

Common Resident Program Manual

**University of Utah Health Care
Department of Pharmacy Services**

Salt Lake City, Utah

2015 - 2016

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Recruitment and Selection of Residents

1. The Department shall participate in the Resident Matching Program of the American Society of Health-System Pharmacists (ASHP).
2. The Department shall participate in the Residency Program Showcase at the ASHP Midyear Clinical Meeting and may also conduct introductory interviews in the Personnel Placement Service (PPS).
3. At the ASHP Midyear Clinical Meeting, the Program Director (or designee), current residents, and preceptors in attendance shall participate in the recruitment of candidates for the residency program.
4. The Residency Program Director shall address questions raised by candidates considering application to the program.
5. Those candidates who wish to be considered for an on-site interview shall submit an application, current curriculum vitae, college transcripts, and three letters of recommendation or standardized recommendation forms on Phorcas by the first of January or date determined by the Program Director. Candidates may be asked to participate in an introductory phone or video interview.
6. In January, after evaluation of the information submitted by residency candidates, a sufficient number of candidates shall be invited for an on-site interview.
7. The one-day interview shall include meeting with preceptors from each core practice area as well as the current program resident(s).
8. After the interview process is completed, the interview groups shall meet to discuss and evaluate each candidate. Each group shall submit a single ordinal rank list of all candidates to the Program Director.
9. The Program Director shall use the rank lists from each interview group and initial ranking to determine a final resident ordinal ranking.
10. The Administrative Director of Pharmacy shall review and approve the resident ranking.
11. The Program Director shall submit the approved rank list to ASHP Resident Matching Program.
12. If the program does not match all positions, they will use the resources of the National Matching Service to identify candidates and interview them by telephone or video-link if they are not local. The interview team will then rank candidates. The RPD will offer the position(s) to the top candidate(s).

General Information

1. The Program Director shall serve as program advisor for each of the residents and will guide the resident in meeting the requirements for successful completion of the residency.
2. The resident shall meet with the Program Director at the beginning of the program to evaluate their skills and knowledge and to develop an individualized plan based on the resident's previous preparation and professional practice goals.
 - a. The evaluation and planning process shall be documented in the PharmAcademic Customized Training Plan (CTP) using the Resident Self-Evaluation and Planning Form.
 - b. The resident and Program Director will develop a customized residency program plan for each resident to accomplish the specific program goals taking into account the resident's goals, interests, strengths, weaknesses, and opportunities available within the University of Utah Health Care System.
 - c. The Resident Self-Evaluation and Planning Form will be used to develop each resident's schedule of rotations.
 - d. Once residency rotations have been assigned, the resident may request a change in assigned rotations. Requests will be accommodated whenever possible and appropriate for their training plan.
3. A copy of the Residency Manual shall be provided electronically to each resident outlining the requirements of the residency program.
 - a. Individual programs may also provide each resident with a program-specific appendix to supplement the common manual with information pertinent to that program.
 - b. Residents shall make themselves knowledgeable of all program requirements.
 - c. Residents shall make themselves aware of important dates and deadlines set forth and identified in the program manual and appendices.
4. Orientation to University of Utah Health Care and to the Department of Pharmacy Services will take place during the first weeks of the program; however, orientation and skills development will continue on an as-needed basis.
5. Residents are classified as regular, full-time, exempt employees of University Health Care Hospitals and Clinics and are eligible for benefits as such. (See Appendix A for the Resident Job Description.)
6. Vacation Leave – PTO-Scheduled
 - a. Residents accrue 20 days paid time off (PTO) to cover vacation and sick leave during the residency year. To ensure the quality of the residency rotations, vacation leave is limited to 10 days over the course of the year and 2 days per 4-week rotation experience. PTO remaining at the end of the residency will be cashed out or will be maintained if the resident accepts a position with the University. This includes leave time granted for interviewing for positions and educational meetings that are **not** sponsored by the program. Unscheduled PTO for sick leave must be limited to 5 days

per year without affecting the duration of residency and may only be used for illness or health-care appointments.

- b. Vacation requests must be submitted in writing, on a Leave Request form, to the Program Director. The resident will first discuss the request with the affected rotation preceptor to ensure that rotation objectives can be met, and the resident will obtain the consenting preceptor's signature on the Leave Request form **prior** to submitting it to the Program Director. Vacation days should be limited to a maximum of two days per rotation. If more time off is required, the Program Director must be informed to ensure rotation objectives can be met. The rotation may need to be extended if rotation objectives cannot be met.

7. Holidays and Holiday Leave

- a. Residents accrue 10 paid holidays as full-time exempt employees during the year in addition to PTO. Residents may count a worked holiday as part of service commitment if they have worked their regular commitment during the remaining weekdays and used the holiday from their holiday bank - making the worked holiday truly an extra shift. If the resident has worked less than a 40-hour commitment between the 8 hours of holiday pay, staffing, and regular rotation attendance, the resident must discuss PTO options with their Program Director.
- b. Benefit-eligible Hospitals and Clinics employees may "bank" time worked on a company-paid holiday for use at a later time. However, the shift work on that holiday cannot count as a required shift or be paid as ECS if the holiday is banked. The banked holiday is paid out on January 1st each year if it is not used or when employment ends.
- c. Residents shall discuss holiday service requirements with the affected rotation's preceptor as early as possible.
- d. Residents who staff inpatient areas are required to be available to staff Thanksgiving, Christmas OR New Year's holidays as a 2-day major holiday coverage commitment. For example, the resident will work Thanksgiving and the day after, or Christmas Eve and Christmas Day, or New Year's Eve and Day. Residents are also required to work two minor holidays including Martin Luther King, Jr. Day, Presidents' Day, Memorial Day, 4th of July, Pioneer Day, or Labor Day. Specific assignments shall be made in conjunction with the pharmacist scheduling manager.
- e. Residents may participate in staffing of shifts for other holidays consistent with the standards applied to regular staff.

8. Sick Leave – PTO-Unscheduled

- a. Residents are afforded sick leave as a part of the PTO accruals.
- b. When the resident is unable to work as a result of illness, either on their rotation assignment or staffing assignment, the resident shall immediately notify their rotation preceptor or scheduling manager for required shifts, rotation days, or project days.

- c. The resident shall subsequently and additionally notify the Program Director of their absence from rotation, and submit the sick day request as PTO-unscheduled (PTO-U) in the appropriate format (eg, payroll exception form).

9. Excessive Absence During the Program

- a. A preceptor or Program Director may decide that absences from the rotation or the program are excessive when there is the potential for a resident to not complete program expectations or requirements. Excessive absence may be due to illness or other factors. When situations such as these occur, the resident must work closely with the preceptor and Program Director to make arrangements to meet the requirements.
- b. Despite all arrangements, a situation may arise where the resident has not completed the rotation experience and program requirements. This determination shall be made by the rotation preceptor or the Program Director. An alternate written plan will be developed to enable the resident to successfully complete the program requirements if possible. The residency year may be extended for no more than 3 months to allow completion of program requirements.
- c. If the resident fails to complete the plan, disciplinary action will be considered. Residents unable to complete program requirements according to the written plan and appropriate extended timeframe will not graduate from the program. Once the annual salary has been paid out at the amount offered in the offer letter, the time spent in completing requirements will then be unpaid.
- d. Graduation from a PGY1 program is required prior to being eligible for PGY2 status. If a resident is in a 2-year program or has early committed to a PGY2 program at UUHC, they must complete the PGY1 program first.

10. Disciplinary Action and Dismissal

- a. Disciplinary actions or dismissal from the program are actions that are considered when residents do not meet program or rotation expectations. Residents are informed of program requirements, expectations, and deadlines. Rotation expectations are communicated by the preceptor at the beginning of and throughout each rotation.
- b. When problems related to performance, professionalism, behavior or knowledge arise, the preceptors will counsel the resident on how to correct the problem. If the issues are not resolved, the ongoing concern will be documented and referred to the Program Director. The Program Director may consult with the Residency Advisory Committee regarding appropriate action.
- c. The Program Director will discuss the issues with the resident and others as appropriate.
- d. When disciplinary action is indicated, the Program Director (or rotation preceptor in conjunction with the Program Director) will take the appropriate action based on the situation and circumstances (See also University Policy 5-111: Corrective Action and Termination Policy for Staff Employees).

- e. When dismissal from the program may be indicated, the Program Director will make recommendations to the Residency Advisory Committee. The Residency Advisory Committee will make the final decision concerning dismissal from the program.
- f. Dismissal from the program may occur with consultation with Human Resources during the resident's first 6 months of employment (probationary term). Problems discovered in the 4th or 5th month of the residency may result in a 3-month extension of the probationary term and will be negotiated with the Human Resources Department by the Program Director and the location manager. After this time, the resident will go through progressive discipline and be terminated from employment.

11. Pharmacist Licensure in Utah

- a. All residents are required to be eligible to work in the United States prior to their first day of residency.
- b. Residents must have either a full or temporary license by the first day of residency. If any resident has licensure testing dates after June 15th, he or she must apply for a temporary pharmacist license prior to this date to ensure licensure by the first day.
- c. Residents must be fully licensed in the state of Utah to practice as a pharmacist by September 30th at the very latest. If the resident is NOT licensed by this date, the resident will be dismissed from the program. Each instance of non-licensure will be evaluated on a case-by-case basis by the Residency Advisory Committee.

12. Residency Program Certificate

- a. Upon successful completion of all program requirements and compliance with all conditions of the residency program, the resident shall be awarded a certificate indicating successful completion of the residency for the appropriate program. The language on the certificate will match ASHP's requirements for certification of graduation.
- b. Residents that fail to complete program requirements and comply with all conditions of the residency program shall not be awarded a certificate of completion.
- c. Certificates will only be awarded to residents who have completed the following:
 - i. Completed 85% or more of objectives as achieved for residency (ACHR) and all other goals and objectives marked as "satisfactory progress" or "achieved" in PharmAcademic.
 - ii. All residents are expected to achieve all clinical goals for residency prior to graduation (e.g., R1 objectives).
 - iii. Completed all required activities, projects, and presentations for residency.
 - iv. Turned in a formal written manuscript of their year-long project to the Program Director and project mentor who deem the document acceptable for submission to a journal.
 - v. Turned in a completed, hyperlinked electronic e-portfolio of all their written projects, presentations, rotation overviews, and readings as appropriate.

Residency Advisory Committee: 2015-2016

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|---------------------------------|--|
| Erin Lingenfelter, PharmD | Clinical Pharmacist, ED & Critical Care PGY2 Director, Critical Care |
| Erin R. Fox, PharmD, FASHP | Director, Drug Information Service PGY2 Director, Drug Information |
| Karen Gunning, PharmD, BCPS | Clinical Pharmacist; Professor, Clinical; Interim Chair of Pharmacotherapy PGY2 Director, Ambulatory Care – Family Medicine |
| Craig Herzog, RPh, MBA | Director, Pharmacy Automation and Informatics PGY2 Director, Informatics |
| Megan Lowe, PharmD | Clinical Pharmacist, Community Practice PGY1 Community Practice Director |
| Shantel Mullin, PharmD, BCPS | Manager, Inpatient Clinical Services PGY1 Pharmacy Practice Director |
| Stephanie Sanders, PharmD, BCOP | Clinical Pharmacist, Oncology PGY2 Director, Oncology |
| Lonnie Smith, PharmD | Manager, Solid Organ Transplant PGY2 Director, Solid Organ Transplantation |
| Linda S. Tyler, PharmD, FASHP | Administrative Director, Pharmacy Services PGY1/PGY2 Director, Pharmacy Administration Chair, Research Steering Subcommittee |
| David Young, PharmD | Professor, Clinical PGY2 Director, Internal Medicine – Pulmonology |
| Nancy Nickman, PhD | Department of Pharmacotherapy Faculty (Ex Officio) |

RAC Subcommittee Chairs (attend only when issues arise related to committees):

Dave Peterson (Preceptor Development and Teaching Certificate)

Elyse MacDonald (Recruiting)

Ann Marie Prazak (Orientation and Assessment)

Research Subcommittees are appointed annually by the following Chairs and generally consist of the program directors as well as interested program preceptors.

