9-valent HPV vaccine. 3. Formulate strategies to address reimbursement and prior authorization processes related to the 9-valent HPV vaccine.
4/13 Sat.	HSEB 4100B 10:00 am	Jeremy Delor, PharmD Mentor: Christine Jamjian, PharmD, AAHIVP <i>Clinical Pharmacist, HIV University of Utah Health</i>	<p style="text-align: center;">Where in the World is Carmen Sandiego’s YF-Vax? Reviewing the management of travel-related illness. (0.1CEU)A-0167-0000-19-015-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Identify the appropriate immunization needs for a patient based on health characteristics and travel itinerary. 2. Outline the epidemiology, diagnosis and treatment of key travel-related illness. 3. Develop a treatment plan for a patient with traveler’s diarrhea using clinical research and guidelines. 4. Formulate an appropriate malaria prophylaxis regimen based on given patient characteristics. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe disease transmission risks related to travel as well as general preventative measures against these risks. 2. Propose appropriate over-the-counter therapies for mild travel-related illness. 3. Illustrate the various resources available to patients regarding preparations for prevention of illness during travel.
4/13 Sat.	HSEB 4100B 11:30 am	Joanne Kuznicki, PharmD Mentor: Kristine Ferreria, PharmD, BCPS <i>Clinical Pharmacist, Internal Medicine University of Utah Health</i>	<p style="text-align: center;">To the Moon Face and Back: Avoiding Complications of Long-term Corticosteroids (0.1CEU)A-0167-0000-19-016-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Compare and contrast the clinical differences between corticosteroid medications. 2. Describe the pathophysiology of common adverse effects associated with long-term corticosteroid use. 3. Develop a pharmacologic plan to prevent adverse effects associated with long-term corticosteroid use. 4. Assess for pertinent interactions between corticosteroids and prescription or over-the-counter medications. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Differentiate between the various dosage forms of corticosteroid medications. 2. List 3 common adverse effects that occur with long-term corticosteroid use. 3. Given a patient profile, identify the preventative medications that a long-term corticosteroid patient would be on.

4/13 Sat.	HSEB 4100B 12:30 pm	Lillan Clark, PharmD/MBA Mentor: Logan Kelly, PharmD, BCPS <i>Clinical Pharmacist,</i> <i>Neurology</i> <i>University of Utah</i> <i>Health</i>	<p style="text-align: center;">“High”lighting abuse concerns with gabapentinoids</p> <p style="text-align: center;">(0.1CEU)A-0167-0000-19-017-L03-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Review clinical uses for gabapentinoids. 2. Discuss the differences between commonly used gabapentinoids. 3. Assess the risk potential for gabapentin use. 4. Differentiate between state and federal criteria for drug scheduling. 5. Compare gabapentin scheduling strategies between various states. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Identify commonly used gabapentinoids. 2. Recognize the adverse effects of gabapentinoids. 3. Evaluate the differences in federal vs. state controlled substance classification.
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***A=application-based CE**

Registration, Info & Fees: All presentations are one hour. The cost is \$55 for pharmacists and \$15 for technicians to attend regardless of the number of hours or sessions attended. You may also pay \$10 for every individual CE you attend. This fee can be paid online at www.ushp.org. No RSVP is required for the weekday sessions, but registration for the Saturday events on April 6, 2019 and April 13, 2019 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.

Webex Meeting Information

Please see the USHP website

Credit Hours: Through attending this program, up to 13.0 contact hours (0.13 CEUs) can be attained. Participants must be a member of USHP, sign in at each program, register and pay for the series or individual sessions, obtain individual session CE codes, and complete evaluation surveys for each day attended. The links to these surveys are available on the USHP website and must be completed within 7 days of each day of CE attendance. A participation code will be required to get credit for each day. You must register and pay for the CE Series by 4/14/19.

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.deholl@utah.edu), Stacy Prelewicz (stacy.prelewicz@hci.utah.edu), or Emma Jones (emma.jones@hci.utah.edu)



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