



The Utah Society of Health-System Pharmacists Presents:
Resident Continuing Pharmacy Education Series
Spring 2022

Target Audience: Pharmacists, pharmacy technicians, and pharmacy students

Website: www.ushp.org for zoom and survey links

Date/Time	Presenter Mentor(s)	Title, ACPE UAN	
		Pharmacist Objectives	Technician Objectives
Monday, March 14th 3:30pm	Aaron Thibeault, PharmD <i>Brian Hathaway, PharmD, BCIDP Clinical Pharmacist, Infectious Diseases</i> <i>Eric Drab, PharmD, BCPS Critical Care Pharmacist St. Mark's Hospital</i>	Antibiotic Considerations in ECMO Patients A-0167-0000-22-001-LO1-P/T	
		<ol style="list-style-type: none"> 1. Describe the various components of ECMO 2. Identify the most common infections and microorganisms seen in this population 3. Evaluate the pharmacokinetic factors that influence antimicrobial dosing 4. Develop evidence-based antimicrobial dosing recommendations and monitoring plans 	<ol style="list-style-type: none"> 1. Describe the use of ECMO 2. Memorize brand and generic names of the antimicrobials with required dosing adjustments 3. Distinguish antimicrobials with modified dosing recommendations
Monday, March 14th 4:30pm	Maren Campbell, PharmD <i>Lauren Williams, PharmD, BCPS Acute Care Multispecialist University of Utah Health</i>	Managing Beta-Lactam Allergies: How Pharmacists Can Scratch That Itch A-0167-0000-22-002-L01-P/T	
		<ol style="list-style-type: none"> 1. Describe what constitutes a true beta-lactam allergy and its implications. 2. Apply strategies to assess patients with a labeled beta-lactam allergy. 3. Design a management plan for patients with a beta-lactam allergy 4. Discuss beta-lactam allergy de-labeling strategies and implications. 	<ol style="list-style-type: none"> 1. Recognize the impact of labeled beta-lactam allergies on patient care. 2. Describe general assessment strategies for beta-lactam allergies 3. Examine the different strategies for managing beta-lactam allergies.
Tuesday, March 15th 3:30pm	Aaron Swomley, PharmD, PhD <i>Rebecca Martin, PharmD, BCOP Clinical Pharmacist, Oncology University of Utah Health Huntsman Cancer Institute</i>	Novel Uses of CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) in Oncology A-0167-0000-22-003-L01-P/T	
		<ol style="list-style-type: none"> 1. Explain the process of CRISPR/Cas9 2. Diagram the steps required of CRISPR/Cas9 for eukaryotic gene editing 3. Define CRISPR/Cas9 in terms of oncology treatment 4. Compare uses of CRISPR/Cas9 in different oncologic disease states 	<ol style="list-style-type: none"> 1. Review the steps in CRISPR/Cas9 production 2. Name a disease state that may benefit from gene editing 3. Differentiate between the different types of gene editing
Tuesday, March 15th 4:30pm	Melanie Hunter, PharmD <i>Charlotte B Wagner, PharmD, BCOP Malignant Hematology Clinical Pharmacist University of Utah Health Huntsman Cancer Institute</i>	Antimicrobial Prophylaxis in Hematologic Malignancies A-0167-0000-22-004-L01-P/T	
		<ol style="list-style-type: none"> 1. Evaluate the National Comprehensive Cancer Network (NCCN), American Society of Clinical Oncology/ Infectious Disease Society of America (ASCO/IDSA), and the American Society of Bone Marrow Transplantation (ASBMT) guidelines for antimicrobial prophylaxis 2. Design prophylactic regimens based on patient specific factors 3. Identify clinical challenges regarding concomitant antifungal prophylaxis and newer targeted agents 	<ol style="list-style-type: none"> 1. Review the National Comprehensive Cancer Network (NCCN), American Society of Clinical Oncology/ Infectious Disease Society of America (ASCO/IDSA), and the American Society of Bone Marrow Transplantation (ASBMT) guidelines for antimicrobial prophylaxis 2. Recognize prophylactic antimicrobial agents by generic and trade names 3. Distinguish between different types of antimicrobial agents used for prophylaxis in hematologic malignancies