Shantel Mullin – PGY1 Pharmacy Practice Residents

Erin Fox – Drug Information, Pharmacy Administration, Informatics

Brandon Jennings – PGY1 Community, Ambulatory Care

Stephanie Sanders – Critical Care, Oncology, Internal Medicine, Transplant

Members of RAC work in conjunction with the Community Residency Advisory Committee (CRAC) to develop policies and to ensure consistency across programs.

Service Commitment

1. Residents are required to provide staffing support, within the department, as part of their program and stipend. The service commitment is **four full shifts** (no less than 32 hours) per month. Training for staffing shall begin in July of the residency year and time requirements may exceed 32 hours per month in staffing roles until training is completed.
2. Scheduling of service commitment will be made based on input from each resident. Residents may work 4, 8, or 16 hour shifts and may ask for preferred dates before the schedule is completed, or they may pick up open shifts once the schedule is published. For example, PGY1 Pharmacy Practice residents are required to work at least half of their required shifts each month (16 hours) on weekend daytime shifts in any decentralized location. Other shifts may be completed on weekday evenings or weekends in central or decentralized locations. The resident may only leave a rotation site early for a required or other extra shift if the rotation preceptor approves this prior to the resident signing up for the shift.
3. Duty Hours: Work Hours are defined as all clinical and academic activities related to the residency program. These can include, but are not limited to, patient care, administrative duties, and scheduled academic activities such as conferences and lectures. Work hours do include internal or external moonlighting shifts worked. Work hours do not include time spent away from the work site (i.e. at home) for reading and preparation or time traveling to conferences.

Work hours must be limited to 80 hours per week averaged over a 4-week period inclusive of all in-house activities and all moonlighting shifts. (Moonlighting must not interfere with the ability of the resident to achieve the educational goals and objectives of the residency program.) Residents must be given one day in seven free from all work-related responsibilities averaged over a 4-week period. One day is defined a 24-hour period free from all clinical, educational, and administrative activities.

Adequate time for rest and personal activities must be provided. This should consist of at least 10 hours between all daily duty periods averaged over 1 week.

4. Opportunities for service are chosen for the resident by the program director and may include on-call, staffing shifts on weekends or swing shifts as appropriate for the resident and training program needs. If the resident elects to sign up for a swing shift, he or she must obtain approval to leave their rotation site early to work the shift. The rotation site takes precedence over the required shift. If the preceptor states they would prefer the resident NOT cover swings during that rotation, the resident should select weekend shifts to avoid leaving the rotation early. This may be particularly relevant on ambulatory care rotations, consult rotations such as infectious disease, and ICU rotations.
5. Residents are expected to read and prepare for rotations and work on their projects on evenings and weekends as part of their learning process. Time spent in the hospital on off-hours working on projects or catching up on rotation requirements may not be used for compensation time or for required shifts. Time "on the clock" may affect duty hour limits.

Rotation Guidelines

1. The resident shall provide complete pharmacy services in coordination and cooperation with departmental professional and support staff, consistent with departmental policies and procedures for operations and clinical practice, meeting all the requirements and obligations of pharmacists on staff.
2. The resident shall actively participate in rotation activities, including: team meetings, rounds, and other interdisciplinary conferences that occur on the services of their rotations. The rotation preceptor shall be responsible to identify these opportunities and to commit the resident to effectively participate.
3. The resident shall identify therapeutic issues and problems and shall develop and present therapeutic recommendations. He or she will also present in-services to the medical, nursing, and pharmacy staffs addressing those issues as needed.
 - a. The resident is encouraged to seek opportunities to educate other ancillary health care practitioners such as physician's assistants, nurse practitioners, and physical therapists, etc., on subjects relating to pharmacology and medication use.
4. The resident shall provide clinical instruction for Doctor of Pharmacy students on clinical clerkships, under the supervision and guidance of their rotation preceptor.
5. Non-University of Utah Health Care Rotations (NUUHC):
 - a. Residents shall be allowed to obtain practice experience in NUUHC rotations as pre-approved by the Residency Director and Pharmacy Director.
 - b. Residents shall not be permitted more than four weeks in a NUUHC site rotation during the residency training program.
6. The residency programs at University of Utah Health Care take a holistic approach to post-graduate training. The expectation is that an interdisciplinary team philosophy will be used, and the team member with the greatest experience will provide leadership and mentorship to other team members.
8. The resident may be required to staff the rotation area during the regular rotation hours after they are oriented to the service in rare situations, including preceptor illness. This is a rotation expectation and will **not** count toward their additional service commitment hours as it occurs during the regular rotational work week and is not considered extra hours of work.

Project

1. The resident shall, with the guidance and supervision of appropriate preceptors, develop and complete a residency project.
2. The resident is responsible to select an individual to serve as primary project advisor.
3. The project advisor(s) shall be responsible to:
 - a. Provide guidance to the resident in designing, performing, and documenting the outcomes of the project.
 - b. Oversee the development of the project proposal.
 - c. Meet with the resident at least monthly to discuss the progress and deliverables on the project.
 - d. Support the resident during presentation of the proposal to the RAC.
 - e. Provide technical expertise and advice to the resident.
 - f. Provide editorial assistance in developing the platform presentation for Mountain States Residents Conference and the final project manuscript.
 - g. Review the final report and notify the Residency Program Director when the project is complete.
4. The project must be approved by the Residency Advisory Committee. The format for the proposal to RAC will follow the current requirements for submission to IRB.
5. The resident shall meet the following project deadlines:
 - a. July Identification of project advisor(s)
 - b. August Development of project proposal
 - c. August-September Present project to the appropriate Research Subcommittee of the Residency Advisory Committee
 - d. September-October Final proposal submitted to Program Director, Research Subcommittee Chair, and Institutional Review Board
 - b. November Submit abstract to UHC for poster presentation in December (required for Teaching Certificate and optional for other residents.)
 - c. February Mountain States Conference (or appropriate conference)

as approved by RAC) abstract approved by project advisor and Program Director and submitted to Conference before the deadline.

- g. April Draft of Project Mountain States Conference slides to project preceptor and Program Director; will include handout.
 - h. April-May Practice presentations for Mountain States Conference
 - i. May Present project at Mountain States Conference
 - j. June Due date (approximate) for submission of case studies and posters for next ASHP Midyear Clinical Meeting (Optional, but highly recommended)
 - k. June Final Summary Report (manuscript format) of project to Program Director and project advisor(s) for approval.
- 6 The resident is responsible to pursue any necessary funding for their residency project. Funds will be used to offset costs of the project and to support travel to conferences where the material will be presented.
7. Funds generated for residency projects shall be deposited into the department's research account and shall be used to offset costs of the residency project.
8. A final written report of the residency project shall be submitted to the Program Director as a requirement for successful completion of the residency. The report shall be written using format and style consistent with publication in a professional journal, including project subject, background, methods, results, and conclusions. Residents will be encouraged to submit their project manuscript for publication in a professional journal. (Some programs may require the manuscript be submitted to a journal before the residency certificate is bestowed.)

Required Format for RAC Proposal:

Protocol Summary

Version: [version date]

[Study Title]

Principal Investigator

[Principal Investigator Name]

[PI Address]

[PI Phone Number]

[PI E-mail Address]

Please list all co-investigators with their contact information

Co-Investigator(s)

[Co-Investigator Name]

[Co-Investigator Address]

[Co-Investigator Phone Number]

[Co-Investigator E-mail Address(es)]

Faculty Sponsor (if applicable)

[Faculty Sponsor Name]

[Faculty Sponsor Address]

[Faculty Sponsor Phone Number]

[Faculty Sponsor E-mail Address]

DIRECTIONS:

- *Replace bracketed items on the title page, such as "[Study Title]" with the requested information. Please replace "[version date]" with a date.*
- *Delete all directions written in italics, such as this section.*
- *Read guidelines for each section, complete as applicable for your project and then delete the template guidelines.*

Your summary should be able to answer the following three questions regarding scholarly merit of the proposed activity:

1. *Will the research design yield valid results?*
2. *Does the research utilize acceptable practice for the discipline?*
3. *Does/Do the investigator(s) possess adequate qualifications to conduct the research?*

BACKGROUND AND INTRODUCTION: Identify the research area being studied and provide a review of the literature that provides the basis for understanding the objectives of the study. This review should be written such that scientists outside the investigator's area of expertise can understand the issues involved. Any information about previous research related to this study involving animals and/or humans should be summarized. Include studies on pregnant animals if the research is conducted on pregnant women, fetuses, or neonates.

OBJECTIVES: The objectives should be stated in such a way that the reader can determine the appropriateness of the study design below. If appropriate, state the specific hypotheses being tested and/or study aims.

PARTICIPANT SELECTION CRITERIA: Participant-entry criteria should be as detailed as necessary to define the patient population under study and, for clinical studies, to reduce confounding treatments or diseases. Precise criteria for age, gender, or any other factors (e.g., in a clinical study: diagnoses, extremes in signs or symptoms, etc.) should be included. Specific exclusion criteria should be listed which could interfere with the study or which place participants at risk during the study.

DESIGN: A simple statement of the design methodology proposed to test your hypothesis(es) should be included. Randomization and control methods should be stated. Of primary importance is clearly showing how the trial design will collect the study data and lead to the analysis and interpretation proposed. Any interim analysis or criteria for stopping a clinical trial should be stated. For studies not proposing experimental design include detail about the scientific methods to be employed.

STUDY PROCEDURES: This section of the protocol should state both the chronological flow of the study and the procedures/activities that the participants must undergo. The investigational activities, treatments, or procedures must be clearly detailed as to how and when they will be performed. For clinical studies, a distinction should be made between the procedures for treatment evaluation versus procedures for safety evaluation. Treatment endpoints must be defined as well as interim procedures for dealing with adverse events. Schematic diagrams may be helpful for understanding the flow of a study.

Standard of Care vs. Research-Related Procedures: Please separate and explain what proposed procedures for this study are considered standard of care and which ones are strictly research-related. *Delete this sub-section if it does not apply to your project.*

Data Safety and Monitoring: All moderate risk studies require a data safety and monitoring plan, committee, or board. The information provided to the IRB should describe the process and mechanisms in place for assuring the safety of research participants and the oversight of data integrity. *You may describe the plan in this sub-section or attach a separate document outlining the DSMB/DSMC to the documents and attachments page of the application under Protocol Summary. Please refer to the IRB website for more information regarding data safety and monitoring requirements under Guidelines. Delete this sub-section if it does not apply to your project.*

STATISTICAL METHODS, DATA ANALYSIS AND INTERPRETATION: The anticipated methods to be used for analysis and interpretation of the data should be stated. Naturally, these methods must compliment the design of the trial and the nature of the data which are being collected. The factors in the trial that determine the proposed sample size (e.g. power) should be stated.

