Krystal L. Moorman, PharmD, BCPS

Home Address: 15074 Talons Reach Court Draper, Utah 84020 Phone: (303) 709-3180 e-mail: moormkl@alumni.musc.edu Work Address: University of Utah College of Pharmacy 30 South 2000 East, Room 4931 Salt Lake City, Utah 84112 Office Phone: (801) 581-4590 e-mail: krystal.moorman@pharm.utah.edu

Education and Training

ASHP-accredited Drug Information Practice Residency MUSC Medical Center and College of Pharmacy Residency Program Program Director: Nannette M. Berensen, PharmD, MBA, BCPS Medical University of South Carolina, Charleston, South Carolina	July 2005 to June 2006
ASHP-accredited Pharmacy Practice Residency with Emphasis in Drug Information MUSC Medical Center and College of Pharmacy Residency Program Program Director: Nannette M. Berensen, PharmD, MBA, BCPS Medical University of South Carolina, Charleston, South Carolina	July 2004 to June 2005
Doctor of Pharmacy First Honor Graduate Advanced Clinical Track Medical University of South Carolina, Charleston, South Carolina Licensure and Certifications	Degree Conferred May 2004
American Pharmacists Association Certified Immunizer	September 2014 to present
Board Certified Pharmacotherapy Specialist	Expiration December 2020
Utah Pharmacy License	Expiration September 2017
South Carolina Pharmacy License	Expiration April 2017
Basic Life Support	Expiration January 2016

Professional Experience

Professional Experience Program Director and Assistant Professor (Clinical) University of Utah College of Pharmacy, Salt Lake City, Utah Department Chair: Karen Gunning, PharmD, BCPS, BCACP, FCCP **Responsibilities:**

- Oversee all aspects of professional experience program including site recruitment, site quality assurance, preceptor development, and student placement
- Prepare and deliver didactic lectures for doctor of pharmacy students
- Serve as course master for Drug Literature Evaluation
- Serve as course master for Core Community and Core Institutional Introductory Pharmacy Practice Experiences
- Conduct research in the area of experiential education

Drug Information Specialist, PRN

University of Utah Drug Information Service, Salt Lake City, Utah Supervisor: Erin Fox, PharmD, FASHP; Director, Drug Information Services **Responsibilities:**

- Provide staffing coverage for Drug Information Call Center as assigned
- Supervise students and residents staffing in Drug Information Call Center

Clinical Pharmacist, PRN University of Utah Hospital, Salt Lake City, Utah Supervisor: Michael Katzourakis, PharmD **Responsibilities:**

- Provide staffing coverage for University Hospital Central Pharmacy
- Verify orders for medications
- Provide final check for medications

Assistant Professor (Clinical)

University of Utah College of Pharmacy, Salt Lake City, Utah Practice site: South Jordan Health Center Supervisors: Diana Brixner, RPh, PhD (college)

Jerel Bullock, RPh (clinic)

Responsibilities:

- Served as course master for Drug Literature Evaluation
- Prepared and delivered didactic lectures for doctor of pharmacy students
- Precepted doctor of pharmacy students and pharmacy residents
- Implemented and developed medication therapy management services at the South Jordan Health Center
- Conducted research in the area of community practice

July 2015 to present

July 2015 to present

March 2012 to present

October 2012 to July 2015

Professional Experience (continued)

Clinical Pharmacist, Drug Information and Medication Safety, PRN October 2012 to March 2014 Intermountain Healthcare - Intermountain Medical Center, Murray, Utah Supervisor: Russell Hulse, RPh, MBA

Coordinator, Drug Information, Medication Safety, September 2008 to October 2012 and Investigational Drug Services Intermountain Healthcare - Intermountain Medical Center, Murray, Utah

Supervisor: Nannette M. Berensen, PharmD, MBA, BCPS (September 2008 to August 2011)

Russell Hulse, RPh, MBA (August 2011 to October 2012)

Responsibilities:

- Provided support for the Urban Central Region Pharmacy and Therapeutics Committee
- Coordinated ACPE-accredited professional development programs for employees
- Provided high-quality, patient-specific responses to drug information requests
- Managed budget for the drug information service line
- Developed and implemented medication use guidelines
- Coordinated adverse drug event surveillance activities
- Prepared adverse drug event reports and coordinate quality improvement projects
- Coordinated institutional strategy for medication shortages
- Coordinated investigational drug services
- Recruited, supervised and evaluated drug information staff
- Precepted doctor of pharmacy students and pharmacy residents

Clinical Pharmacist, Schmidt Chest Clinic October 2007 to September 2008 Intermountain Healthcare - Intermountain Medical Center, Murray, Utah Supervisor: Jeff Olson, PharmD, BCPS

Clinical Pharmacy Specialist, Drug Information Kaiser Permanente - Colorado Region, Aurora, Colorado Supervisor: Frances A. Lanty, PharmD, BCPS

Clinical Pharmacist, PRN October 2004 to July 2006 Medical University of South Carolina Medical Center, Charleston, South Carolina Supervisor: Jennie Adams, PharmD; Tracy Mulhern, PharmD, BCPS

July 2006 to October 2007

July 2004 to July 2005 (5 weeks/year)

Adult and Pediatric On-call Services Medical University of South Carolina Medical Center, Charleston, South Carolina

Teaching Experience

Course Direction

University of Utah College of Pharmacy 2015-2016 Foundations of Professional Practice (PHARM 7141) 2-credit-hour course designed to prepare students for introductory professional experiences

Journal Club (PCTH 7820)

1-credit-hour elective designed to provide an in-depth experience in critiquing various types of clinical trials

2014-2015

Drug Literature Evaluation I (PCTH 5116)

3-credit-hour class focusing on critical literature evaluation and drug information

2013-2014

Drug Literature Evaluation I (PCTH 5116) 3-credit-hour class focusing on critical literature evaluation and drug information

Drug Literature Evaluation II (PCTH 5125) 3-credit-hour class focusing on critical literature evaluation and drug information

Didactic Lectures

University of Utah College of Pharmacy 2015-2016 Foundations of Professional Practice (PHARM 7141) Lectures: Overview of Learning Styles (1 hour) Professional attire (2 hours) Motivational Interviewing (4 hours) Overview of Standard Patient Interview (2 hours)

Foundations of Patient-centered Care (PHARM 7140) Professionalism (1 hour) Electronic Communication Skills (2 hours) Foundations of Medication Safety (4 hours)

Recitation - Fall first year (PHARM 7155)

Facilitation: Professionalism (1 hour)
The 7 C's of Tight Writing (1 hour)
Introduction to Drug Information: Tertiary References (1 hour)
Monitoring the outcomes of drug therapy: intended/unintended consequences (1 hour)
Complimentary and alternative medicine: Does natural always mean safer? (1 hour)

Journal Club Elective (PCTH 7820) Noninferiority study presentation (1 hour)

Introduction to Clerkship (PCTH 7321) Lecture: Medication Safety on Rotation (1.5 hours) APPE Orientation 1 (1.5 houts) APPE Orientation 2 (3 hours)

2014-2015

Profession of Pharmacy (PCTH 5112) Lectures: Medication Safety (1.5 hours)

Drug Literature Evaluation I (PCTH 5116)
Lectures: Organization of the Biomedical Literature (1 hour)
The Systematic Approach to Drug Information (1.5 hours)
Literature Searching (1.5 hours)
Formulary Management (1.5 hours)
Journal Club Tutorial (1 hour)
Meta-analysis Article Review (1.5 hours)
More on Noninferiority (1.5 hours)
Noninferiority Study Article Review (1.5 hours)

Drug Literature Evaluation II (PCTH 5125) Lectures: Appropriate Referencing (1.5 hours) Cohort Study Article Review (1.5 hours) Case Control Study Article Review (1.5 hours) Pharmacoeconomics Article Review (1.5 hours)

Introduction to Clerkship (PCTH 7321) Lecture: Medication Safety on Rotation (2 hours)

