

**The Utah Society of Health System Pharmacists, University of Utah Hospitals and Clinics Present:
2015 Resident Continuing Pharmacy Education Series**

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

Date	Time & Location	Presenter	Title, Objectives & ACPE UAN
3/10 Tue.	HSEB 4100B at 3:00 pm	Brian K. Fung, PharmD, Mentors: Adam Bress, PharmD, MS and Daniel M. Witt, PharmD, FCCP, BCPS	<p style="text-align: center;">Optimizing Fate: Pharmacogenomics in Clinical Practice – 0167-0000-15-200-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the utility of the CPIC guidelines and their recommendations 2. Apply the CPIC guidelines to two medications that are actionable if genetic information is available 3. Assess the current barriers for implementing pharmacogenomics into clinical practice 4. Propose a method for leveraging informatics to facilitate the adoption of pharmacogenomics <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Recognize that genetic variations can influence how individuals respond to drugs. 2. Recognize that drug dosing may need to be tailored for certain medications based on an individual's genetic variation. 3. Identify two medications that are actionable if genetic information is available.
3/10 Tue.	HSEB 4100B at 4:00 pm	Bhanupriya Sirandas, PharmD Mentor: Nicole Kenyon, PharmD, BCPS	<p style="text-align: center;">From Chronic to Curable: Treating Hepatitis C in Post Transplant Recipients – 0167-0000-15-201-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Discuss the importance of treating recurrent Hepatitis C in post transplant patients 2. Identify current targets of therapies utilized to treat Hepatitis C in post transplant patients 3. Compare and contrast past and current therapies for Hepatitis C in post transplant patients 4. Develop a treatment plan for a post-transplant recipient with Hepatitis C <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Identify various genotypes of Hepatitis C 2. Recognize testing used to diagnose Hepatitis C 3. List a consequence of Hepatitis C recurrence post liver transplant
3/12/ Thur.	HSEB 2110 At 3:00 pm	Trang Au, PharmD Mentor: Steve Kirkegaard, PharmD	<p style="text-align: center;">Nauseated, Not Psychotic: Novel Use for Olanzapine – 0167-0000-15-003-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe chemotherapy-induced nausea and vomiting (CINV) 2. Review the clinical uses of olanzapine 3. Evaluate evidence for olanzapine for CINV 4. Design an anti-emetic regimen for a patient using the National Comprehensive Cancer Network guidelines <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Review the formulations of olanzapine 2. Differentiate FDA-approved indications versus off- label uses for olanzapine 3. Compare the cost of olanzapine with other anti-emetic agents

3/12/ Thur.	HSEB 2110 At 4:00 pm	Jordan McPherson, PharmD Mentor: Sara Hiller, PharmD	<p style="text-align: center;">I Know What You Approved Last Summer: 2014 New Oncology Drug Update – 0167-0000-15-208-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Identify the FDA approved indications of the oncology drugs approved in 2014 2. Describe the mechanism of action and adverse events associated with the newly approved oncology drugs 3. Evaluate potential drug interactions for the newly approved oncology drugs 4. Distinguish the place in therapy of the newly approved oncology drugs as related to current standards of care <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Match brand names with generic names for the oncology drugs approved in 2014 2. Recognize product formulations and costs of the newly approved oncology drugs 3. Describe proper storage and preparation procedures of the newly approved oncology drugs
3/17 Tue.	HSEB 4100B at 3:00 pm	John Schoen, PharmD Mentors: Erin Fox, PharmD Russell Benefield, PharmD	<p style="text-align: center;">Weight-Based Medications in Obesity: Should We Scale Back? – 0167-0000-15-205-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the pharmacokinetics changes that occur in obesity 2. Discuss the importance of weight-based dosing in obesity 3. Formulate a strategy to determine how to appropriately dose a weight-based medication for an obese patient 4. Select an appropriate body weight for the medication(s) discussed in the case example(s) <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Discuss the importance of weight-based dosing in obesity 2. Describe the different body weights used to dose weight-based medication 3. List 5 medications that are dosed based on body weight
3/17 Tue.	HSEB 4100B at 4:00 pm	Jessica Louie, PharmD Mentor: Donald Alexander, PharmD	<p style="text-align: center;">Filtering out the waste: exploring the utility of renal biomarkers in critically ill – 0167-0000-15-204-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the tools for assessing renal function in the past, present and future 2. Differentiate advantages and disadvantages of renal biomarkers 3. Explain why appropriate estimates of renal function are important to medication dosing 4. Select an appropriate renal function assessment plan for a critically ill patient <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the tools for assessing renal function in the past, present and future 2. List biomarkers available for assessing renal function 3. Identify why renal function is important to medication dosing
3/19 Thur.	HSEB 3515B at 3:00 pm	Hanna Bailey, PharmD Mentor: Jeffrey Gilreath, PharmD, BCOP	<p style="text-align: center;">Let's Iron Out the Kinks in Thalassemia – 0167-0000-15-206-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the two most common thalassemia forms based on genetic abnormalities 2. Identify organs affected by iron overload 3. Compare and contrast currently available iron chelators 4. Construct a treatment strategy for a patient with iron overload <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Review currently available iron chelating agents 2. Compare different administration methods for each iron chelator 3. Recognize current issues involving procurement of iron chelators