ADMINISTRATIVE RESPONSIBILITIES:

Study Resources: Specify the resources available to conduct the research including qualified personnel, equipment, space, and what facilities will be involved. Include an explanation of the methods for maintaining confidentiality of the study data. *All investigators must provide this information.*

Recruitment: Describe methods of participant recruitment which will be used to recruit participants such as newspaper/internet advertisements or flyers. *Please note that the University of Utah IRB does not allow cold-calling as a method of recruitment. All recruitment materials must be attached to the documents and attachments page in the application. If chart review will be involved as a method of recruitment, you must complete a request for waiver of authorization and consent in the application. Delete this sub-section if it does not apply to your project.*

Control of Investigational Devices/Drugs: If this project involves an investigational drug or device please provide a plan as to how you will control, store, and dispense investigational drugs/devices to ensure they are only used by the qualified investigator(s) for this study and the participants enrolled in this research project. *Delete this sub-section if it does not apply to your project.*

Communication Plans for Multi-Center Studies (i.e. multiple sites around the nation): If you are the lead investigator for this study, or the University of Utah is the lead site for this study, please describe the management and communication among sites of information obtained in this research that may be relevant to the protection of research participants, such as:

- Unanticipated problems involving risks to participants or others
- Interim results
- Protocol modifications

Please attach an IRB approval or signed letter of support from each participating site to the documents and attachments page of the application under Other Documents. Delete this sub-section if it does not apply to your project.

Participating Sites outside the University of Utah (i.e. multiple sites around the city or state):

This section should discuss which other institutions are participating in the study for which you, as the PI, are responsible. Please describe the procedures, provisions and resources in place at the participating institutions to protect the safety of participants, and how unanticipated problems will be communicated to the PI and the University of Utah IRB. If the participating site is not adequately equipped to handle safety concerns, please explain the procedures and plan in place for the PI to respond to any such occurrences. *Please attach an IRB approval or signed letter of support from each participating site to the documents and attachments page of the application under Other Documents. Delete this sub-section if it does not apply to your project.*

TIMELINE FOR PROJECT (specific to RAC proposal)

ROLE OF RESIDENT IN COMPLETING THE PROJECT (specific to RAC proposal)

REFERENCES AND APPENDICES: Citations from the literature should be included in the Background/Introduction section above and the references listed here. Other supporting information, such as your own publications, should be submitted if you feel it would allow a deeper understanding of the project.

Presentations

1. The resident shall participate in departmental staff development programs as directed by the Program Director.
2. Residents shall prepare and deliver a minimum of four presentations under the direction of the Residency Presentation Coordinator and the Content Advisor for each presentation selected by the resident. The Presentation Coordinator is Gary Davis. The four required presentations are:
 - A. A formal, academic seminar to the Department of Pharmacy Services staff.
 - B. An American Council of Pharmaceutical Education (ACPE)-approved, presentation developed and presented for area pharmacists, pharmacy students, and technicians on a topic that is of current interest to pharmacy practitioners. The continuing education presentation is subject to the guidelines provided by ACPE, and must include an evaluation of available literature.
 - C. The residency project presentation given at the Mountain States Residency Conference (or other approved conference) with practice sessions presented to the staff preceding the Conference.
 - D. A lecture at the University of Utah College of Pharmacy in a class selected from a list of options provided by the College each year, with approval by the Residency Director and Course Coordinator at the College.

3. The following are the goals for each of the four presentations:

- A. Formal, academic seminar to the pharmacy staff

Goal 1 – Demonstrate the ability to verbally present a practice controversy to peers in 30 to **35 minutes**. The primary focus of clinical residents will be to identify the clinical dilemma/controversy and related literature, orient the audience to where these data fit in clinical practice, present data from the literature to answer the clinical question, and then clearly provide guidance to audience members on what to do clinically if faced with this clinical controversy. A Seminar Content Advisor, chosen by the resident and agreed to by the Program Director, will serve as the content expert and mentor the resident through this process. (Residents in PGY2 programs may choose to present controversial administrative or technological controversies.)

Goal 2 – Demonstrate the ability to appropriately select and evaluate literature. The chosen literature should support or refute the **controversial** topic chosen. A written evaluation of at least 4 articles using the Seminar Pre-Work handout

(attached) will be due to the Content Advisor and Program Director **21 days** prior to the presentation.)

Goal 3 – Prepare and use appropriate visual aids (e.g., PowerPoint) for a small-to medium-sized conference room. All audio/visual content must meet approval of the Presentation Advisor and either the Presentation Coordinator or Program Director prior to presenting the seminar.

Goal 4 – Demonstrate the ability to appropriately answer questions posed by peers.

Goal 5 – Provide clear recommendations to the audience members regarding what they should do if confronted with this clinical scenario in the future. If clear recommendations are not given, the resident will be required to re-evaluate the data and present the seminar a second time in order to complete this residency requirement.

Goal 6 – Demonstrate the ability to present clinically relevant data in a clear, concise manner and demonstrate a high level of professionalism. Lack of clarity in the presentation may result in the resident needing to re-present to a small group of RAC members.

B. ACPE-approved presentation for pharmacists, pharmacy students, and technicians.

Goal 1 – Learn the preparation and procedures required for presenting an ACPE-approved presentation. For example, the presentation must be a full **50 minutes** of contact time, allowing 5-10 minutes for questions.

Goal 2 – Prepare a PowerPoint presentation for a large auditorium with appropriate handouts.

Goal 3 – Demonstrate the ability to review a disease state, established or innovative therapeutic plan, new pharmacologic agent, or other pharmacy-practice issue.

Goal 4 – Select and evaluate appropriate **primary and tertiary** literature to support conclusions relevant to the pharmacy practitioner (i.e., pharmacist and technician).

Goal 5 – Provide clear conclusions and information related to the “role of the pharmacist and technician.”

Goal 6 – Improve speaking skills and presentation style as compared with the first seminar presentation to pharmacy staff.

C. Formal platform presentation at the Mountain States Residency Conference

Goal 1 – Clearly and confidently present original research.

Goal 2 – Follow the guidelines established for a formal invited speaking engagement. In this case, follow the guidelines mandated by the Mountain States Conference coordinators.

Goal 3 – Use PowerPoint effectively to make slides using tables, graphs, or imported graphics.

Goal 4 – Use this presentation as a medium to organize data to be included in the final manuscript, which will be written and submitted for publication in a national peer-reviewed journal and/or to the Program Director.

D. Lecture for students at the University of Utah College of Pharmacy (with the approval of the Program Director and Teaching Certificate Coach as appropriate).

Goal 1 – Provide an appropriate overview of material that is new to a group of pharmacy students.

Goal 2 – Research the lecture topic in order to become a content expert.

Goal 3 – Select current primary and tertiary literature to reference for the class.

Goal 4 – Prepare a handout and other visual aids that are appropriate for pharmacy students.

Goal 5 – Use active learning techniques to engage students at a higher level in the classroom.

Goal 6 - Work with the course coordinator/primary instructor to schedule the class and verify that the lecture content is adequate.

Goal 7 – Write clear and appropriate test questions for the class material presented. (Questions should be submitted with the lecture material for review by the course coordinator and Teaching Certificate Coach as appropriate prior to the presentation of the lecture material in class.)

4. Deadlines: A **seminar** topic and Content Advisor must be selected by mid-August. Objectives and handout for the seminar are due **14 days** prior to the presentation to the Program Director, Presentations Coordinator and the Content Advisor. Feedback will be returned to the resident within 4 business days. A final handout will be due **7 days** prior to the seminar to the Program Director and Content Advisor.

A topic and Content Advisor must be selected for the **CE presentation** by the end of November. Objectives and other paperwork required for accreditation of the ACPE presentation are due a full **60 days** prior to the first day of the presentation series to the USHP CE Administrator and to the resident's chosen CE Content Advisor. (ACPE

presentations are scheduled two to three months in advance.) A first draft of all materials for the ACPE-approved presentation (including handout and slides) are due *without fail* to the Program Director, Presentations Coordinator and the Content Advisor **40 days** prior to the beginning of the CE series. The resident shall then make improvements based on feedback from the advisor and provide a second draft **30 days** prior to the presentation series to the individuals listed above and to the USHP CE Coordinator. These deadlines must be met to fulfill program requirements. Residents who fail to meet their deadlines will be required to present their seminar or CE in a closed-door session with the Program Director and Content Advisor and risk losing CE-accreditation for their presentation.

The lecture date and due dates for materials and test questions will be negotiated with the Course Coordinator. When the lecture topic is selected, the resident must immediately notify the Program Director and Presentation Coordinator.

Mountain States practice sessions will be held starting 3-4 weeks prior to the meeting in order to meet slide submission deadlines. Each resident will present at least twice to Research Committee members and project advisors.

5. At the beginning of each presentation, the resident will identify to the audience who his/her advisor is and thank him/her for his/her effort.
6. Designated evaluators will use approved evaluation forms to verify that all the requirements for the formal academic seminar and ACPE presentation are met. All other audience members will complete a standard evaluation for the continuing education presentation. Failure to achieve satisfactory evaluations, meet the ACPE requirements, or meet deadlines will result in the seminar or continuing education presentation being revised and repeated by the resident. The resident will not receive a certificate of residency completion until all presentation requirements are met.
7. Shortly after the seminar (within 1 week following presentation), the resident and either the Program Director or the Content Advisor should meet and discuss how the resident performed, what the resident thought went well and did not go well, how the resident thinks he/she can improve for next time, and any comments on the evaluations that need further discussion.
8. The residents shall attend all seminar and CE sessions, practice sessions, and project presentations as assigned by program. In the event of conflicts with rotation requirements, the resident shall resolve the conflict with the preceptor of the rotation and the Program Director.
9. Presentation handouts, evaluations, and list of attendees shall be included in the Resident's electronic portfolio for all four required presentations.

SEMINAR EVALUATION FORM

DATE: _____
EVALUATOR: _____
PRESENTER: _____
TITLE: _____

This is a learning experience for both you and the resident. Please provide constructive feedback. "Great Job!" is not constructive feedback.

Evaluation codes: **S = Satisfactory** **NI = Needs Improvement**
 Please provide constructive feedback to resident, especially if "NI" is checked

I. PRESENTATION STYLE

The style was conducive to my learning.

| Objective | S | NI | Comments |
|--------------------------------|---|----|----------|
| Voice Projection | | | |
| Pace | | | |
| Lack of Distracting Mannerisms | | | |
| Professional Dress | | | |
| Eye Contact | | | |

Additional Comments:

II. VISUAL AIDS

The material and techniques used enhanced my comprehension and interest.

| Objective | S | NI | Comments |
|--|---|----|----------|
| Use of equipment and lighting | | | |
| Reasonable amount of slides utilized for the allotted time | | | |
| The slides/ handouts enhanced the topic (e.g., through the use of diagrams, figures, tables) | | | |
| The number of words per slide allowed easy comprehension for the audience | | | |

Additional Comments:

III. PREPARATION

The presenter was prepared regarding the clinical implications of the topic presented.

| Objective | S | NI | Comments |
|---|---|----|----------|
| Did you feel the presenter achieved an expert level of knowledge such that information presented was valid? | | | |

Additional Comments:

IV. EFFECTIVENESS OF PRESENTATION

The resident was able to identify the clinical dilemma, orient the audience to where these data fit in clinical practice, present data from the literature to answer the clinical question, and then clearly provide guidance to audience members on what to do clinically if faced with this dilemma.

| Objective | S | NI | Comments |
|--|---|----|--|
| Was the clinical dilemma presented clearly at the beginning of the seminar? | | | |
| Were the objectives clear, relevant and reflect the content presented? | | | |
| Were the objectives effectively addressed by the end of the seminar? | | | |
| Was the resident able to appropriately orient the audience as to where this clinical controversy fits in contemporary clinical practice? | | | |
| Did the resident effectively use published literature to support/refute what is currently done in contemporary clinical practice? | | | |
| Was the resident able to focus the presentation into clear, concise "take-home" points that were easily understood by the audience? | | | |
| Were the conclusions reached by the resident credible based on the published data provided? | | | |
| Were clear recommendations made regarding what the audience member should do if confronted with this clinical scenario in the future? | | | (If these were not given, a recommendation to suggest redoing the seminar is strongly recommended) |
| Did the resident enhance your understanding of this clinical dilemma? | | | |

