

**The Utah Society of Health System Pharmacists, University of Utah Hospitals and Clinics & VA Medical Center Present:  
2014 Resident Continuing Pharmacy Education Series (Revised 3/25/14)**

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

Date	Time & Location	Presenter	Title, Objectives & ACPE UAN
3/05 Wed.	HSEB 2100 at 2:30 pm	Jordan Burger, PharmD, MBA, BCPS  Mentor: Linda Tyler, PharmD, FASHP	<p style="text-align: center;"><b>FDA Approved, Now What?: Regulations for Marketing of Prescription Medications</b> - 0167-0000-14-039-L03 -P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Summarize the Federal Food, Drug, and Cosmetic Act</li> <li>2. Outline the organizational structure of the FDA</li> <li>3. Explain the role of the Office of Prescription Drug Promotion</li> <li>4. Assess situations to determine if misleading promotion is used</li> <li>5. Develop an action plan to manage incidents of misleading promotion</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the history of the FDA</li> <li>2. Understand what the FDA regulates and does not regulate</li> <li>3. Define the term off-label</li> </ol>
3/06 Thurs.	HSEB 4100B at 3:00 pm	Kelly Fritz, PharmD  Mentor: Steve Kirkegaard, PharmD	<p style="text-align: center;"><b>Getting Comfortable with Comfort Care: Medication Use in Hospice and End-of-Life Care</b> - 0167-0000-14-040-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Compare and contrast aspects of palliative care and hospice care</li> <li>2. Given a patient example, justify goals of care for chronic disease states in hospice</li> <li>3. Evaluate a patient's medication record of opportunities to streamline medication use in end of life care</li> <li>4. Identify resources for further information on palliative care and hospice care</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe two difference between palliative care and hospice care</li> <li>2. Recognize different medication routes used for end of life medications</li> <li>3. Identify three symptoms commonly managed with medications at the end of life</li> </ol>
3/06 Thurs.	HSEB 4100B at 4:00 pm	Kim Maxa, PharmD, MBA  Mentor: Steve Kirkegaard, PharmD	<p style="text-align: center;"><b>Weeds &amp; Seeds: Alternatives in Management of Nausea</b> - 0167-0000-14-038-L04 -P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Compare and contrast the requirements between the Dietary Supplement Health and Education Act (DSHEA) and those for prescription medications</li> <li>2. List common supplements used in nausea</li> <li>3. Given an supplement, summarize side effects and drug interactions</li> <li>4. Identify resources available for further inquiry on supplements</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Distinguish what differentiates a supplement from a prescription drug</li> <li>2. Define supplement</li> <li>3. Identify potential supportive care indications for supplements</li> </ol>