3/19 Thur.	HSEB 35150B at 4:00 pm	Natalee Tanner, PharmD Mentor: Elizabeth Young, PharmD, BCPS	<p style="text-align: center;">TSOACs in Cancer: Hop aboard the thrombus – 0167-0000-15-2007-L01-P/T</p> <p><u>Pharmacist Objectives</u></p> <ol style="list-style-type: none"> Review the effect of active malignancies on a patient’s coagulopathy Assess guideline recommendations for venous thromboembolism (VTE) treatment in cancer patients with active malignancies Analyze the risk and benefits associated with the therapeutic options for VTE treatment in cancer patients with active malignancies Discuss the available data for the target specific oral anticoagulants (TSOACs) for VTE treatment in cancer patients with active malignancies <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> Identify the medications used for the VTE in cancer patients with active malignancies Review the proper storage, handling, and dispensing of the therapeutic options for VTE in cancer patients with active malignancies Recognize cost differences between TSOACs and other anticoagulant options
3/24 Tue.	HSEB 4100B at 3:00 pm	Lisa Hong, PharmD, BCPS Mentors: Chad Condie, PharmD Benson Sederholm, PharmD, BCPS	<p style="text-align: center;">Orthostatic Hyp-“Whoa!”-tension: Exploring Updates in Management – 0167-0000-15-203-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> Describe the pathophysiology of orthostatic hypotension Identify etiologies of orthostatic hypotension and determine medication-related causes Discuss the pharmacologic and non-pharmacologic options utilized in the treatment of orthostatic hypotension Given a patient case, evaluate treatment options and formulate a plan for management of orthostatic hypotension <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> Define orthostatic hypotension and list signs and symptoms consistent with this diagnosis Explain non-pharmacologic options and recognize agents used to treat orthostatic hypotension Identify common side effects associated with medications used to treat orthostatic hypotension
3/24 Tue.	HSEB 4100B at 4:00 pm	Jennifer Babin, PharmD, BCPS Mentor: Krystal Moorman, PharmD, BCPS	<p style="text-align: center;">Wide Awake: Management of Insomnia – 0167-0000-15-202-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> Describe non-pharmacologic treatment options for insomnia Compare different medication classes used in the treatment of insomnia Analyze evidence for the use of the newest FDA-approved medication for insomnia, suvorexant Choose appropriate pharmacotherapy for insomnia given a patient scenario <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> List three over-the-counter and prescription medications used to treat insomnia Describe non-pharmacologic treatment options for insomnia Compare the cost of suvorexant to the cost of other medications used to treat insomnia
3/26 Thur.	HSEB 4100B at 3:00 pm	Ashley Kosloske, PharmD Mentor: Heidi Simons, PharmD	<p style="text-align: center;">Not What you Were Expecting: Understanding Pharmacy’s Role in Managing Obstetric Emergencies – 0167-0000-15-210-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> Describe the physiologic changes that occur during pregnancy that can contribute to the development of obstetric emergencies. Differentiate between the preferred antihypertensive agents used in treating pre-eclampsia. Compare and contrast the role of magnesium sulfate versus other anticonvulsants in the management of eclampsia in pregnancy. Select an appropriate treatment plan for a patient that presents with postpartum hemorrhage. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> State the role of methotrexate in ectopic pregnancy and recall the precautions that must be considered when handling this medication. List two potential adverse outcomes that can result from untreated pre-eclampsia. Describe the proper storage, preparation, and administration of the common medications used in the management of postpartum hemorrhage.