Additional Comments:

V. OVERALL IMPRESSION OF PRESENTER

It is encouraged that ALL attendees provide comments to these questions so that the residents may improve.

| Objective | Please provide constructive comments to each question? |
|--|--|
| How effective was the resident at presenting a seminar that was clear, concise, well-structured, and well-supported by literature? | |
| What steps do you suggest this presenter take to improve their ability to give an effective seminar? | |

Additional Comments:

___ Pass ___ Recommend rework and second presentation

Seminar Pre-Work: Complete this form for each study used to prepare your seminar – submit to Seminar Advisor
 Questionnaire for Evaluating Primary Literature compiled by Linda S. Tyler, PharmD
 Article: _____

| Introduction | yes/ no/ partial | Comments |
|---|-----------------------------|--|
| Is the reason for conducting the study discussed? | | |
| Are the study objectives clearly defined? | | |
| Is the null hypothesis clear? | | |
| Methodology | yes/ no/ partial | How might this influence the results or affect the validity of the study? |
| Have adequate measures been taken to prevent selection bias? | | |
| • Is the study population adequately defined? | | |
| • How were subjects selected? What are the inclusion criteria? Are the selection procedures clearly defined? | | |
| Case-control: How were cases selected? How were controls selected? Are the controls comparable to the cases? Was bias introduced in the selection process? | | |
| Follow-up/cross-sectional: How was the study population selected? Was bias introduced in the selection process? | | |
| Experimental: Were subjects randomly selected? Did all qualified subjects have an equal chance of being admitted to the study? Are the treatment groups comparable? | | |
| • Are pertinent patient specific data provided? (ie healthy subjects vs patients, sex, age, concurrent disease states, concurrent therapy, race, weight or other pertinent information) | | |
| Have adequate measures been taken to prevent classification bias? | | |
| • Does the study use specific definitions for the study parameters? | | |
| • How were patients classified for entrance into the study? Do they have the disease of interest? (case-control, experimental) | | |
| • Is the severity of disease described? | | |
| • How were the risk factors classified? | | |
| • How were the outcomes classified? | | |
| Have adequate measures been taken to prevent confounding bias? | | |
| • Have measures been taken to prevent competing interventions that may influence the results? | | |
| Are exclusion criteria clearly defined? | | |
| Have adequate measures been taken to prevent information bias? | | |
| • Are data sources used appropriate and likely to have the appropriate information? What is the quality of the data? | | |
| • Have the issues related to recall bias been adequately addressed? | | |
| Have adequate measures been taken to prevent measurement bias? | | |
| • What measures were used to evaluate the outcomes of the study? Are they adequately described? | | |
| • Were the measures used appropriate? | | |

| | | |
|---|---------------------|----------|
| • Were objective measures used? | | |
| • Are the measures reproducible? | | |
| Were subjects observed for a sufficient length of time? | | |
| Have adequate measures been taken to prevent observer bias? | | |
| • Are the observers specified? | | |
| • Have measures been taken to prevent inter-observer variation? | | |
| Experimental studies: | | |
| • Were subjects randomized? Are randomization procedures appropriate and clearly defined? [Allocation bias] | | |
| • Are the interventions well described? | | |
| • Is the study blinded? Are blinding procedures appropriate? | | |
| • Were specific data on drug regimens given including dose, dosage form, duration of administration, time of dose in relationship to meals? | | |
| • Were all study drugs given in appropriate doses and regimens? | | |
| • Are both groups comparable, and treated in the same manner, except for the intervention? | | |
| • Were the measures adequate to insure or evaluate compliance? | | |
| • Were there any competing therapies that would have influenced the results | | |
| If the study is a crossover trial, was the washout period adequate between interventions? | | |
| Statistical Analyses | | |
| • Have the authors described the statistical analyses to be used in the study? | | |
| • Are the statistical tests appropriate for the type of data (nominal, ordinal, continuous)? | | |
| • Is the sample size determination information included? | | |
| • Have appropriate significance levels been established? | | |
| • Is the power of the study described? | | |
| Based on the methodology, is the study likely to have external validity? | | |
| • Is the study sample representative of the general population? | | |
| • Were the interventions practical? (experimental) | | |
| Results | yes/ no/ partial | Comments |
| Patients studied | | |
| • Is the number of patients specified? | | |
| • Can all patients be accounted for? | | |
| • Is the number of dropouts given? Are the reasons for dropping out described? (experimental, follow-up) | | |
| • Were sufficient numbers of patients studied? | | |
| • Were patient demographics presented? | | |

| | | |
|---|---------------------|----------|
| • Do the groups look similar based on demographics? | | |
| Data presentation | | |
| • Are data presented for all measurements specified in the methodology? | | |
| • Are data presented objectively? | | |
| Statistical Analyses | | |
| • Are appropriate descriptive statistics presented? [ie measure of central tendency (median, mean, mode), spread of the data (range), variation in the data (SD)] | | |
| • Are p values and confidence intervals specified? | | |
| • Are the inferential statistical tests applied appropriately? | | |
| • Are statistical analyses meaningful? | | |
| Discussion/ Conclusions | yes/ no/ partial | Comments |
| Are the author's conclusions appropriate based on the data presented? | | |
| Are the results statistically significant? | | |
| Are the results clinically significant? | | |
| Does the author discuss objectively the limitations to the study? | | |
| Are the conclusions consistent with the purpose of the study? | | |
| Can the conclusions be extrapolated to the population in general? | | |
| Overall | | |
| Do the title and abstract appropriately reflect the content of the study? | | |
| Does the author cite mostly primary literature? Is the article referenced appropriately? | | |
| Who sponsored the study? | | |
| What is the reputation of the journal? Is it peer reviewed? | | |
| Are there editorials available that discuss the article? (companion editorials or editorials that come out later) | | |

Summary: Overall assess the study's strengths and weaknesses

Does the study have internal validity?

Does the study have external validity? Is it relevant to your problem/situation/practice

PRESENTATION EVALUATION FORM FOR THE SPRING CE SERIES:

SAMPLE: Speaker Evaluation

University of Utah Resident CE Series

Resident Name Here

“CE TITLE GOES HERE”

1. Did the presenter meet the stated educational objectives? (Place Pharmacist Objectives 1st, then Tech Objectives 2nd, clearly delineating which is which.)

- | | | |
|-----------------------------------|-----|----|
| a. Objective #1 written out here. | Yes | No |
| b. Objective #2 written out here. | Yes | No |
| c. Objective #3 written out here. | Yes | No |
| d. Objective #4 written out here. | Yes | No |
| e. Objective #5 written out here. | Yes | No |

Please rate the following, 1 = very dissatisfied, 5 = very satisfied

2. How satisfied are you with this presentation? 1 2 3 4 5

3. The material presented was:

- | | | | | | |
|--------------|---|---|---|---|---|
| a. Practical | 1 | 2 | 3 | 4 | 5 |
| b. Useful | 1 | 2 | 3 | 4 | 5 |
| c. Relevant | 1 | 2 | 3 | 4 | 5 |

4. As a speaker Amanda Gallegos was:

- | | | | | | |
|-------------------------------------|---|---|---|---|---|
| a. Interesting | 1 | 2 | 3 | 4 | 5 |
| b. Practical | 1 | 2 | 3 | 4 | 5 |
| c. Answered questions appropriately | 1 | 2 | 3 | 4 | 5 |
| d. Showed mastery of the subject | 1 | 2 | 3 | 4 | 5 |

5. Please rate the quality of the facility. 1 2 3 4 5

6. Please rate the quality of the learning materials. 1 2 3 4 5

7. Please rate the effectiveness of the learning activity. 1 2 3 4 5

8. The presentation was free from commercialism and/or bias? Yes No

9. Describe yourself (circle one): Pharmacist Technician Student Other

10. Comments or suggestions for improving the presentation or presentation style:

Mountain States Evaluation Form

Mountain States Conference Platform Presentation Evaluation Form

Presenter's Name: _____ Abstract #: _____

Presenter's Institution: _____

Evaluator: Resident Fellow Preceptor RPD Other: _____

| Presentation Feedback | 1=Needs Improvement 5=Excellent | Comments |
|---|---------------------------------------|----------|
| Presenter demonstrated strong presentation skills: pace and volume were appropriate. Good eye contact. Free of distracting mannerisms. | 1 2 3 4 5 | |
| Slides were clear and readable and augmented the presentation well. | 1 2 3 4 5 | |
| The presentation was organized and flowed well. | 1 2 3 4 5 | |
| Project was clearly described: sufficient background to understand the project; methods clearly described; results presented for each objective; conclusions are clear. | 1 2 3 4 5 | |
| Presenter handled questions well. | 1 2 3 4 5 | |
| Handout is well organized and contains useful information. | 1 2 3 4 5 | |

Presentation strengths:

One key way to improve presentation:

| Project / Research Feedback | 1=Needs Improvement 5=Excellent | Comments |
|---|---------------------------------------|----------|
| Reasons for selecting project clear; objectives clearly stated. | 1 2 3 4 5 | |
| Methods appropriate to answer research question; statistics appropriate for the study design. | 1 2 3 4 5 | |
| Results relevant to pharmacy practice. | 1 2 3 4 5 | |
| Conclusions match the results presented. | 1 2 3 4 5 | |
| Resident's interest and participation in project evident. | 1 2 3 4 5 | |

Please provide additional comments that will help the presenter with future research.

Resident Participation in Conferences and Committees

1. Residents shall meet on a weekly basis for a 1 to 1.5 hour directed discussion session. Attendance at these conferences is **mandatory** for PGY1 Pharmacy Practice Residents. (Pharmacy Practice and Community Residents have a separate list of required conferences.) PGY1 residents must negotiate absences with the program director before the conference begins. All other residents are encouraged to attend to learn and to mentor the PGY1 residents as often as they are able.
2. A schedule of discussion topics shall be developed and a discussion leader shall be assigned. Possible conference topics include teaching and training, leadership, journal club, professionalism, and time and project management, etc.
3. To prepare residents to give formal, academic seminars, a series of presentations including: How to Give a Seminar, Statistics, and Study Design will be presented during weekly conferences.
4. Residents shall be responsible to participate in or lead discussion and to be prepared by reading background materials and by supplementing with additional readings.
5. Residents on rotations located on campus are required to attend Pharmacy Grand Rounds on Wednesdays at 4:00 p.m. each week provided they are not on rounds. Residents must notify all preceptors that they are required to attend weekly resident conference.
6. The residents may attend department Management Group meetings which are held on the fourth Monday of each month at 2:00 p.m., and residents may also attend inpatient management team or other management meetings when on related rotations.
7. The resident shall attend all departmental staff meetings related to their area of practice. For University Hospital-based residents, staff meetings are held on the fourth Wednesday of the month at 2:00 p.m. For Huntsman Hospital-based residents, staff meetings are the fourth Wednesday at 2:30 p.m.
8. Residents are encouraged to participate in department and hospital-based committees and task forces (e.g., Adverse Drug Reaction Committee, policy task forces, Exceptional Patient Experience teams, Pharmacy Medication Safety Committee, etc.) Residents wishing to attend a P&T meeting will prepare a presentation of a formulary or policy discussion with Erin Fox.
9. Residents are encouraged to participate on state and national committees and task forces (i.e., ASHP, UHC, or USHP).
10. Residents are encouraged to attend Residency Advisory Committee meetings as they are able. Meetings are the second Wednesday of each month at noon. Residents will be excused for topics involving potential disciplinary issues.