3/12 Wed.	HSEB 4100B at 2:30 pm	Ian Ford, PharmD  Mentor: Sonya Ruelle, RPh, MBA	<p align="center"><b>From Promise to Practice: Realizing the Potential of Clinical Decision Support-</b> 0167-0000-14-041-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe characteristics of effective clinical decision support alert systems</li> <li>2. Give examples of unintended consequences of clinical decision support</li> <li>3. Evaluate published evidence evaluating the impact of clinical decision support tools on patient care</li> <li>4. Examine avenues for becoming involved with clinical decision support implementation and improvement</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Define clinical decision support</li> <li>2. List common errors that may be prevented by utilizing clinical support technology</li> <li>3. Describe how specific clinical decision support tools fit into the medication use system</li> </ol>
3/13 Thurs.	HSEB 4100B at 3:00 pm	Ryan McTish, PharmD  Mentor: Gary Davis, PharmD	<p align="center"><b>Take a Chill Pill: Principles of Therapeutic Hypothermia and Temperature Management-</b> 0167-0000-14-042-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Recommend pharmacologic options for the management of shivering</li> <li>2. Describe the physiologic changes to organ systems during therapeutic hypothermia</li> <li>3. Analyze the pharmacokinetic and pharmacodynamics alterations to medications during therapeutic hypothermia</li> <li>4. Evaluate the indications for therapeutic hypothermia</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Discuss the physiological mechanisms of thermoregulation</li> <li>2. Identify medications used to prevent shivering</li> <li>3. Recognize indications for therapeutic hypothermia</li> </ol>
3/13 Thurs.	HSEB 4100B at 4:00 pm	Brianna Wolfe, PharmD  Mentor: Erin Lingenfelter, PharmD and Heidi Simons, PharmD, BCPS	<p align="center"><b>Skittles, Kit Kats, and Lemon Drops: When the Candy Man Goes Bad-</b> 0167-0000-14-043-L05-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Given a specific street drug, classify it into one of the following categories: cannabinoid, opioid, stimulant, dissociative drug, hallucinogenic, or club drug</li> <li>2. Summarize the systemic effects that would commonly be seen in a patient who is symptomatic secondary to an illicit substance</li> <li>3. Formulate a comprehensive treatment plan for a patient who is symptomatic secondary to an illicit substance</li> <li>4. When presented with a patient case, select and defend the best treatment option</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Recognize street names for the substances emphasized in the presentation</li> <li>2. Given a specific street drug, identify the items that an individual would purchase at a pharmacy to manufacture said street drug</li> <li>3. Identify medications used in the treat of illicit substance overdose which need expedited delivery</li> </ol>
3/19 Wed.	HSEB 2110 at 2:30 pm	John Schoen, PharmD  Mentor: Heather Nyman, PharmD, BCPS	<p align="center"><b>Ironing It Out: A Look at the Available IV Iron Products Used to the Treatment of Iron Deficiency Anemia in Chronic Kidney Disease-</b> 0167-0000-14-054-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Discuss the benefits of using newer IV iron formulations instead of iron dextran products</li> <li>2. Compare the differences in administration between the different IV iron products</li> <li>3. Determine when IV iron products are preferred over oral iron products in IDA in CKD</li> <li>4. Identify appropriate ferritin and transferrin saturation goals for patients receiving iron replacement for IDA with CKD</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. List the available IV iron products (brand/generic)available in the United States</li> <li>2. Compare and contrast the preparation of the different IV iron products</li> <li>3. Discuss the potential safety concerns associated with the use of IV iron products</li> </ol>

3/20 Thurs.	HSEB 4100B at 3:00 pm	Brandon Wilds, PharmD  Mentor: Stephanie Sander, PharmD, BCOP	<p align="center"><b>Ain't Nothing But an IVIG Thing: An Overview of IVIG Use in Hematological Disorders-</b> 0167-0000-14-045-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Explain the mechanism of action of IVIG in the treatment of hematological disorders</li> <li>2. Identify the various risks of IVIG use</li> <li>3. Select appropriate clinical situations where IVIG can be used</li> <li>4. Integrate the information presented into clinical practice based on a patient case example</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify different formulations of IVIG and what disease states each formulation can be used for treatment</li> <li>2. Describe proper techniques to prepare and store IVIG</li> <li>3. Integrate the information presented into practice</li> </ol>
3/20 Thurs.	HSEB 4100B at 4:00 pm	Shilpa Paul, PharmD,  Mentor: Jeffery Gilreath, PharmD, BCOP	<p align="center"><b>Nobody Knows the Marrow I've Seen: The Treatment of Cancer-Related Anemia -</b> 0167-0000-14-046-L01 -P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the three primary causes of anemia seen in cancer patients</li> <li>2. Differentiate absolute vs. functional iron deficiency anemia</li> <li>3. Explain how treatment options differ for absolute and functional iron deficiency anemia</li> <li>4. Develop a step-wise approach to the treatment of anemia due to malignancy</li> </ol> <p align="right"><u>Technician Objectives</u></p> <ol style="list-style-type: none"> <li>1. Identify currently available IV iron products and erythropoietin stimulating agents</li> <li>2. Compare different storage, reconstitution, and administration methods for each product</li> <li>3. Recognize appropriate dosing ranges for currently available IV iron product and erythropoietin stimulating agents</li> </ol>
3/27 Thurs.	HSEB 3515B at 3:00 pm	Kelly Holcomb, PharmD  Mentor: Dave Young, PharmD	<p align="center"><b>Pulmonary Arterial Hypertension: Clinical Pearls and Pharmacy Involvement-</b> 0167-0000-14-047-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the pathophysiology and World Health Organization (WHO) classification scheme of pulmonary arterial hypertension (PAH)</li> <li>2. Compare and contrast FDA-approved pharmacologic treatment options</li> <li>3. Evaluate emerging and investigative pharmacologic therapies</li> <li>4. Explain the role of pharmacists in the care of PAH patients</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Define pulmonary arterial hypertension (PAH)</li> <li>2. Identify FDA-approved medications for treatment of PAH</li> <li>3. Explain the role of pharmacy technicians in the care of PAH patients</li> </ol>
3/27 Thurs.	HSEB 3515B at 4:00 pm	Carissa Garza, PharmD  Mentor: Nicole Kenyon, PharmD	<p align="center"><b>Antibody-Mediated Rejection in Kidney Transplant Recipients-</b> 0167-0000-14-048-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the potential consequences of rejection episodes in kidney transplantation</li> <li>2. Interpret donor-specific antibody testing results and biopsy findings used to diagnose antibody-mediated rejection (AMR)</li> <li>3. Compare mechanisms of action of medications used for the treatment of AMR</li> <li>4. Formulate a treatment plan for the management of AMR in a kidney transplant recipient</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the consequences of rejection in kidney transplant recipients</li> <li>2. List medications used to treat AMR</li> <li>3. Identify which medication(s) used to treat AMR must be prepared in a biological safety cabinet</li> </ol>