University of Utah Physician Assistant Program

2014-2015 Drugs in Primary Care II Lecture: Contraception I (2 hours) Contraception II (2 hours) Drugs in Pregnancy (2 hours) Menopause and Hormone Therapy (2 hours)

University of Utah College of Pharmacy 2013-2014

Profession of Pharmacy (PCTH 5112) Lectures: Professional Electronic Communications (1.5 hours) Medication Safety (1.5 hours)

Drug Literature Evaluation I (PCTH 5116) Lectures: Organization of the Biomedical Literature (1 hour) Formulary Management (1.5 hours) Experimental Study Article Review (1.5 hours) Meta-analysis Article Review (1.5 hours) Noninferiority Study Article Review (1.5 hours)

Drug Literature Evaluation II (PCTH 5125) Lectures: Appropriate Referencing (1.5 hours) Cohort Study Article Review (1.5 hours) Case Control Study Article Review (1.5 hours) Pharmacoeconomics Article Review (1.5 hours)	
Introduction to Clerkship (PCTH 7321) Lecture: Medication Safety on Rotation (2 hours)	
2012-2013 Profession of Pharmacy (PCTH 5112) Lecture: SOAP Notes and the Electronic Medical Record (1.5 h	ours)
Drug Literature Evaluation II (PCTH 5125) Lectures: Appropriate Referencing (1.5 hours) Cohort Study Article Review (1.5 hours) Case Control Study Article Review (1.5 hours)	
Introduction to Clerkship (PCTH 7321) Lecture: Medication Safety on Rotation (2 hours)	
Roseman University Therapeutic Disease State Management: Pulmonology (PHAR 514) Lecture: Systematic Approach to Drug Information (1 hour)	March 2010
Medical University of South Carolina Ambulatory and Self-care Therapeutics (PHMPR 676) Medical University of South Carolina, Charleston, South Carolina Lecture: Pharmacotherapy of Obesity (1 hour)	April 2006
Advanced Drug Information (PHMPR 729) Teaching Assistant Lecture: How to Present Journal Club (1 hour)	August to December 2005
Introduction to Drug Information (PHMPR 610) Lecture: Organization of the Biomedical Literature (1 hour)	October 2005
Ambulatory and Self-care Therapeutics (PHMPR 676) Lecture: Plaque Psoriasis (1 hour)	April 2005
Advanced Drug Information (PHMPR 729) Teaching Assistant Lecture: How to Present Journal Club (1 hour)	November to December 2004

Clinical Precepting

University of Utah College of Pharmacy 2013-2014 Community Pharmacy Residency Program Site Coordinator South Jordan Health Center, South Jordan, UT Resident: Eve Van Wagoner, PharmD 2014 Macheala Jacquez, PharmD 2013 Advanced Community Clerkship (PCTH 7601) Students Precepted Matthew Ence, PharmD 2015 Anthony Pham, PharmD 2015 Caleb Hopkinson, PharmD 2015 Zach White, PharmD 2015 Keith Chow, PharmD 2015 Brooke LeMaster, PharmD 2014 Brian Spence, PharmD 2014 Eve Van Wagoner, PharmD 2014 Angela Green, PharmD 2014 F. Adam Smart, PharmD 2014 Renee Petty, PharmD 2014 Janice Muehle, PharmD 2014 Intermountain Medical Center Residency Program Preceptor October 2007 to October 2012 Residents Precepted Becky Doman, PharmD 2012 Shannon Inglet, PharmD 2012 Nate Spence, PharmD 2010 Chad Marsing, PharmD 2009 Kayta Kobayashi, PharmD 2009 Derek Roylance, PharmD 2008 Dustin Wagstaff, PharmD 2008 Amy Perpich, PharmD 2007 October 2007 to October 2012 Clinical Pharmacy Preceptor Intermountain Medical Center, Murray, Utah Responsibilities: precept fourth-year pharmacy students from University of Utah and Roseman University on rotation in pulmonary hypertension clinic and drug information Students Precepted KC Lee, PharmD 2012 Puja Sharma-Basnet, PharmD 2012 Riki Ashment, PharmD 2012 Spencer Johnson, PharmD 2011 Vinh Su, PharmD 2011 Larry Prettyman, PharmD 2011 Lorinda Anderson, PharmD 2011