Conference Attendance

ASHP Midyear Clinical Meeting - required

Residents will be given educational leave to attend the meeting. Residents shall spend time helping recruit potential candidates for the next residency class, attend our residency showcase, and attend the Utah reception. The residents will also attend CE presentations and will give summaries during Friday conference or during Grand Rounds upon their return.

Mountain States Residents Conference – required for all residents

The Mountain States Conference for Pharmacy Residents, Fellows and Preceptors will be held each May. Utah residents will present their project to other residents and preceptors during this meeting. Residents are expected to attend assigned presentations, and as many other resident presentations as possible as one of the host organizations.

Other Conferences

PGY2 residents may have department funding for one additional specialty conference per year. Other conferences may be attended at the resident's own expense and using accrued vacation time (PTO-S), provided the time away from rotation does not prevent the resident from meeting the required rotation objectives. If the resident has a presentation or poster prepared with a pharmacist preceptor at University Health Care, they should complete two steps. First, verify with the Program Director and the preceptor of the rotation affected by the conference that the absence is acceptable. Once permission is granted by the preceptor and Program Director, complete the Travel Request Form available on the online Pharmacy Help Book and submit the request to their Pharmacy Director and a copy to the Residency Director. Educational leave and/or partial reimbursement for travel and registration may be available from the Pharmacy Department depending on available budget resources.

Professional conduct is expected from all attendees while representing the University of Utah at any conference. Unprofessional conduct during meetings may result in disciplinary action.

Residency Program Portfolio

1. The resident shall maintain a Residency Portfolio electronically which shall be a complete record of the resident's program activities. Residents are to maintain the e-portfolio throughout the year. The e-portfolio shall be submitted to the Residency Program Director at the conclusion of the residency training program and shall be a requirement for successful completion of the program.
2. The residency program portfolio shall include the following items:
 - a. Completed Resident Self-Evaluation and Planning Form
 - b. Residency profile and plan
 - c. Documentation of activities, projects, presentations, and edited documents.
 - d. Evaluations of the preceptors, rotations, and self that are not posted on PharmAcademic
 - e. A record of all in-services, presentations, and seminars given
 1. Handouts developed
 2. A list of attendees/participants
 3. Evaluations
 - f. Residency Project
 1. RAC and IRB proposals
 2. Grant/funding proposal
 3. Final manuscript
 4. PHI should NOT be posted in the e-portfolio
 - g. A list of all seminars/meetings attended
 1. Staff meetings
 2. Committee meetings (including professional associations)
 3. Educational presentations (i.e., grand rounds)
 3. Departmental staff development/pharmacy grand rounds
 4. State/local continuing education
 5. Regional/national meetings
 7. Residency program retreat
 - h. A current curriculum vitae
 - i. Staffing/PTO/ECS log
3. An electronic file will be kept for each resident and will contain planning forms, presentations, and projects.

Evaluation Guidelines

1. All evaluations shall be timely and documented on appropriate forms in PharmAcademic.
2. If for any reason an evaluation is not documented in PharmAcademic, copies of the completed evaluations shall be forwarded to the Program Director and uploaded to the resident's PharmAcademic supplemental documents.
3. Evaluation of Resident:

The performance of the resident shall be based upon the use of predetermined goals and objectives derived from the ASHP Residency Learning System (RLS) Goals and Objectives.

- a. Rotation: The resident shall be responsible to attend periodic meetings with their rotation preceptor to assess and evaluate their progress in the rotation. The frequency and scheduling of these sessions shall be determined by the rotation preceptor and the resident. At a minimum, a mid-rotation evaluation, a self-evaluation (using the same evaluation form), and final evaluation will be performed.

If the rotation is team-taught, the preceptors will communicate with each other about the resident's progress, specific recommendations for improvement, and upcoming assignments and special requirements.

Within seven days after the completion of each rotation, and **preferably on the last day of the rotation**, the preceptor will evaluate the overall performance of the resident using the Summative Evaluation form. The evaluation will be reviewed with and signed by the resident, and forwarded to the Program Director for co-signature in PharmAcademic.

- c. Quarterly: Quarterly evaluation sessions with the Program Director shall be scheduled to assess progress toward meeting global goals and program requirements. The resident shall schedule the sessions to be held in approximately July (baseline), October, January, April and June. This information is documented as part of the Customized Training Plan (CTP).
- d. Failure to demonstrate adequate performance or to meet program deadlines may result in formal disciplinary action including possible dismissal from the residency program.
- e. The Achieved Definition for Residents: The Program Director may allow some goals and objectives to be marked as achieved only after completion of specific activities. For example, a resident is unlikely to achieve goals related to writing prior to successfully completing a RAC proposal or Drug Information rotation. The resident

appropriately and consistently demonstrates during all learning opportunities, rotations, and throughout the year the following in knowledge, skills and abilities (as appropriate for each goal evaluated):

Achieved Definition:

1. Competently and safely care for patients at a level acceptable for all pharmacists in the University system.
2. Present patients in a logical and succinct order and understand the priorities of pharmaceutical needs.
3. Serves as a valuable resource for the healthcare team.
4. Gives timely responses that are clear and appropriate for audience understanding.
5. Demonstrates an advanced level of problem solving skills. Demonstrating knowledge, and proper use, of all available resources.
6. Able to autonomously identify and prioritize current tasks as well as upcoming deadlines.
7. Appropriately balance time between work tasks, personal life, projects, and learning opportunities in order to complete all requirements, while continuing to increase knowledge and skills.
8. Through actions demonstrates reliability, responsibility, and trustworthiness on a level that would be desirable for employment.
9. Helps to create an amiable, productive work environment.

4. Evaluation of Preceptor and Learning Experience

Within seven days after the completion of each rotation, and **preferably on the last day of the rotation**, the resident shall complete the Preceptor and Learning Experience Evaluation. This evaluation shall be discussed with the preceptor and submitted to the Program Director through PharmAcademic.

5. Evaluation of Program

Residents may bring program issues to the attention of the Program Director, the Director of Pharmacy, or to the Residency Advisory Committee at any time during the year.

Residency Program Retreat:

- a. The resident class (including PGY1 and PGY2 residents) shall be responsible to schedule two residency program retreats that shall be held in December and June. The residents, Program Directors, and Director of Pharmacy shall attend the retreat.
- b. Residents shall develop an agenda for the retreat in cooperation with the Residency Program Directors.

- c. The purpose of the retreat shall be to address the strengths and weaknesses of the programs.
 - d. The residents shall produce a summary of the proceedings of the retreat that shall include recommendations for change that are identified by the program participants.
6. The residency program considers a resident's evaluations as privileged information within the program to ensure focused development and feedback for each resident. Use of evaluations as a recruiting tool for future employers or residency/fellowship programs is discouraged. The Program Director and preceptors will not release copies of a resident's evaluations to anyone NOT serving as a preceptor for the Program.

Appendix A

Job Description

**Department of Pharmacy Services
University of Utah Hospitals and Clinics
University of Utah Health Sciences Center**

Pharmacy Resident (7578)

Fair Labor Standards Act (FLSA): Exempt

Revision Date: Mar 04, 2013

Position Summary

This position provides all the functions of a clinical pharmacist as part of a 1-2 year structured training program to develop the resident's skills and knowledge. The residency program director sets the program requirements and is responsible for the overall training program. As part of this training program, the resident will complete a project. Residents are supervised by program preceptors for each of their assigned training rotations.

Essential Functions

- Performs all the essential functions of a Clinical Pharmacist.
 - Solves problems in the medication use process for patients and the organization.
 - Identifies and engages in organizational and department quality improvement activities to improve patient care, medication use process, and pharmacy operations.
 - Educates and trains residents, students, interns, colleagues and other health care professionals as well as supervises technicians, residents, interns, or trainees in their job tasks.
 - Responsible for the medication use process of preparing and dispensing medications following medication use policy and all laws, regulations, and standards applicable to pharmacy practice.
 - Assesses appropriate drug information and literature resources, and provides effective information to varied audiences including patients, other health care professions, and peers.
- Meets all the program requirements of a resident as outlined in the program requirements.
- Conducts a major project.

Knowledge / Skills / Abilities

- Ability to perform the essential functions of the job as outlined above.
- Ability and willingness to train department trainees (e.g. students, interns, and new staff).
- Ability to assess data regarding the patient's status and provide care as described in the department's policies and procedures manual.
- Demonstrated knowledge and skills necessary to provide care appropriate to the age of the patients served on his or her assigned unit.
- Demonstrated knowledge of the principles of life span growth and development and the ability to assess data regarding the patient's status and provide care as described in the department's policies and procedures manual.

Qualifications

Required:

- Graduate of an accredited college of pharmacy in the United States.
- Applications are accepted via PhORCAS until January 1st each year or as otherwise specified by the program director. University Hospitals & Clinics participates in the ASHP Resident Matching Program for the selection of residents into the program. Applications may be accepted in late March for any positions not filled during the matching process.

Required license(s):

- Current Pharmacist license in the State of Utah (obtain within 90 days of starting residency)

Appendix B

ASHP Residency Learning System for All Programs:

See <http://www.ashp.org/menu/Accreditation/ResidencyAccreditation>

New 2015 PGY1 Practice Goals & Objectives for Residency:

<http://www.ashp.org/DocLibrary/Accreditation/Regulations-Standards/PGY1-Required-Competency-Areas.pdf>

Appendix C

PharmAcademic Instructions:

Log in to PharmAcademic at <https://www.pharmacademic.com/Login.aspx>
and follow the Help and Support link to
<http://PharmAcademic.mccreadiegroupp.com/Members/Support.aspx>

Appendix D

Service Commitment Record

Name:

Print Date:

| Required Shift Log Sheet | | | | | | | | |
|--------------------------|-------|------|--------------------------|-------|------|--------------------------|----------|------|
| Month | Shift | Date | Req? | Shift | Date | AC? | Vacation | Date |
| July | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| August | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| September | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| October | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
| November | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | |
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Appendix E