4/01 Tues.	HSEB 4100B at 3:00 pm	Jessica Louie, PharmD  Mentor: Heidi Simons, PharmD, BCPS	<p align="center"><b>Don't Get HIT by Surprise: Understanding Heparin-Induced Thrombocytopenia Diagnosis and Management</b>–0167-0000-14-049-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>Describe the epidemiology and incidence of heparin-induced thrombocytopenia (HIT)</li> <li>Identify the criteria for diagnosis of HIT</li> <li>Differentiate advantages and disadvantages of pharmacologic treatment options for HIT</li> <li>Select an appropriate treatment plan for a patient who develops HIT consistent with clinical presentation and current practice guidelines</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>Discuss the importance of treating HIT</li> <li>Recognize three medications used in the treatment of HIT</li> <li>Determine proper compounding and storage of medications used in HIT</li> </ol>
4/04 Fri.	HSEB 3515B at 2:30 pm	Jessica Hopper, PharmD, BCPS (VAMC)  Mentor: Christine Holman PharmD, BCPS, CGP	<p align="center"><b>Please Pass the Salt! Considerations for Antidepressant Use and Hyponatremia</b>–0167-0000-14-051-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>Identify antidepressant agents that are likely to cause hyponatremia</li> <li>Describe patients that are most likely to experience hyponatremia when treated with antidepressants</li> <li>Determine the clinical relevance of hyponatremia</li> <li>Develop a treatment strategy for a patient hyponatremia</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>Identify the antidepressant agents that are likely to cause low sodium blood levels (hyponatremia)</li> <li>Identify at least one patient risk factor for developing hyponatremia</li> <li>Recognize potential medications used to treat hyponatremia</li> </ol>
4/04 Fri.	HSEB 3515B at 3:30 pm	Nathan Kamerath, PharmD (VAMC)  Mentor: Chad Nelson, PharmD	<p align="center"><b>rtPA 0.9 in Time Saves Nine</b> – 0167-0000-14-052-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>Describe the pathophysiology and presentation of acute ischemic stroke</li> <li>Identify the impact of acute ischemic stroke on morbidity and mortality in the United States</li> <li>Evaluate the role of rtPA in acute ischemic stroke cases, noting contraindications to its use</li> <li>Identify the management options for hypertension and glucose control in the setting of acute ischemic stroke</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>Describe the pathophysiology and presentation of acute ischemic stroke</li> <li>Identify the impact of acute ischemic stroke on morbidity and mortality in the United States</li> <li>Describe the role of rtPA in acute ischemic stroke</li> </ol>