Blake Bentley, PharmD 2011 Jonathan Orme, PharmD 2011 Aden Andrus, PharmD 2010 Joanna Roth, PharmD 2010 Amber Nelson, PharmD 2010 Ryan Cardon, PharmD 2010 Jackie Pensel, PharmD 2009 Sepidah Daeery, PharmD 2008 David Crowther, PharmD 2008		
Clinical Pharmacy Preceptor July 2006 to October 2007		
 Kaiser Permanente – Colorado Region, Aurora, Colorado Responsibilities: precept fourth-year pharmacy students from University of Colorado and Creighton University on rotation in drug information <u>Students Precepted</u> Erika McLaughlin, PharmD 2007 Sara Johnson, PharmD 2007 Khaloud Alsilmi-Yousiff, PharmD 2007 		
Professional Experience Unit I (PHMPR 630) Clinical Preceptor, Medical University of South Carolina, Charleston, South Carolina Responsibilities: precepted first-year pharmacy students for a 4 hour/week clinical shadowing experience, educated each student regarding the clinical pharmacist's role in an institutional setting		
Selected Presentations		
Preceptor Update ACPE-accredited 1-hour presentation providing practical application of ACPE Standards, 2016 Utah Pharmacists Association Annual Meeting St. George, Utah, April 15, 2016		
University of Utah Preceptor Development ACPE-accredited 1.5-hour webinar to onboard preceptors for the University of Utah		
American Society of Health-System Pharmacists Specialty Certifications Core Therapeutics Modules:		
Statistics ACPE-accredited 2-hour webinar, practice exam, and resource packet created to prepare pharmacists for the statistics portion of Board of Pharmacy Specialties Exams American Society of health-System Pharmacist, copyright 2015		
Providing Direct Feedback Preceptor Development Workshop presented to preceptors at University of Utah Hospitals and Clinics University of Utah, Salt Lake City, Utah, February 11, 2015		

Selected Presentations (continued)

Literature Searching Pearls

ACPE-accredited CE presented to pharmacists at Intermountain Medical Center Intermountain Medical Center, Murray, Utah, September 8, 2011

Safeguarding Your Patients

ACPE-accredited CE presented to pharmacist and technician members of the Utah Society of Health-System Pharmacists USHP Annual Meeting, Layton, Utah, September 18, 2010

Decoding the Orange Book

ACPE-accredited technician CE presented to members of the Utah Society of Health-System Pharmacists USHP Annual Meeting, Salt Lake City, Utah, September 8, 2007

The Role of Rimonabant in Obese Patients

ACPE-accredited seminar presented to pharmacy and medicine faculty, staff, and residents Medical University of South Carolina, Charleston, South Carolina, February 6, 2006

The Role of Antitumor Necrosis-alpha Agents in the Management of Severe Plaque Psoriasis ACPE-accredited seminar presented to pharmacy and medicine faculty, staff, and residents Medical University of South Carolina, Charleston, South Carolina, March 7, 2005

Publications

Articles

Jacquez M, **Moorman KL**, McAdam-Marx C, Owen D, Schauerham MB, Jennings BT. Identification of medication related problems during medication reviews in a community setting. RRJHCP. 2015;1(2):9-13.

Dick TB, Moorman KL, MacDonald EA, Raines AA, Mathews-Cox KD. Defining and implementing a model for pharmacy resident research projects. Pharmacy Practice. 2015;13(3): 1-5.

MacDonald EA, Moorman KL. Establishing an investigational drug service. Pharmacy Purchasing & Products 2013 Nov;10(11):86-87.

Strohecker JL, Carbajal DM, Crandall B, Day J, Lappe D, Mahapatra S, **Moorman KL**, Osborn J, Smith M, Weiss JP, Bunch TJ. Herbal and non-herbal supplement use is common in warfarin-treated patients and the majority of these agents impact warfarin safety and efficacy. The Journal of Innovations in Cardiac Rhythm Management. 2012;3:611-19.