Past Resident Graduates and Project Titles

Past Resident Graduates and Project Titles

| Last Name | First Name | School | Year | Resident Project |
|----------------|------------|----------------|-----------------|---|
| Arterbury | Allison | Arizona | 14-15 | Evaluating Warfarin versus Aspirin for Post-operative VTE Prophylaxis in Patients with TKA and THA |
| Au | Trang | Creighton | 14-15 (onc) | Evaluation of Safety and Effectiveness of Vascular Endothelial Growth Factor-Tyrosine Kinase Inhibitors with Concomitant Proton Pump Inhibitors or Statins in Advanced Renal Cell Carcinoma |
| Babin | Jennifer | Alabama | 14-15 (IM) | Implementation of an Inpatient Computer-Based Inhaler Education Program |
| Bailey | Hanna | Florida | 14-15 (onc) | Evaluation of neutropenic fever admissions in patients with solid tumors |
| Black | William | Kentucky | 14-15 (admin-1) | Standardizing the Medication Reconciliation Process |
| Caffiero | Nicole | Wilkes U | 14-15 (Comm) | Interruptions and Distractions Before and After the Implementation of a Central Call Center on Pharmacists and Technicians in a Community Pharmacy Setting |
| Coleman | Abby | Creighton | 14-15 | Left Ventricular Assist Devices as Independent Risk Factors for GI Bleeding in Cardiovascular Surgery Patients |
| Diamantopoulos | Anastasia | TX Tech | 14-15 (CC) | Evaluation of the Efficacy and Safety of a Dexmedetomidine Protocol in Traumatic Brain Injury Patients |
| Fung | Brian | Florida | 14-15 (IT) | Implementation of Antimicrobial Renal Dosing Decision Support in EPIC Using SmartText |
| Hansen | Alisyn | Nebraska | 14-15 (Am Care) | Implementation of Hypertension Shared Medical Appointments in An Academic Family Practice Clinic |
| Holesch | Lauren | UNC | 14-15 (admin-1) | Health-System and Patient Care Benefits of a Centralized Prior Authorization Service |
| Hong | Lisa | Colorado | 14-15 (IM) | Pharmacokinetics of continuous infusion beta-lactams and tobramycin in the treatment of acute pulmonary exacerbations in adult cystic fibrosis patients |
| Hoyt | Jessica | Wisconsin | 14-15 | Analysis of Adherence to Asymptomatic Bacteriuria Treatment Guidelines for an Emergency Department at an Academic Medical Center |
| Kosloske | Ashley | Minnesota | 14-15 | Assessment of Empiric Antibiotic Prescribing Practices in the Emergency Department for Patients Admitted with a Diagnosis of Acute Pyelonephritis |
| Louie | Jessica | Southern Cal | 14-15 (CC) | A comparison of dexmedetomidine-propofol sedation to propofol sedation in mechanically ventilated patients |
| Marini | Erica | Northeastern | 14-15 (admin-2) | Impact of Central Call Center on Distribution of Work Activities in Outpatient Pharmacies |
| McPherson | Jordan | WVU | 14-15 (onc) | Predictors of Systemic Chemotherapy Utilization Within the Last 30 Days of Life |
| Palmer | Kelsey | Montana | 14-15 (Comm) | Using failure mode and effects analysis (FMEA) methods to identify barriers contributing to low human papillomavirus (HPV) vaccination rates in a University of Utah community-based clinic |
| Schoen | John | Colorado | 14-15 | Developing a Guideline for Weight-Based Dosing of Medications in Obese Adults |
| Sirandas | Bhanupriya | UI Chicago | 14-15 | Evaluation of Induction Therapy in Renal Transplant Recipients |
| Smith | Tonya | MUSC | 14-15 | Survey of Antibiotic Utilization for Treatment of <i>Burkholderia cepacia complex</i> Infection in Cystic Fibrosis Patients |
| Tanner | Natalee | Arizona | 14-15 (onc) | Utilization of Antineoplastic Chemotherapy Near the End-of-Life |
| VanWagoner | Eve | Utah | 14-15 (Comm) | Patient Safety Culture within the University of Utah Health Care Community Pharmacies |
| Burger | Jordan | Drake | 13-14 (admin-2) | Strategizing Dispensing of Medications Prescribed in Specialty Clinics |
| Diamantopoulos | Anastasia | Texas Tech | 13-14 | Risk of Venous Thromboembolism in Patients Receiving BID versus TID Prophylactic Heparin Dosing Based on a 90 kg Weight Cut-off |
| Ford | Ian | UoPacific | 13-14 (IT) | The Effect of an Improved, Guideline-Based Clinical Decision Support Tool on Ambulatory Clinic Vaccination Rates |
| Fritz | Kelly | Ohio Northern | 13-14 (onc) | Evaluation of Complications of Chemotherapy in HIV-positive Patients on HAART Therapy Compared to HIV-negative Matched Controls |
| Garza | Carissa | Incarnate Word | 13-14 (SoTX) | Use and Outcomes of Rabbit Antithymocyte Globulin for Induction Therapy in Cardiac Transplantation: A Single Center Experience |
| Hansen | Alisyn | Nebraska | 13-14 | Evaluation of Aspirin Prescribing Practices in Elderly Women at the University of Utah Sugar House Health Center |
| Holcomb | Kelly | Auburn | 13-14 (IM) | Survey of Antibiotic Utilization for Treatment of <i>Mycobacterium abscessus</i> Infection in Cystic Fibrosis Patients |
| Jacquez | Machaela | Utah | 13-14 (Comm) | The Identification of Medication Related Problems from a Medication Review Provided by a Clinical Pharmacist in a Community Setting |

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| Johnston | Kiersten | Utah | 13-14 (DI) | Did we do What we Said we Would do? Developing a Process to Follow-up on P&T Decisions |
| Liu | Cindy | Maryland | 13-14 (Comm) | Socio-economic and Clinical Characteristics of Patients Hospitalized with Prescription Opioid-Related Overdose |
| Louie | Jessica | Southern Cal | 13-14 | Safety of Continuous Infusion Beta-lactam Antibiotics in Adult Cystic Fibrosis Patients During an Acute Pulmonary Exacerbation |
| Marini | Erica | Northeastern | 13-14 (admin-1) | Optimization of Care Transition Practices Performed by Pharmacy Services Across a University Health System |
| Maxa | Kim | Drake | 13-14 (onc) | Voriconazole Safety in Obese and Non-Obese Patients |
| McTish | Ryan | Georgia | 13-14 (CC) | Experience with Colistin in the Management of an Extensive Drug Resistant Acinetobacter Outbreak in an ICU |
| Miles | A. Meredith | Georgia | 13-14 (Comm) | The Gap in Transitions of Care in Heart Failure Patients: When, Why and Who do Drug-related Problems Affect? |
| Paul | Shilpa | Illinois-Chicago | 13-14 (onc) | Utilization of Antineoplastic Chemotherapy Near the End-of-Life |
| Ratermann | Kelley | Kentucky | 13-14 | Effect of Pharmacy-Initiated Chronic Pain Management Admission Notes on HCAHPS Scores |
| Schoen | John | Colorado | 13-14 | Descriptive Case-series of the Use of Kcentra™ for the Reversal of Warfarin-associated Major Bleeding |
| Thompson | Johanna | Washington | 13-14 (Am Care) | A Clinical Pharmacist's Assessment of Bisphosphonate Use for Osteoporosis and Appropriateness of Long Term Therapy |
| Wilds | Brandon | LECOM | 13-14 (onc) | Clinical Outcomes and Risk Factors for Treatment Failure and Recurrence of <i>Clostridium difficile</i> Infections in Hematopoietic Stem Cell Transplant Patients |
| Wolfe | Brianne | Montana | 13-14 (CC) | 'Development and Implementation of a Protocol for the Treatment of Acute Massive Pulmonary Embolism |
| Bhakta | Zubin | TX Tech | 12-13 (Int Med) | A Survey of the Pharmacist's Role at U.S. Cystic Fibrosis Foundation - Accredited Centers |
| Bowles | Harmony | New Mexico | 12-13 (onc) | Incidence of febrile neutropenia in patients with HER2 positive breast cancer receiving docetaxel, carboplatin, and trastuzumab (TCH) for adjuvant treatment |
| Burger | Jordan | Drake | 12-13 (admin-1) | Verification of benefits for clinic and infusion medication administration |
| Buu | Jenni | Idaho State U | 12-13 (comm) | Improving evidence-based guideline implementation – Identifying barriers and developing a process to improve adult influenza vaccination rates and clinical guideline implementation in a community clinic setting |
| Ford | Ian | UoPacific | 12-13 | Effect of Implementation of a Barcode Medication Administration System In the Incidence of Medication Administration Errors |
| Fritz | Kelly | Ohio Northern | 12-13 | Analysis of Community-Oriented Resistance Patterns in Urinary Tract Infections for an Emergency Department at an Academic Medical Center |
| Gillespie | Matthew | Michigan | 12-13 (TX) | Cytomegalovirus prophylaxis with valganciclovir in kidney transplant recipients: A single-center experience |
| Hays | Emily | Nebraska | 12-13 (Am Care) | Pharmacist intervention to decrease risk of hypoglycemia in older patients with diabetes mellitus |
| Holsopple | Megan | Creighton | 12-13 (DI) | How SMART can we be? – Maximizing the use of smart pump infusion data to improve guardrail programming |
| Johnston | Kiersten | Utah | 12-13 | One-Stop Shopping: Integrating Medication Use Information into the Online Formulary at the University of Utah Hospitals and Clinics |
| McTish | Ryan | Georgia | 12-13 | Observational Study of a High Dose Heparin Protocol with Bolus in Comparison to a Bolus-free Low Dose Heparin Protocol in Brain Injured Patients with Concomitant Thrombosis |
| Mishra | Adya | Utah | 12-13 | Evaluation of acute coronary syndrome/myocardial infarction (ACS/MI) heparin drip protocols in obese patients at the University of Utah Hospital |
| Nguyen | Truong | UMKC | 12-13 (IT) | Implementing Clinical Decision Support - Medication Dosing in Renal Impairment |
| Ogborn | Diane | Utah | 12-13 (comm) | Tdap Vaccination Rates in Pregnant Women through Electronic Medical Record Process Changes |
| Parikh | Kinjal | UNC | 12-13 (onc) | Outcomes of Metastatic Renal Cell Carcinoma Patients with Favorable Clinical and Histologic Features Treated with High-Dose Interleukin-2 Therapy |
| Pecoraro | Joshua | Wyoming | 12-13 (onc) | Effect of thrombocytosis on venous thromboembolism risk in pancreatic cancer patients receiving chemotherapy |
| Rim | Matthew | Western U | 12-13 (admin-2) | Developing a Pharmacy Benefit Management Program (Part II) |

Measuring the clinical impact of surgical intensive care pharmacists using documentation in the electronic medical record