Date/Time	Presenter Mentor(s)	Pharmacist Objectives	Title, ACPE UAN Technician Objectives
Saturday, March 19th 8:30am	<p>Alan Abbinanti, PharmD</p> <p><i>Hanna Raber, PharmD, BCPS, BCACP, TTS Assistant Professor, Pharmacotherapy Clinical Pharmacist, Ambulatory Care University of Utah Health, University of Utah College of Pharmacy</i></p>	<p>Potentiate their potential: motivational interviewing techniques for precepting</p> <p>A-0167-0000-22-005-Lo4-P/T</p> <ol style="list-style-type: none"> 1. Name the various aspects of motivational interviewing 2. Identify when motivational interviewing techniques would benefit a learner you are precepting 3. Practice utilizing motivational interviewing techniques to encourage a learner to develop their knowledge and skills 4. Formulate a plan to incorporate motivational interviewing techniques with learners you are precepting 	<ol style="list-style-type: none"> 1. Define Motivational Interviewing 2. Compare motivational interviewing to providing direction 3. Recognize scenarios where motivational interviewing would apply in your work duties
Saturday, March 19th 9:30am	<p>Chloe Ortals, PharmD</p> <p><i>Karen Gunning, PharmD, BCPS, BCACP, FCCP Professor, Pharmacotherapy Clinical Pharmacist, Ambulatory Care University of Utah Health University of Utah College of Pharmacy</i></p> <p><i>Gary Huynh, PharmD, BCPS, AAHIVP Clinical Pharmacist, HIV Clinic University of Utah Health</i></p>	<p>Let's PrEP: Law Updates on Pharmacist Prescriptive Authority for HIV Prevention</p> <p>A-0167-0000-22-006-Lo3-P/T</p> <ol style="list-style-type: none"> 1. Discuss medical and social concerns HIV PrEP and PEP patients face. 2. Apply guideline-directed medication therapy for HIV prevention. 3. Review the Utah Pharmacy Practice Act law updates surrounding HIV PrEP and PEP. 4. Employ the steps a pharmacist would need to take to prescribe HIV PrEP or PEP for a patient. 5. Demonstrate knowledge of resources for medical care for HIV PrEP and PEP. 	<ol style="list-style-type: none"> 1. Discuss medical and social concerns HIV PrEP and PEP patients face. 2. Recognize common medications used in the prevention of HIV. 3. Demonstrate knowledge of resources for medical care for HIV PrEP and PEP patients.
Saturday, March 19th 10:40am	<p>Samantha Relias, PharmD</p> <p><i>Erin Fox, PharmD, BCPS, FASHP Senior Director, Drug Information and Support Services University of Utah Health</i></p>	<p>Time for a Road Trip: U.S. Law Review</p> <p>A-0167-0000-22-007-Lo3-P/T</p> <ol style="list-style-type: none"> 1. Describe the impact of recent common law rulings on pharmacy practice. 2. Discuss trends in pharmacy-related legislation in other states. 3. Compare and contrast Utah practice with new laws and regulations in other states. 4. Develop a plan to stay aware of ongoing legislative and regulatory issues. 	<ol style="list-style-type: none"> 1. Describe the impact of recent common law rulings on pharmacy practice. 2. Discuss trends in pharmacy-related legislation in other states. 3. Compare and contrast Utah practice with new laws and regulations in other states. 4. Develop a plan to stay aware of ongoing legislative and regulatory issues
Monday, March 21st 3:30pm	<p>Ashley Jackson, PharmD</p> <p><i>Helen Hou, PharmD, BCPS Emergency Medicine Pharmacist University of Utah Health</i></p>	<p>Who You Gonna Call? Clotbusters: Thrombolytics for Pulmonary Embolism Induced Cardiac Arrest</p> <p>A-0167-0000-22-008-Lo1-P/T</p> <ol style="list-style-type: none"> 1. Explain the pathophysiology of cardiac arrest secondary to pulmonary embolisms (PEs). 2. Describe the role of thrombolytics in cardiac arrest secondary to PEs. 3. Identify patients with contraindications for thrombolytics. 4. Design a patient specific thrombolytic plan. 	<ol style="list-style-type: none"> 1. Describe the mechanism of action (MOA) of thrombolytics 2. Identify brand and generic names for common thrombolytics. 3. Demonstrate appropriate storage and handling requirements for thrombolytics.