Publications Publications (continued) Whitley HP, **Moorman KL**. Pharmacists' Opinions Following Levonorgestrel (Plan B) Labeling Change from Prescription-Only to Over-the-Counter. IJPEP [serial on Internet]. 2008;4(1): [14 p.]. Available from: <u>http://www.samford.edu/schools/pharmacy/ijpe/108/whitley.pdf</u>

Whitley HP, **Moorman KL**. Interference with smoking-cessation effects of varenicline after administration of immediate-release amphetamine-dextroamphetamine. Pharmacotherapy. 2007;27(10):1440-5.

Whitley HP, **Moorman KL.** Varenicline: a review of the literature and place in therapy. Pharmacy Practice. 2007;5(2):51-58.

Poster Presentations

Van Wagoner E, Tak C, **Moorman KL**, Jennings BT, Stevens V, Nickman N. Patient Safety Culture within the University of Utah Health Care Community Pharmacies. APhA Annual Meeting. March 2015.

Caffiero N, Nickman N, Drews F, Jennings BT, King JB, **Moorman KL**. Interruptions and Distractions Before and After the Implementation of a Central Call Center on Pharmacists and Technicians in a Community Pharmacy Setting. APhA Annual Meeting. March 2015.

Palmer K, Nickman N, **Moorman KL**, Owen D, Brixner D, Jennings BT. Using Failure Mode and Effects Analysis (FMEA) Methods to Identify Barriers Contributing to Low Human Papillomavirus (HPV) Vaccination Rates in a University-Based Community Health Clinic. APhA Annual Meeting. March 2015.

Trovato A, MacDonald EA, **Moorman KL.** Assessment and use of drug information references in Utah pharmacies. ASHP Midyear Clinical Meeting. December 2014.

Jacquez M, **Moorman KL**, McAdam-Marx C, Owen D, Jennings BT. The identification of medicationrelated problems from a medication review provided by a clinical pharmacist in a community setting. APhA Annual Meeting. March 2014.

Moorman KL, Bigelow J. Implementing a frontline pharmacy and nursing medication event taskforce to improve patient safety at Intermountain Medical Center. ASHP Midyear Clinical Meeting. December 2010.

Bair J, Moorman KL, Raines AA, Smith K. Assessing compliance with IDSA guidelines for catheterrelated bloodstream infections. ASHP Midyear Clinical Meeting. December 2010.

Leavitt BE, Berensen NM, **Moorman KL**, Muelleck R, Akagi MD. Development and implementation of a medication occurrence review process at Intermountain Medical Center. ASHP Midyear Clinical Meeting. December 2010.

Poster Presentations (continued)

Simister S, Tuckett A, Rapier M, Evans ES, **Moorman KL.** Creating and implementing dose-checking templates at a tertiary medical center. ASHP Midyear Clinical Meeting. December 2010.

Crowther D, Moorman KL. Evaluating the risk of edema or worsening right-heart failure with ambrisentan compared with bosentan. ACCP Fall Meeting. October 2008.

MacFall HM, Garrison KL, Berensen NM, **Moorman KL**. Assessment of medication-induced gastrointestinal bleeding in adult patients and reporting of such events. International Pharmaceutical Abstracts 2006.

Garrison KL, MacFall HM, Berensen NM, **Moorman KL**. Assessment of adherence to guidelines for the management of adult patients with hospital-acquired, ventilator-associated, and healthcare-associated pneumonia. International Pharmaceutical Abstracts 2006.

Berensen NM, **Moorman KL**, Weart CW, DeLegge MH, Nickel RO, Phillips CO, et. al. Developing and implementing an interdisciplinary educational conference series to improve organizational performance. Pharmacotherapy. 2005;25:1499.

Winner, Celebrating Excellence Fair, Medical University of South Carolina, Charleston, SC, November 2005.