| Sledge | Tyler | TX Tech | 12-13 (CC) | |
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| Bailey | Erin | West Virginia | 11-12 (onc) | Opportunity to Optimize Oral Chemotherapy Outcomes: The Pharmacist's Role |
| Bhakta | Zubin | TX Tech | 11-12 | Evaluation of Prasugrel vs. High-Dose Clopidogrel in Acute Coronary Syndrome Patients |
| Burgeson | Mick | Colorado | 11-12 (IT) | Developing a Web-Based Collaborative Information Sharing Environment |
| Cline | Kyle | UMKC | 11-12 | Comparison of the Treatment and Prophylaxis of Patients with Heparin-Induced Thrombocytopenia Prior to and Following Hospital Guideline Implementation |
| Ghaffarian | Sanaz | UCSF | 11-12 (DI) | Reformulating the Formulary at the University of Utah Hospitals and Clinics |
| Hiller | Sara | UMKC | 11-12 (onc) | Evaluation of Iron Deficiency Anemia and Treatment in Cancer Patients |
| Parikh | Kinjal | UNC | 11-12 | Use of Simvastatin in Transplant Patients and the Incidence of Side Effects, and Evaluation of Efficacy |
| Rim | Matthew | Western U | 11-12 (admin) | Developing a Pharmacy Benefit Management Program |
| Robinson | McKay | Wyoming | 11-12 (comm) | Bridging the Gap Between FDA Safety Warnings and Patients: Are Pharmacists the Appropriate Messengers? |
| Sledge | Tyler | TX Tech | 11-12 | Evaluation of a New Hyperglycemia Protocol Across Multiple Intensive Care Units |
| Soni | Nimisha | Wayne State | 11-12 (TX) | Analysis of Risk Factors for the Development of Chronic Kidney Disease After Orthotopic Liver Transplant |
| Sorensen | Teshia | Wyoming | 11-12 | Development of Albumin Use Guidelines |
| Streeter | Jessica | New Mexico | 11-12 (onc) | Hematologic Effects of Sulfamethoxazole/Trimethoprim and Dapsone for Pneumocystis jiroveci Pneumonia Prophylaxis in Patients with Glioblastoma |
| White | Jacob | Utah | 11-12 (CC) | Multiforme Receiving Concomitant Temozolomide and Radiation |
| Bailey | Erin | West Virginia | 10-11 | Evaluation of Administration Rate of 23.4% Sodium Chloride on Duration of Intracranial Pressure Control |
| Carlson | Adrian | North Carolina | 10-11 (TX) | Clinical outcomes of MRSA bacteremia treated with vancomycin: Assessing the utility of vancomycin trough serum concentrations and AUC ₂₄ /MIC |
| Filtz | Michael | Maryland | 10-11 (onc) | Analysis of Rabbit Antithymocyte Globulin Induction Therapy in Elderly Kidney Transplant Patients |
| Gebarski | Matt | U Michigan | 10-11 (IT) | Feasibility, Justification and Clinical Development of a Hospice Care Program |
| Ghaffarian | Sanaz | UCSF | 10-11 | A Comparison of Medication Order Error Rates in a Neonatal Intensive Care Unit Before and After Computerized Prescriber Order Entry Implementation |
| Giouroukakis | Mary | New York | 10-11 (DI) | Antiplatelet Therapy Versus Anticoagulation in Patients with Cervical Artery Dissection |
| Hatch | Heather | Utah | 10-11 | Descriptive Case-Series of the Treatment and Prophylaxis of Patients with HIT at University of Utah Hospital |
| Katzourakis | Michael | Utah | 10-11 (admin) | Evaluation of Adherence to Thienopyridines After Discharge from University of Utah Hospital Cardiovascular Medicine Unit |
| Hiller | Sara | UMKC | 10-11 | Impact of CPOE decision support on IV to PO medication interchange initiative: Assessing quality and cost |
| Prazak | Ann Marie | Houston | 10-11 (CC) | Evaluation of Peri-procedural Anticoagulation in Patients Undergoing Atrial Fibrillation Ablation |
| Stenehjem | David | Minnesota | 10-11 (onc) | Evaluation of the Efficacy and Safety of a Dexmedetomidine Protocol |
| Votroubek | Nathan | U Iowa | 10-11 | Factors affecting clinical response to tyrosine kinase inhibitors in chronic myeloid leukemia |
| Williams | Kali | Wisconsin | 10-11 (onc) | What are the Underlying Causes of Resistance to Erythropoiesis Stimulating Agents? |
| Alwan | Michael | Butler | 09-10 (admin) | Clinical outcomes of rasburicase administration in tumor lysis syndrome: A retrospective cohort study |
| Filtz | Michael | Maryland | 09-10 | Evaluation of workflow before and after implementation of computerized provider order entry (post-implementation) |
| Mahmoudjafari | Zahra | Missouri | 09-10 (onc) | Evaluation of 14.6% NaCl for the Treatment of Increased Intracranial Pressure in Traumatic Brain Injury |
| MacDonald | Elyse | Creighton | 09-10 (DI) | Correlating electrolyte abnormalities with hematopoietic recovery following myelosuppressive chemotherapy |
| Miars | Laura | Butler | 09-10 (onc) | Drug Shortages Impact on Patient Safety |
| Milne | Nikki | Utah | 09-10 | Comparative toxicities of 2 high-dose IL-2 treatment doses at Huntsman Cancer Hospital |
| Prazak | Ann Marie | Houston | 09-10 | Evaluation of the Appropriateness of Bisphosphonate Therapy Using the FRAX Calculator |
| Simons | Heidi | Montana | 09-10 (CC) | Evaluation of the cardiothoracic surgery heparin protocol at the University of Utah Hospital |
| Stenehjem | David | Minnesota | 09-10 | Evaluation of Cardiac Arrest Documentation in an Academic Teaching Hospital with Pilot Implementation of Electronic Cardiac Arrest Documentation |
| Wagstaff | Dustin | USN | 09-10 (CC) | Effects of P-glycoprotein Modulators on Acute Epileptic Events |
| | | | | Surgical ICU Nurse-Owned Wake-up, Extubate and Discharge: (SNOWED) Trial |

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| Williams | Kali | Wisconsin | 09-10 | A Retrospective Dose-finding Study of Hydroxyurea for Leukocytoreduction in Myelogenous Leukemia |
| Alwan | Michael | Butler | 08-09 (admin) | Evaluation of workflow before and after implementation of computerized provider order entry (pre-implementation) |
| Burt | Lauren | U Florida | 08-09 (onc) | Vitamin Deficiencies in Anemic Cancer Patients |
| Dryer | Megan | Utah | 08-09 | Medication Use Evaluation of Intravenous Acyclovir for Suspected Viral Encephalitis |
| Kenyon | Nicole | Midwestern IL | 08-09 (TX) | Evaluation of a transplant specialty pharmacy service line on renal allograft function and survival |
| Mason | Russell | UC San Diego | 08-09 | Visual Compatibility of Intravenous 3% Hypertonic Saline |
| Myers | Kathryn | U Conn | 08-09 (CC) | Hospital-wide Evaluation of Off-Label Use of Recombinant Activated Factor VII |
| Ngo | Nolan | U of Iowa | 08-09 (onc) | Efficacy Assessment of Current Antiemetic Regimens for Chemotherapy-Induced Nausea and Vomiting at the Huntsman Cancer Institute |
| Simons | Heidi | Montana | 08-09 | Implementation of an Enoxaparin Dosing Protocol for Venous Thromboembolism Prophylaxis in Obese Surgical Intensive Care Unit Patients |
| Walker | Amanda | Kansas | 08-09 | Evaluation of Combined Warfarin and Antiplatelet Use at the University of Utah Thrombosis Center and Community Clinics |
| Walraven | Carla | New Mexico | 08-09 | Evaluation of the diagnostic and therapeutic management of CA-MRSA SSTIs in the emergency department |
| Winslow | Roger | USN (NV) | 08-09 (admin) | Breakeven Analysis of a Proposed Pharmacy Discharge Prescription Medication Reconciliation Program |
| Lin | Hsin | Northeastern | 07-08 (CC) | The Early Use of Intravenous Neostigmine for the Prevention of Barbiturate-induced Ileus and Necessity for Parenteral Nutrition in Neurosurgical Patients in Barbiturate Coma |
| Gallegos | Amanda | Utah | 07-08 | Cystic Fibrosis Quality Improvement Study |
| Truax | Crystal | Drake | 07-08 (TX) | Impact of reduced-dose mycophenolic acid therapy on the incidence of renal transplant rejection and graft loss in corticosteroid withdrawal patients |
| Shipley | R. Wayne | Creighton U | 07-08 (CC) | A Monte Carlo Simulation of Piperacillin-Tazobactam in Critically Ill Patients with Pseudomonas Aeruginosa |
| Myers | Kathryn | U Conn | 07-08 | Electrolyte Replacement Protocol Design and Assessment in the ICU Setting |
| Miles | LeeAnn | Utah | 07-08 | Comparison of Indomethacin and Ibuprofen in Neonates with Patent Ductus Arteriosus |
| VanDemark | Kimberly | Wisconsin | 07-08 | Conversion of chronic hemodialysis patients from intravenous erythropoietin alfa to intravenous darbepoetin alfa |
| Ponce | Paola | Kansas | 07-08 | Establishing Optimal Dosing of Intravenous Amiodarone in the Treatment of New Onset Atrial Fibrillation for Postoperative Surgical Patients |
| Sanders | Stephanie | Ferris State U | 07-08 (Onc) | Establishing and Outpatient Anticoagulation Clinic for Oncology Patients |
| Lampas | Mary | Purdue | 07-08 (Onc) | Assessment of Appropriate Vancomycin Use in Neutropenic Patients |
| Sanders | Tom | Ferris State U | 07-08 (DI) | Building a Better Drug Budgeting System: A Survey and Assessment |
| Winslow | Roger | USN (NV) | 07-08 (admin) | The Financial Impact of Pharmacy Specialty Billing Services |
| Au | Cam | Utah | 06-07 | Insulin availability in a parenteral nutrition solution |
| Au | Lara | Utah | 06-07 (Onc) | Analysis of anticoagulation practices in multiple myeloma patients treated with thalidomide and dexamethasone |
| Canann | David | Midwestern AZ | 06-07 | Drug compatibility during Y-site infusions |
| Condie | Chad | Utah | 06-07 | Drug compatibility during Y-site infusions |
| Dang | Kim | Utah | 06-07 (CC) | Levothyroxine infusions in the setting of shock and its effects on hemodynamic stability |
| Draper | Leslie | Utah | 06-07 | Venous thromboembolism prevention in the morbidly obese medical ill patient: A pharmacological analysis of the predictability of prophylactic weight-based enoxaparin dosing |
| Kantesaria | Pranish | Massachusetts | 06-07 (admin) | Improved patient outcomes in a pharmacist managed anemia clinical at Huntsman Cancer Hospital |
| Lingenfelter | Erin | Ohio Northern | 06-07 (CC) | The management of sepsis and septic shock in the SICU of the University of Utah Hospitals and Clinics |
| Masck | Mary | Purdue | 06-07 | The role of D-ribose in patients diagnosed with fibromyalgia |
| Truax | Crystal | Drake | 06-07 | Evaluation of the drug interaction between low-dose fluconazole and tacrolimus in renal transplant patients |
| Brooks | Tyson | Wyoming | 05-06 (IM) | Exacerbation rates associated with non-selective vs. B1 selective beta-blocker use in patients with asthma or chronic obstructive pulmonary disease |
| Burns | Shauna | Mercer | 05-06 (Onc) | Impact of cytokine prophylaxis on patients receiving moderately myelosuppressive chemotherapy regimens |
| Dang | Cathyeyn | Utah | 05-06 (CC) | Intensive insulin therapy in critically ill surgical patients: evaluation of outcome benefit of tighter glucose control |