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Monday, March 21 st 4:30pm	<p>Presley Whetman, PharmD</p> <p><i>Brianne M. Wolfe, PharmD, BCPS, BCCCP Critical Care Pharmacist University of Utah Health</i></p>	<p>One Drug to Rule Them All: Phenobarbital for Alcohol Withdrawal A-0167-0000-22-013-L01-P/T</p> <table border="0"> <tr> <td data-bbox="835 272 1723 505"> <ol style="list-style-type: none"> 1. Assess a patient's overall withdrawal risk using PAWSS 2. Differentiate BAWS assessment from CIWA-Ar assessment 3. Recognize possible contraindications to the use of phenobarbital 4. Construct a patient-specific dosing regimen for phenobarbital in alcohol withdrawal </td> <td data-bbox="1723 272 2610 505"> <ol style="list-style-type: none"> 1. Identify medications that can interact with phenobarbital on a patient's medication list 2. Recognize appropriate dosage forms of phenobarbital 3. Apply appropriate storage of phenobarbital formulations </td> </tr> </table>		<ol style="list-style-type: none"> 1. Assess a patient's overall withdrawal risk using PAWSS 2. Differentiate BAWS assessment from CIWA-Ar assessment 3. Recognize possible contraindications to the use of phenobarbital 4. Construct a patient-specific dosing regimen for phenobarbital in alcohol withdrawal 	<ol style="list-style-type: none"> 1. Identify medications that can interact with phenobarbital on a patient's medication list 2. Recognize appropriate dosage forms of phenobarbital 3. Apply appropriate storage of phenobarbital formulations
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Tuesday, March 22 nd 3:30pm	<p>Austin Lange, PharmD</p> <p><i>Lisa Arrigo, RPh, BCPS Advanced Clinical Pharmacist, Cardiology St. Mark's Hospital</i></p>	<p>The Impact of COVID-19 and Its Treatments On Cardiovascular Health A-0167-0000-22-009-L01-P/T</p> <table border="0"> <tr> <td data-bbox="835 589 1723 797"> <ol style="list-style-type: none"> 1. Describe how the pathophysiology of COVID-19 can impact the cardiovascular system 2. Differentiate cardiovascular manifestations of COVID-19 3. Analyze the cardiovascular impact of medications used for COVID-19 </td> <td data-bbox="1723 589 2610 797"> <ol style="list-style-type: none"> 1. Distinguish between typical COVID-19 symptoms and those that are potentially cardiovascular related 2. List potential cardiac-related diagnoses that could be secondary to a COVID-19 infection 3. Identify medications used to treat COVID-19 that may impact the cardiovascular system </td> </tr> </table>		<ol style="list-style-type: none"> 1. Describe how the pathophysiology of COVID-19 can impact the cardiovascular system 2. Differentiate cardiovascular manifestations of COVID-19 3. Analyze the cardiovascular impact of medications used for COVID-19 	<ol style="list-style-type: none"> 1. Distinguish between typical COVID-19 symptoms and those that are potentially cardiovascular related 2. List potential cardiac-related diagnoses that could be secondary to a COVID-19 infection 3. Identify medications used to treat COVID-19 that may impact the cardiovascular system
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Tuesday, March 22 nd 4:30 pm	<p>Guadalupe Chavez, PharmD</p> <p><i>Elizabeth Bald, PharmD, BCACP Assistant Professor (Clinical) University of Utah College of Pharmacy</i></p>	<p>Stay in the Loop: Preventing Progression of CKD in T2DM A-0167-0000-22-010-L01-P/T</p> <table border="0"> <tr> <td data-bbox="835 886 1723 1138"> <ol style="list-style-type: none"> 1. Describe the pathophysiology of chronic kidney disease (CKD) associated with type two diabetes mellitus (T2DM) 2. Interpret primary literature surrounding the medications used for the prevention of CKD progression in T2DM 3. Design an effective therapy regimen for a patient with T2DM to prevent progression of CKD </td> <td data-bbox="1723 886 2610 1138"> <ol style="list-style-type: none"> 1. Examine the prevalence of CKD in patients with T2DM 2. Recognize common side effects associated with medications used for the prevention of CKD progression in T2DM 3. Discuss strategies for ensuring patients can access and afford medications used for the prevention of CKD progression </td> </tr> </table>		<ol style="list-style-type: none"> 1. Describe the pathophysiology of chronic kidney disease (CKD) associated with type two diabetes mellitus (T2DM) 2. Interpret primary literature surrounding the medications used for the prevention of CKD progression in T2DM 3. Design an effective therapy regimen for a patient with T2DM to prevent progression of CKD 	<ol style="list-style-type: none"> 1. Examine the prevalence of CKD in patients with T2DM 2. Recognize common side effects associated with medications used for the prevention of CKD progression in T2DM 3. Discuss strategies for ensuring patients can access and afford medications used for the prevention of CKD progression