3/26 Thur.	HSEB 4100B at 4:00 pm	Anastasia Diamantopoulos, PharmD Mentor: Tyler Sledge, PharmD	<p style="text-align: center;">Not your Run of the Mill Emergency: ROTEM® for Management of Bleeding – 0167-0000-15-209-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the methodology and clinical application of ROTEM® analysis 2. Illustrate the difference between conventional anticoagulation tests and ROTEM 3. Interpret ROTEM® results with respect to drug therapy 4. Assess therapeutic strategies in the management of patients based on ROTEM® results <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe why ROTEM® test is useful 2. List other tests utilized in trauma to assess bleeding 3. Explain common pharmacologic interventions that may affect the results of ROTEM
4/07 Tue.	HSEB 4100B at 3:00 pm	Erica Marini, PharmD Mentor: Linda Tyler, PharmD, FASHP	<p style="text-align: center;">The Law and Ethics of an Ebola Cure – 0167-0000-15-211-L03- P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Analyze the legal measures that incentivize manufactures to develop treatments for rare diseases. 2. Describe reasons why manufacturers did not develop an Ebola treatment prior to the 2014 outbreak. 3. Analyze the ethical considerations involved in drug development during a global outbreak of disease. 4. Evaluate the appropriateness of use of un-approved treatments during the Ebola outbreak. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Recognize laws that influence drug development for rare diseases. 2. Describe the purpose of experimental trials in drug development. 3. Discuss the potential dangers of using un-approved treatments.
4/07 Tue.	HSEB 4100B at 4:00 pm	Tonya Smith, PharmD Mentor: Christine Jamjian, PharmD	<p style="text-align: center;">One Pill Fits All: Past, Present, and Future of Single Tablet Regimens for the Treatment of HIV – 0167-0000-15-212-L02-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the history and outgoing burden of human immunodeficiency virus (HIV). 2. Recall the four FDA-approved single-tablet regimens (STRs) used to treat HIV. 3. Compare and contrast potential drug-drug interactions, side effects, food requirements, and cost of the four STRs. 4. Select an appropriate STR for a patient diagnosed with HIV. <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Understand the burden of HIV in the United States. 2. Recognized brand and generic names of the four current STRs used to treat HIV. 3. Compare and contrast various characteristics of STRs, including how to address cost barriers to accessing STRs.

4/09 Thur.	HSEB 4100B at 2:00 pm	Abby Coleman, PharmD, MBA Mentor: Katie Scerbo PharmD	<p style="text-align: center;">Co-dependency gone wrong: Hepatorenal Syndrome – 0167-0000-15-213-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Interpret the clinical signs and symptoms of hepatorenal syndrome 2. Compare and contrast treatment approaches based on the patient’s required level of care 3. Understand how to monitor treatments used for hepatorenal syndrome 4. Develop recommendations for the prevention of hepatorenal syndrome based on initial disease presentation <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Identify patients who are at high risk for developing hepatorenal syndrome 2. List the drugs used in the management of hepatorenal syndrome 3. Explain how the drugs used in hepatorenal syndrome are supplied and stored
4/09 Thur.	HSEB 4100B at 3:00 pm	Jessica Hoyt, PharmD Mentor: Anthony Dalpiaz, PharmD	<p style="text-align: center;">Hepatitis C Ya Later: Game Changers in Medication Therapy – 0167-0000-15-214-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the epidemiology and complications of hepatitis C 2. Compare the side effects, duration of therapy, sustained virologic response and cost of new pharmacologic therapies for hepatitis C 3. Design an appropriate treatment plan for a treatment naïve patient with hepatitis C 4. Identify resources for further information on hepatitis C therapy <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the clinical symptoms and consequences of hepatitis C 2. Recognize medications that are currently marketed for the treatment of hepatitis C in the US 3. Understand the financial barriers of the new therapeutic agents for hepatitis C
Saturday Session Requires Online Registration by April 3, 2015 to reserve your seat since seating is limited! Go to www.ushp.org to register.			
4/11 Sat.	HSEB 4100B at 8:00 am (please arrive by 7:45 to sign in for this event)	Allison Arterbury PharmD Mentor: Karen Gunning, PharmD	<p style="text-align: center;">Sero-TUNE-in! An Update on Depressive Disorders – 0167-0000-15-004-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Review the mechanisms of action of the different available classes of antidepressants 2. Discuss the first line pharmacological treatments for major depressive disorder (MDD) 3. Describe the dosing strategies for the 3 new antidepressants approved in the past 3 years 4. Differentiate advantages and disadvantages of the different pharmacologic options available to treat MDD <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. List the brand and generic names of antidepressants approved in the last 3 years 2. Recognize the different classes of antidepressants available 3. Evaluate the cost differences and potential insurance issues that may arise with different antidepressants