4/04 Fri.	HSEB 3515B at 4:30 pm	Cassandra Clement, PharmD, BCPS (VAMC)  Mentor: Chris Stock, PharmD	<p style="text-align: center;"><b>Overdose Prevention: Assessment and Plan</b>– 0167-0000-14-053-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify risk factors and patterns which may indicate a patient is at risk of an overdose.</li> <li>2. Describe appropriate questions to ask when assessing of suicidality in patients at risk of an overdose</li> <li>3. Categorize medications within a profile which may lead to fatal overdoses</li> <li>4. Determine appropriate resources and efforts which can be utilized do prevent overdoses.</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify risk factors and patterns which may indicate a patient is at risk of an overdose</li> <li>2. Recognize patterns of behavior which are associated with overdoses</li> <li>3. List medication classes which have been most commonly associated with overdoses</li> </ol>
4/08 Tue.	HSEB 2110 at 2:30 pm	Anastasia Diamantopoulos, PharmD  Mentor: Ann Marie Prazak, PharmD, MS and Donald Alexander, PharmD	<p style="text-align: center;"><b>Time TB Serious: Management of <i>Mycobacterium tuberculosis</i> in Critically Ill Patients</b>- 0167-0000-14-044-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the pathophysiology of <i>Mycobacterium tuberculosis</i></li> <li>2. Identify first line treatment options available for <i>Mycobacterium tuberculosis</i> and briefly discuss alternative treatment regimens</li> <li>3. Determine common obstacles for treatment of <i>Mycobacterium tuberculosis</i> in critically ill patient</li> <li>4. Apply current literature for monitoring of drug levels in patients with <i>Mycobacterium tuberculosis</i></li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Discuss appropriate contact precautions necessary for patients with <i>Mycobacterium tuberculosis</i></li> <li>2. List 3 drugs commonly used for the treatment of <i>Mycobacterium tuberculosis</i></li> <li>3. Recognize the importance of drug monitoring and adherence</li> </ol>
4/09 Wed.	HSEB 4100B at 3:00 pm	Kiersten Johnston, PharmD  Mentor: Erin Fox, PharmD, FASHP	<p style="text-align: center;"><b>FDA Tidbits</b> - 0167-0000-14-055-L03-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the FDA inspection process and current trends in FDA warning letters to pharmaceutical manufacturers</li> <li>2. Compare the regulatory and approval process of drugs and biologics</li> <li>3. Explain what FDA does with adverse event (AE) data and how AE information is included in package inserts</li> <li>4. Apply bioequivalence information to determine therapeutic bioequivalence of several drug presentations</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the FDA inspection process and current trends in FDA warning letters to pharmaceutical manufacturers</li> <li>2. Explain the difference between drugs and biologics from a regulatory standpoint</li> <li>3. Identify 2 resources used in determining therapeutic bioequivalence of drug products</li> </ol>
4/10 Thurs.	SOM Classroom B at 3:00 pm	Erica Marini, PharmD  Mentor: Shantel Mullin, PharmD, BCPS	<p style="text-align: center;"><b>Weighing In: New Obesity Guidelines and the Role of Pharmacotherapy</b>- 0167-0000-14-056-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Discuss the medical complications of obesity including increased CVD risk and obesity-related comorbidities</li> <li>2. Evaluate current pharmacotherapeutic treatment options for obesity based on safety and efficacy</li> <li>3. Determine if a patient would be a candidate for obesity pharmacotherapy based on patient-specific factors and current guidelines</li> <li>4. Discuss the current and future role of pharmacotherapy in treatment of obesity</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Recognize disease states that are associated with obesity</li> <li>2. Identify the currently approved medications for obesity</li> <li>3. Understand the role of medications in a treatment plan for obesity</li> </ol>