MacFall HM, Berensen NM, Davis KL, Cole SW, Prutting SM, **Moorman KL**, et al. Assessment of potentially inappropriate medications using the Beers criteria in an ambulatory setting. Pharmacotherapy. 2005;25:1457.

Moorman KL, Berensen NM, Bush PW. Interdisciplinary approach to expanding an automatic therapeutic substitution program in an academic health sciences center. Proceedings from University HealthSystem Consortium Pharmacy Council Poster Sessions. December 2005.

Other Scholarship

Moorman KL- American Society of Health-System Pharmacists Pharmacotherapy Recertification Literature Study 2015, Module 1A: Cardiology and Statistics (nested case-control study) and 1B: Cardiology and Statistics (meta-analysis).

ACPE-accredited continuing education articles and exam, copyright 2015.

Service

Professional

American Association of Colleges of Pharmacy Wal-mart Scholars Mentor Student Mentee- Anthony Trovato	July 2015
American Society of Health-System Pharmacists Council on Education and Workforce Development Section Advisory Group on Preceptors Skills Development	2016 to present 2013 to 2015

Service (continued)

Utah Society of Health-System Pharmacist President President-elect Utah Delegate- ASHP Annual Meeting Program Committee, co-chair

Peer Reviewer, Journal of Pain and Palliative Care Pharmacotherapy

University of Utah University Teaching Committee

University of Utah College of Pharmacy

Chair, Professional Experience Committee *Rho Chi* Faculty Advisor Student Mentoring Committee

Seminar Mentor Brooke LeMaster, PharmD 2014 Eve Van Wagoner, PharmD 2014 Continuing Education Committee Pharmacy Experiential Program Committee

University of Utah Hospitals and Clinics

Preceptor Development and Teaching Certificate Committee Pharmacy Medication Safety Committee Community Residency Advisory Committee Adverse Drug Event Subcommittee Pharmacist Clinical Training Committee, vice chair

University of Utah Residency Program Teaching Certificate Coach

Ashley Kappenman, PharmD Kelsey Palmer, PharmD

Intermountain Healthcare System-wide Committees

Medication Safety Team Medication Event Verification Users Group Pharmacy and Therapeutics Guidance Council

Intermountain Healthcare Urban Central Region Committees

Pharmacy and Therapeutics Committee Education Council Medication Cycle Improvement Committee August 2015 to present September 2014 to August 2015 June 2015 September 2013 to September 2014

October 2012 to present

August 2014 to present

July 2015 to present July 2014 to present July 2013 to present

July 2013 to July 2015 March 2014 to August 2014

July 2015 to present April 2014 to July 2015 October 2012 to July 2015 March 3013 to July 2015 November 2012 to July 2015

> July 2015 to present July 2014 to June 2015

September 2008 to October 2012 September 2008 to October 2012 March 2011 to October 2012

September 2008 to October 2012 June 2009 to October 2012 September 2008 to October 2012

Service (continued)

Intermountain Medical Center Committees Pharmacy Safety Taskforce, Chair Nursing, Pharmacy Medication Safety Taskforce. Co-chair Resident Advisory Council Resident Research Committee Honors and Awards	November 2 April 2	009 to October 2012 009 to October 2012 010 to October 2012 010 to October 2012
Kaiser Permanente RXellence Award- Quality Improvement Pro Standardization of Injectable Medications	ject of Year;	October 6, 2007
First Honor Graduate, William A. Prout Award, MUSC College	of Pharmacy	May 21, 2004
Eli Lilly Achievement Award		May 21, 2004

Professional Memberships

American Association of Colleges of Pharmacy	2014 to present
Utah Society of Health-System Pharmacists	2010 to present
American College of Clinical Pharmacy	2004 to present
Phi Lambda Sigma Pharmacy Leadership Fraternity, Beta Chi Chapter	2003 to present
Rho Chi Academic Honor Society, Alpha Iota Chapter	2002 to present
American Society of Health-System Pharmacists	2001 to present
South Carolina Society of Health-System Pharmacists	2000 to 2006

Revised May 2016