4/11 Sat.	HSEB 4100B at 9:00 am	Lauren Holesh, PharmD Mentor: Linda Tyler, PharmD, FASHP	<p align="center">FDA OTC Regulation: A Tale of Two Tracks – 0167-0000-15-219-L03-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Outline the models used to assess the safety of new non-prescription medications 2. Compare and contrast the two processes used to regulate OTC products 3. Evaluate the implications of an OTC drug regulated through each approval process 4. Assess the areas for future development of new safety measures from the FDA <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Define the categories historically used to classify the safety of OTC products 2. List three drugs regulated by both the New Drug Approval process and the Monograph process 3. Understand the difference between the two methods used to regulate OTC products
4/11 Sat.	HSEB 4100B at 10:10 am	Alisyn Hansen PharmD Mentor: Karen Gunning, PharmD	<p align="center">Shared Decision Making: Medication Discontinuation in Geriatric Patients – 0167-0000-15-218-L05-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Recognize potentially inappropriate medications in older adults. 2. Differentiate goals of chronic disease state management for older patients compared to a younger population. 3. Assess medications used for prevention in older patients and understand their time to benefit. 4. Use shared decision making to help patients and caregivers weigh risks vs benefits of medication therapy. <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Define functional versus chronological age in the context of geriatric care. 2. Recognize potentially inappropriate medications in older adults and understand why certain medications are not covered by insurance providers. 3. Explain which over-the-counter medications should be avoided in older adults.
4/11 Sat.	HSEB 4100B at 11:10 am (Followed by time to purchase lunch on your own.)	William Black, PharmD, MBA Mentor: Kavish Choudhary, PharmD, MS	<p align="center">You have no idea how high I can fly: advancing the role of the pharmacy technician – 0167-0000-15-216-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the advanced roles in which pharmacy technicians are currently involved in the state of Utah 2. Understand the barriers to implementing advanced roles for pharmacy technicians 3. Evaluate the impact that expanded pharmacy technician roles will have on the role of a pharmacist 4. Distinguish technicians with proper training and/or experience required to carry out an advanced role <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe the advanced roles in which pharmacy technicians are currently involved in the state of Utah 2. List areas for potential expansion of pharmacy technician roles 3. Recognize the barriers to implementing advanced roles for pharmacy technicians
4/11 Sat.	HSEB 4100B at 1:00 pm	Nicole Caffiero, PharmD Mentor: Karen Gunning, PharmD	<p align="center">Long Acting Reversible Contraceptives: Are we breeding confusion with long acting reversible contraceptives? – 0167-0000-15-217-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> 1. Compare and contrast the different LARC options, including mechanism of action, administration, associated risks, and monitoring parameters. 2. Evaluate the efficacy of different long acting reversible contraceptive agents. 3. Discuss the place in therapy of LARCs in adolescents and impact of LARCs on teen births as well as evaluating the law relevant to treating minors with LARCS. 4. Prepare effective counseling techniques for patients and parents using LARCs. <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> 1. Identify and define the different LARC options 2. State the patients that LARCs may be an appropriate contraceptive option as well as evaluate the laws relevant to treating minors with LARCs 3. Discuss the impact of LARCs on teen births

4/11 Sat.	HSEB 4100B At 2:00 pm	Eve Van Wagoner, PharmD Mentors: Krystal Moorman, PharmD, BCPS McKay Robinson, PharmD	<p align="center">ACE-I in the hole: Should ACE-I be prescribed for all diabetic patients regardless of blood pressure status? – 0167-0000-15-221-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> Describe how ACE-I and ARBs work within the RAS System Explain how microalbuminuria indicates kidney damage and leads to cardiovascular disease Compare options to prevent or slow the progression of microalbuminuria Develop a medication therapy plan for a normotensive, type 2 diabetic patient with/without microalbuminuria <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> Understand how ACE-I and ARBs work with the RAS system List 5 ACE-I and/or ARBs Define microalbuminuria
4/11 Sat.	HSEB 4100B At 3:00 pm	Kelsey Palmer, PharmD Mentor: Patricia Jerant, PharmD, BCPS	<p align="center">Weight Loss Drugs: The Skinny on the Available Agents – 0167-0000-15-220-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> Review the history of weight loss medications and the factors that contributed to the removal of certain agents from the market Identify patients who are candidates for weight loss agents Describe common side effects and contraindications associated with weight loss agents Compare and contrast available agents for weight loss <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> Recognize the risks associated with currently available weight loss agents and those previously removed from the market List 3 prescription agents available to weight loss Understand the controlled substance classification of the available weight loss agents

Registration, Info & Fees: All classes are one hour. The cost is \$60 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 4/11 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 23.0 contact hours (0.23 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.

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.