4/10 Thurs.	SOM Classroom B at 4:00 pm	Kelley Ratermann, PharmD  Mentor: Tyler Sledge, PharmD	<p align="center"><b>The Laparoscopic Edge of Bariatric Surgery: Pharmacotherapy Considerations and Recommendations for This Unique Patient Population –</b> 0167-0000-14-057-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Discuss trends of obesity within the United States</li> <li>2. Detail the indications for bariatric surgery and understand the differences between the types of bariatric procedures</li> <li>3. Formulate drug monitoring plans and evaluate medications that carry a higher risk of adverse effects given the changes in anatomy of bariatric surgery patients</li> <li>4. Evaluate vitamin supplementation and the appropriateness of restarting home medications based on comorbid conditions in bariatric surgery patients</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. List at least three vitamin deficiencies bariatric surgery patients typically experience</li> <li>2. Understand how to prepare medications that are available on our formulary and commonly utilized by bariatric surgery patients</li> <li>3. Compare and contrast which types of medication formulations are more appropriate for bariatric surgery patients (and which ones should be avoided)</li> </ol>
<b>Saturday Session Requires Online Registration by 4/12/14 to reserve your seat since seating is limited! Go to <a href="http://www.ushp.org">www.ushp.org</a> to register.</b>			
4/12 Sat.	HSEB 1750 at 7:30 am  (please arrive by 7:15 to sign in for this event)	Cindy Liu, PharmD  Mentor: Heather Nyman, PharmD, BCPS	<p align="center"><b>Hyperlipidemia and Hyperglycemia Management in Hemodialysis Patients-</b> 0167-0000-14-058-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the differences between conventional and non-conventional dialysis</li> <li>2. State at least 3 special considerations when managing hyperglycemia in hemodialysis patients</li> <li>3. Evaluate the current evidence on hyperlipidemia management in hemodialysis patients</li> <li>4. Assess the dietary considerations in hyperlipidemia and hyperglycemia management of hemodialysis patients</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the five stages of chronic kidney disease</li> <li>2. State at least 3 common clinical signs and symptoms of hypoglycemia</li> <li>3. Name at least 5 foods that should be avoided in hemodialysis patients</li> </ol>
4/12 Sat.	HSEB 1750 at 8:30 am	Macheala Jacquez, PharmD  Mentor: Krystal Moorman, PharmD	<p align="center"><b>Migraine Prophylaxis: Is it Worth the Headache?-</b> 0167-0000-14-059-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the etiology, epidemiology and pathophysiology of migraine onset</li> <li>2. Identify patients who are candidates for migraine prophylaxis</li> <li>3. Compare and contrast the use of various agents for the treatment and prophylaxis of migraines</li> <li>4. Evaluate the appropriateness of migraine therapeutic and prophylaxis treatment options</li> </ol> <p align="right"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify the differences between migraines, tension headaches, and cluster headaches</li> <li>2. State 3 triggers associated with a migraine</li> <li>3. List the agents available for treatment and prevention of migraines</li> </ol>