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| Gilreath | Jeffrey | Wisconsin | 05-06 | Developing a collaborative practice agreement between pharmacists and oncologists to manage erythropoietic growth factor therapy for oncology patients in a pharmacist run ambulatory oncology center |
| Ho | Mei-Jen | Rutgers U | 05-06 (IT) | Economic benefits of self-managed pharmacy benefit manager in a large academic hospital |
| Kantesaria | Pranish | Massachusetts | 05-06 | Retrospective analysis of Cinacalcet use in renal transplant patients at an academic medical center |
| Nighorn | Katie | Wisconsin | 05-06 | Efficacy of a pharmacist managed hypertension service |
| Roberts | Keri | Northeastern | 05-06 (TX) | Impact of a rapid steroid withdrawal protocol on height and weight outcomes in pediatric renal transplant recipients |
| Sederholm | Benson | Utah | 05-06 | Pharmacist managed hyperlipidemia care versus usual care for patients with dyslipidemia in a UUHCS community clinic setting |
| Smith | Lara | Utah | 05-06 | Evaluation of venous thromboembolism prophylaxis in medically ill oncology patients |
| Allard | Jill | Nebraska | 04-05 | Retrospective Review of Steroid Withdrawal in Renal Transplant Patients |
| Howarth | Shannon | UNC | 04-05 | Improving Immunization Rates for Inpatients at UUHC |
| Neyens | Ron | So Dakota | 04-05 | Intensive Insulin Therapy in Burn Trauma Patients |
| Puett | Heather | UNC | 04-05 | Workplace Contamination with Antineoplastic Agents in a new Cancer Hospital Using a Closed Drug preparation System |
| Wohlt | Paul | Wisconsin | 04-05 | Outpatient Management Protocol for Venous Thromboembolic Disease |
| Bohm | Nicole | Florida | 04-05 (IM) | Appropriateness of Fluoroquinolones as Empiric Therapy for Nosocomial UTIs |
| Ludwig | Kyle | St. Louis CoP | 04-05 (CC) | Ventilator-Associated Pneumonia: A Retrospective Look at the Pharmacological Management in the SICU |
| Mills | Kyle | Wyoming | 04-05 (IM) | Asthma Medications and their association with Symptomatic Gastroesophageal Reflux |
| Wilkinson | Joey | Wyoming | 04-05 (Tx) | Retrospective Review of BK Nephropathy in a Renal Transplant Population |
| Aggers | Patricia | Idaho State | 03-04 | Review of Efficacy and Safety of Valganciclovir for CMV Prophylaxis in Adult Renal Transplant Recipients |
| Beaumont | Cody | Michigan | 03-04 | Investigation of the Venous Thromboembolism (VTE) Prophylaxis in Patients at our Rehabilitation Unit |
| Buchanan | Christie | PCP | 03-04(Tx) | Assessing the pharmacokinetics of MMF by bound and free levels of MPA and MPAG in Renal Failure |
| Christensen | Russell | Utah | 03-04 (IM) | The Predictability of Antibiotic Sensitivities Based on the Urine Analysis Nitrite Test |
| Gebhart | Benjamin | Drake | 03-04 (CC) | Sedation Management in a Surgical Intensive Care Unit |
| Hermansen | Erica | Utah | 03-04 (PC) | Evaluation of pharmacist vs physician anticoagulation management in a family medicine residency clinic |
| Jefferies | Kristen | Utah | 03-04 | The Impact of a Pharmacist initiated medication History on Patient Satisfaction and Accuracy of Medications Ordered |
| Kay | Brent | Utah | 03-04 | Evaluation of Medication Ordering for Univerity Hospital |
| Wilkinson | Joey | Wyoming | 03-04 | Describing the Usage Patterns, Reimbursement Rates, Acquisition Costs and Efficacy of Epoetin alfa and Darbepoetin at the Huntsman Cancer Institute |
| Dell | Kamila | UNC | 02-03 (CC) | Medication propensity to clog nasoduodenal feeding tubes |
| Feddema | Sarah | U of Wyoming | 02-03 (DI) | Evaluating Online Formulary Vendors for a University Hospital |
| Gebhart | Benjamin | Drake | 02-03 | Glucose control using a standardized sliding scale insulin protocol in a surgical intensive care unit |
| McDevitt | Lisa | Nebraska | 02-03 (Tx) | Evaluating the Benefit of aggressive anemia treatment in renal transplant patients |
| Scott | Amy M | Idaho State | 02-03 | Inpatient utilization of erythropoietin and darbepoetin: improving treatment of anemia |
| Skordos | LeAnne | Utah | 02-03 | Evaluation of the Venous Thromboembolism prophylaxis in medical patients |
| Strain | Joe | South Dakota | 02-03 | Health Care Screening at University Hockey Games |
| VanBeuge | Derrick | Idaho State | 02-03 | Retrospective Analysis of anemia and associated cardiovascular and renal allograft complications post primary renal transplant |
| Dell | Kamila | UNC | 01-02 | Evaluation of a Heparin Nomogram |
| Fakata | Keri | Nebraska | 01-02 | Sirolimus inhibitions of P-Glycoprotein: a Possible Mechanism for increased Nephrotoxicity with concomitant use with Cyclosporin |
| Feddema | Sarah | U of Wyoming | 01-02 | Physical Compatibility of Vasopressin with Commonly Used Medications in Cardiac Arrest |
| Moaleji | Norwan | Colorado | 01-02 | Assessment of Cholesterol Treatment in a Family Medicine Clinic: Are we at goal with NCEPIII |
| Peterson | Dave | Utah | 01-02 (DI) | Improving Documentation During Codes: A Process Improvement Project |
| Sundberg | Aimee | U of Wisconsin | 01-02 (Tx) | Opinions of Pediatric Renal Transplant Patients about Switching from Cyclosporine to Tacrolimus |
| Wick | Catherine | U Washington | 01-02 | Evaluation of Surface and Personnel Cytotoxic Contamination at the Huntsman |

Cancer Institute

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| Carter | Orly | U of Utah | 00-01 (PC) | A Multidisciplinary Approach to Hypertension Management: Utilizing a Pharmacist as an Education Provider in a Family Medicine Clinic |
| Chalverus | Carrie | U Washington | 00-01 | Surfactant Adverse Outcomes Monitor: A Comparison of Infasurf vs. Survanta |
| Crompton | Jason | Philadelphia | 00-01 (Tx) | Impact of Basiliximab Induction Therapy in Adult Living Renal Transplants |
| Dalpia | Anthony | U of Montana | 00-01 (DI) | Outcome Evaluation of Combination High Dose Daily interferon Alfa Plus Ribavirin in Patients with Hepatitis C |
| Davis | Lynn | U of Florida | 00-01 | Estimation of Creatinine Clearance between Aminoglycoside Pharmacokinetics, Cockcroft-Gault, and Jelliffe Methods in Critically Ill Patients |
| Sundberg | Aimee | U of Wisconsin | 00-01 | Opinions of Pediatric Renal Transplant Patients about Switching from Cyclosporine to Tacrolimus |
| Crompton | Jason | Philadelphia | 99-00 | Development of a Fail-Safe Medication Error Prevention System in Cancer Chemotherapy |
| Dalpia | Anthony | U of Montana | 99-00 | Treatment of Myofascial Trigger Point Pain with Topical Lidocaine Patches |
| Fox | Erin | U of Utah | 99-00 (DI) | Assessing the Cost Savings of a Pharmacy-Administered IV to PO Interchange Program |
| Johnson | Stephanie | Creighton U | 99-00 | Assessing the Impact of Switching Maintenance Immunosuppression from Cyclosporin to Tacrolimus in Rediatric Renal Transplant Patients |
| McGee | Kelly | U of Cincinnati | 99-00 (PC) | Homocysteine Reduction in a Geriatric Clinic Population: Effectiveness of Multivitamin Supplements |
| Raap | Jonathon | U of Texas at Austin | 99-00 | Movement Toward Becoming an Integrated Health Delivery System: Initiation of Pharmacy Services in a Primary Care Clinic |
| Grahmann | Paula | Texas at Austin | 98-9 | Analysis of Pain Clinicians' Perceptions of Opioid Use in Chronic Non-malignant Pain |
| Martin | Andrew | Ferris State U | 98-9 (DI) | Developing a Drug Evaluation Process |
| Panjwani | Nooruddin | Texas at Austin | 98-9 | Treatment of Post-Ictal Vascular headaches with Intra-Nasal Sumatriptan (Imitrex) |
| Smith | Lonnie | Tennessee | 98-9 | Prophylactic Low Dose Fluconazole after Primary Renal Transplantation |
| Voytilla | Krista | U of Pittsburgh | 98-9 | Compatibility of Dolasetron with Commonly Used Post-Surgical Drugs During Y-Site Delivery |
| Wellman | Melinda | Utah | 98-9 (PC) | Assessing Medication prescribing Appropriateness, Patient Educational Needs and Compliance in Ambulatory Family Medicine Patients: A Descriptive Study |
| Bearden | David | U of Illinois | 97-8 | Evaluation of Amiloride Use with Amphotericin B in the Oncology Patient |
| Mathiason | Mark | Creighton | 97-8 | A Three Year Retrospective Survey of Yeast Isolates Compared to Fluconazole Use in a University Hospital |
| Nguyen | Long | Houston | 97-8 | Evaluation of Patient's Satisfaction Utilizing Telepharmacy to Deliver Pharmaceutical Care |
| Phillips | Mark | Idaho State | 97-8 | An Assessment of Hyperlipidemia in HIV Patients Treated with Protease Inhibitors |
| Wetzstein | Gene | N.Dakota State | 97-8 | The Impact of a Clinical Event Management System on Pharmacy Services in a University Medical Center |
| Brumfield | Lauren | MCV | 96-7 | Effect of Administration Sets and Volumes on the Delivery of Gentamicin to Low-Birth-Weight Infants |
| Salverson | Sandra | U of Illinois | 96-7 | Using Telemedicine as a Tool to Implement Pharmaceutical Care in Remote Ambulatory Setting |
| Mullin | Shantel | Idaho State U | 96-7 (DI) | Computerizing Drug Information Services- External Survey and Internal Evaluation |
| Shah | Hetal | Rutgers U | 96-7 | Assessment of Clinical Outcomes Utilizing Predicted Carboplatin AUC in Autologous Bone Marrow Transplant (ABMT) Patients Treated with a Stamp V Regimen |
| Vaezi | Liza | Creighton U | 96-7 | Application of a Multi-Attribute Utility Theory (MAUT) Model to Select Agents for Use in ICU Sedation |
| Hutchings | Steven | Idaho State U | 95-6 | Y-Site Physical Compatibility of Cefmetazole with Other Commonly Used Drugs |
| Johnson | Melissa | St Louis U | 95-6 | Evaluation of Current Serotonin Antagonist Use in Chemotherapy Treated Patients |
| Mullin | Shantel | Idaho State U | 95-6 | Assessing the Use of an Emesis Questionnaire for Monitoring Chemotherapy and Antiemetic Outcomes in Ambulatory Oncology Patients |
| Rubingh | Carla | U of Nebraska | 95-6 | Therapeutic Interchange by Pharmacists: Outcomes in an Ambulatory Care Clinic |
| Albright | Lisa | U of Nebraska | 94-5 | Evaluating Inpatient and Outpatient Allergy Documentation in a University Hospital Setting |
| Cerveney | Joli | U of Nebraska | 94-5 (HIV) | Using Pharmaceutical Manufacturer Support to Fund an HIV Residency Program at University Hospital |
| Furniss | Shawn | Idaho State U | 94-5 | Indomethacin vs Surgical Ligation for the Treatment of Patent Ductus Arteriosus- A Retrospective Chart Review |
| Loeffelbein | Robert | U of Nebraska | 94-5 | A Comparison of Parenteral Nutrition Solution Osmolarity and Loss of Peripheral Venous Access in Neonates |

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| Muncey | Lance | Idaho State U | 94-5 | Implementation and Evaluation of New American Diabetes Association Standards of Care for the Diabetic Patients in a Family Practice Clinic |
| Portley | Bonnie | Idaho State U | 94-5 | The Effect of Osmolality on Feeding Tolerance in the Preterm Neonate |
| Andrews-Boudreaux | Stacey | Idaho State U | 93-4 | Evaluation of Depression in the Elderly Using the Geriatric Depression Scale |
| Cerveney | Joli | U of Nebraska | 93-4 | Evaluation of a Pharmacist's Role During Cardiac Arrest |
| DiGregorio | Vicky | UC SF | 93-4 | Evaluating the Accuracy of Medical and Drug Histories in Russian Patients' Charts- An Evaluative Study |
| Grunden | John | U of Utah | 93-4 (DI) | Evaluation of an Electronic Formulary |
| Najari | Zohre | U of Arizona | 93-4 | Y Site Physical Compatibility of Common BMT Drug Combos |
| Beckwith | Christina | U of Utah | 92-3 (DI) | Surveying Former Drug Information Residents for Career Aspirations |
| Cafee | Anne | U of Florida | 92-3 | Pharmacist Counseling when a Sample Medication is Dispensed |
| Davis | Gary | U of Arizona | 92-3 | Evaluation of Transdermal Nicotine Replacement Therapy in the Outpatient Population - an Evaluative Study |
| Kelsey | Julie | U of the Pacific | 92-3 | First Dose Gentamicin Pharmacokinetics in Obstetric Patients |
| Moser | Lynette | U of Illinois | 92-3 | Pharmacist Participation in an Established Hyperlipidemia Clinic- A Descriptive Report |
| Dwinell | Andrea | U of Minnesota | 91-2 | Patient Compliance with Prescription Filling After Discharge from the Emergency Department |
| Robinette | Bryan | Tennessee | 91-2 | Physical Compatibility of Ceftazidime Sodium, and Methylprednisolone Sodium Succinate with Secondary Intravenous Agents via Simulated Y-Site Injection |