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Thursday, March 24th 3:30pm	<p>Krystal Heinen, PharmD</p> <p><i>Todd Larson, PharmD Clinical Pharmacist, Solid Organ Transplant University of Utah Health</i></p>	<p>Let's Pause to Talk About Birth Control and Menopause in Solid Organ Transplant A-0167-0000-22-011-L01-P/T</p> <table border="0"> <tr> <td data-bbox="835 1227 1723 1414"> <ol style="list-style-type: none"> 1. Select appropriate contraception therapies based on safety and efficacy 2. Propose a safe and effective contraceptive therapy plan for a solid organ transplant patient 3. Design a pharmaceutical or alternative therapy regimen for menopausal symptoms in a solid organ transplant recipient </td> <td data-bbox="1723 1227 2610 1414"> <ol style="list-style-type: none"> 1. Discuss barriers to contraceptive use 2. Distinguish between monophasic and multiphasic contraceptives 3. Recognize therapies for contraception and menopause </td> </tr> </table>		<ol style="list-style-type: none"> 1. Select appropriate contraception therapies based on safety and efficacy 2. Propose a safe and effective contraceptive therapy plan for a solid organ transplant patient 3. Design a pharmaceutical or alternative therapy regimen for menopausal symptoms in a solid organ transplant recipient 	<ol style="list-style-type: none"> 1. Discuss barriers to contraceptive use 2. Distinguish between monophasic and multiphasic contraceptives 3. Recognize therapies for contraception and menopause
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Thursday, March 24th 4:30pm	Omeid Vadipour, PharmD <i>Anthony May, PharmD, MBA, BCPS Pharmacy Director, Clinical Pharmacist Huntsman Mental Health Institute</i>	The Long and Short of Long-Acting Injectable Medications A-0167-0000-22-012-L01-P/T 1. Review and discuss indications, dosing, pharmacokinetics, and administration pearls for available long-acting injectable antipsychotics (LAI's), Sublocade, and Vivitrol 2. Describe what to do when patients miss doses of LAI's, Sublocade, and Vivitrol 3. Demonstrate understanding of differences in dosing and administration between different LAI's 4. Design a treatment plan for patients utilizing LAI's, Sublocade, or Vivitrol	1. Differentiate between the types of LAI's, and dosing schedule for each one 2. Discuss the benefits of LAI's, Sublocade, and Vivitrol on patient care 3. List the different LAI's

Registration, Info & Fees: All presentations are one hour. The cost is FREE for USHP members; otherwise, it is \$110 for pharmacists and \$25 for technicians to attend regardless of the number of hours or sessions attended. This fee can be paid online at <http://www.ushp.org>. If you are interested in joining USHP, please visit our website www.ushp.org and join online.

Virtual Meeting Information: DUE TO COVID-19, THE ENTIRE SERIES WILL BE PRESENTED VIA ZOOM. Please see the USHP website for meeting links.

Credit Hours: Through attending this program, up to 13.0 contact hours (0.13 CEUs) can be attained. **All participants must register** and, if applicable, pay for the series, 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 by **April 1, 2022**. A participation code will be required to get credit for each day. You must register and pay for the CE Series by **March 24, 2022**.

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

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

Questions? Emma Jones (emma.jones@hci.utah.edu), or Jennifer Bishop (Jennifer.Bishop@MountainStarHealth.com)



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

Residents presenting are in the process of completing post graduate pharmacy residencies at:



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St. Mark's Hospital