4/12 Sat.	HSEB 1750 at 9:30 am  (Followed by time to purchase lunch on your own.)	Meredith Miles, PharmD  Mentor: McKay M. Robinson, PharmD	<p style="text-align: center;"><b>Concentrating on Insulin-</b> 0167-0000-14-060-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Compare and contrast the properties of concentrated insulin versus non-concentrated insulin</li> <li>2. Assess and evaluate the appropriateness of concentrated insulin versus non-concentrated insulin given a specific patient scenario</li> <li>3. Explain and counsel patients and providers on the use and safety of different concentrated insulin products</li> <li>4. Assess patient ability to use concentrated insulin appropriately</li> <li>5. Describe the principles of safe dispensing and storage of concentrated insulin and supplies</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify different medications that are considered concentrated versus non-concentrated insulin products</li> <li>2. List the differences between concentrated insulin and non-concentrated insulin</li> <li>3. Describe safe guards that can be implemented to assure the safe storage of concentrated insulin</li> </ol>
4/12 Sat.	HSEB 1750 at 11:00 am	Joshua King, PharmD (VAMC)  Mentor: Abril Atherton, PharmD, BCPS, BCPP	<p style="text-align: center;"><b>Endocrinology and Mood Disorders: Do Hormones Have Effects on Affect?-</b> 0167-0000-14-061-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Define three symptoms of mood disorders associated with endocrine abnormalities</li> <li>2. Describe four major endocrine abnormalities that may alter mood</li> <li>3. Identify which lab tests to monitor for abnormalities of vitamin D, thyroid, and gender-specific sex hormones and interpret results of each test</li> <li>4. Recommend pharmacologic and non-pharmacologic therapy to correct the endocrine abnormality</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify two mood disorders associated with hormone abnormalities</li> <li>2. Name one pharmacologic therapy used to treat abnormalities of vitamin D, thyroid, and gender-specific sex hormones</li> <li>3. Recognize the various drug formulations used for treating vitamin D, thyroid and gender-specific sex hormone abnormalities</li> </ol>
4/12 Sat.	HSEB 1750 at 12:00 pm  (Followed by time to purchase lunch on your own.)	Jennifer Preinitz, PharmD (VAMC)  Mentor: Abril Atherton, PharmD, BCPS, BCPP	<p style="text-align: center;"><b>I Feel So Depressed. Is There Anything Else We Can Try, Doc?-</b> 0167-0000-14-062-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the epidemiology, pathophysiology, and diagnosis of MDD</li> <li>2. Discuss available pharmacologic therapy and treatment guidelines for MDD</li> <li>3. Analyze current evidence based data supporting the use of the novel oral agent vortioxetine in the treatment of depression</li> <li>4. Identify the potential role for vortioxetine in the treatment of MDD</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the prevalence and symptoms typical of MDD</li> <li>2. Identify medications used in the treatment of MDD</li> <li>3. Describe common adverse effects of vortioxetine and its role as a treatment of MDD</li> </ol>
4/12 Sat.	HSEB 1750 At 2:00 pm	Thomas Kerr, PharmD (VAMC)  Mentor: Patricia Jerant, PharmD, BCPS	<p style="text-align: center;"><b>No Pain, No Gain? Not anymore! Avoiding Needles in the Multiple Sclerosis Equation-</b> 0167-0000-14-063-L01-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe the etiology, pathophysiology, clinical presentation, and disease course of multiple sclerosis</li> <li>2. Review the current treatment guidelines of multiple sclerosis</li> <li>3. Analyze current evidence-based data supporting or refuting the use of novel oral therapeutic agents in the treatment of multiple sclerosis</li> <li>4. Describe the current safety and tolerability profiles of novel agents</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Describe and recognize the symptoms of multiple sclerosis</li> <li>2. Identify available pharmacologic treatments for multiple sclerosis</li> <li>3. Describe common side effects of agents used to treat multiple sclerosis</li> </ol>

4/12 Sat.	HSEB 1750 At 3:00 pm	Alisyn Hansen, PharmD  Mentor: Holly Gurgle, PharmD, BCACP	<p style="text-align: center;"><b>Staying Sharp: An Update on Immunizations-</b> 0167-0000-14-064-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Screen and identify patients who may be potential candidates for immunization based on ACIP guidelines</li> <li>2. Utilize appropriate documentation systems and patient education requirements when providing immunizations</li> <li>3. Practice correct immunization administration technique(s)</li> <li>4. Recognize and treat anaphylaxis and other adverse effects related to immunizations</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify immunizations that may be provided by pharmacists in Utah</li> <li>2. Understand and utilize proper immunization storage and handling</li> <li>3. Practice proper labeling of pediatric and adult immunizations</li> </ol>
4/12 Sat.	HSEB 1750 At 4:00 pm	Johanna Thompson, PharmD,  Mentor: Holly Gurgle, PharmD, BCACP	<p style="text-align: center;"><b>Now What? Lipid Treatment Update-</b> 0167-0000-14-065-L04-P/T</p> <p><u>Pharmacist Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Recognize changes in 2013 ACC/AHA guidelines identify the four statin benefit groups</li> <li>2. Calculate 10-year ASCVD risk score</li> <li>3. Develop recommendations for statin and lipid monitoring parameters</li> </ol> <p style="text-align: right;"><u>Technician Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Identify antihyperlipidemic treatments</li> <li>2. Communicate basic guideline changes with patients</li> <li>3. Recognize appropriate reasons for treatment with statins</li> </ol>

**Registration, Info & Fees:** All classes are one hour. The cost is \$50 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](http://www.ushp.org). No RSVP is required for the weekday sessions, but registration for the Saturday event on 4/12 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 28.0 contact hours (0.28 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](mailto: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.