



# **PGY2 Oncology Pharmacy Residency Manual**

**Departments of Pharmacy  
UPMC Presbyterian Shadyside**

**2021-2022**

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## **UPMC Health System Mission, Vision, and Values**

### **Our Mission**

UPMC's mission is to serve our community by providing outstanding patient care and to shape tomorrow's health system through clinical and technological innovation, research, and education.

### **Our Vision**

UPMC will lead the transformation of health care. The UPMC model will be nationally recognized for redefining health care by:

- Putting our patients, health plan members, employees, and community at the center of everything we do and creating a model that ensures that every patient gets the right care, in the right way, at the right time, every time
- Harnessing our integrated capabilities to deliver both superb state-of-the-art care to our patients and high value to our stakeholders
- Employing our partnership with the University of Pittsburgh to advance the understanding of disease, its prevention, treatment, and cure
- Serving the underserved and disadvantaged, and advancing excellence and innovation throughout health care
- Fueling the development of new businesses globally that are consistent with our mission as an ongoing catalyst and driver of economic development for the benefit of the residents of the region

### **Our Values**

We create a safe environment where quality is our guiding principle.

**QUALITY & SAFETY**

We treat all individuals with dignity and respect.

**DIGNITY & RESPECT**

We listen to and care for our patients, our health plan members, our fellow employees, our physicians, and our community.

**CARING & LISTENING**

We perform our work with the highest levels of responsibility and integrity.

**RESPONSIBILITY & INTEGRITY**

We think creatively and build excellence into everything that we do.

**EXCELLENCE & INNOVATION**

## **Pharmacy Residency Administration**

The UPMC Directors of Pharmacy and University of Pittsburgh School of Pharmacy Department Chair for Pharmacy and Therapeutics are responsible for the overall execution of the residency programs throughout UPMC Presbyterian (PUH), Shadyside (SHY) and Western Psychiatric Hospital (WPH). The Residency Program Directors (RPDs) are responsible for the individual program execution. The Residency Program Coordinators (RPCs) under the guidance of the individual program RPDs are responsible for executing program support and assigned areas of responsibility within individual residency programs. The PUH/SHY/WPH Resident Advisory Committee (RAC) meets monthly and is comprised of RPDs, Pharmacy Leadership and key preceptors that coordinate cross program activities. Each individual program also has a RAC that participates in the oversight of that program. Each RPD is also a member of the University of Pittsburgh School of Pharmacy Resident and Fellowship Council.

### **Resident Expectations**

Resident(s) is expected to represent UPMC mission and values through all professional activities; be punctual for all residency activities and meet assigned timelines; and communicate with RPD and preceptors concerns and needs to meet program requirements through the year.

### **Residency Program Director Expectations**

The RPD is responsible for the overall conduct of the program, including but not limited program structure, orientation of residents, preceptor selection, learning experience scheduling, resident development plan and continuous quality improvement for the program. The RPD will communicate with resident(s) and preceptors potential changes to the program and needs for evaluation. The RPD will be an available resource to resident(s) and preceptors with any concerns or needs in relation to the residency program. When not available, a clear designee is appointed.

### **Resident Preceptor**

Preceptors will provide the resident orientation to the specific site activities, personnel, schedule and expectations for successful completion. Preceptors will be available for resident assistance for site needs and when they are not available they will ensure a clear designee will be available.

## **Pharmacy Residency Assessment Strategy**

### **Expectations of the Resident**

1. By June 1 prior to arrival, the resident will complete the Entering Resident Form and Interest and Preference Information form prior to entering the residency program.
2. By July 1, the resident will complete a self-assessment of their practice experiences or competencies prior to the initiation of the residency using the ASHP Standard Form and Objective -Based Self-Evaluation in PharmAcademic.
3. PGY1 residents will participate in an active Readiness Assessment at the beginning and end of the year when available.
4. For each learning experience, residents will complete the following in PharmAcademic:
  - a. Evaluation of Learning Experience and Evaluation of Preceptor at the close of each learning experience
  - b. Resident Self-Evaluation at the completion of selected learnings and quarterly for longitudinal learning experiences. The self-assessment should include qualitative assessment including both strengths as well as areas for improvement.
  - c. Other customized evaluations as indicated by individual programs.
5. Residents will conduct a self-assessment for each oral presentation (e.g., Pharmacotherapy Updates: Lecture Series & Continuing Education (PULSE), Clinical Pearl, Teaching) to be discussed verbally, including strengths as well as areas for improvement. Feedback from evaluators and moderators as well as attendees will be discussed. Residents should scan copies of written feedback on presentations and upload files to PharmAcademic.
6. Residents may also receive written feedback on slide sets, formulary reviews or other written material. In this case, residents should upload a copy of the final document or presentation to PharmAcademic along with a copy of the draft with feedback.

### **Expectations of Preceptors**

1. Preceptors will provide the resident orientation to the specific site activities, personnel, schedule and expectations for successful completion.
2. Preceptors should provide the resident with sufficient formative feedback throughout the learning experience to help the resident systematically improve performance. Such feedback can be delivered and discussed in a variety of ways: during clinical rounds to address a particular performance, after patient care rounds as a review of daily performance, weekly summation of performance specifics. Feedback should be provided on a weekly basis at a minimum and can be documented in PharmAcademic for review by RPD. Individual programs may require additional documentation at set time points utilizing the Activity Formative Feedback evaluation within PharmAcademic.
3. Preceptors will complete a Summative Evaluation of Resident Performance at the end of the rotation (and on a quarterly basis for longitudinal experiences) and document this evaluation within 7 days of the rotation completion. Like feedback, summative evaluation must be discussed in person with the resident and focus on areas of improvement.
4. Preceptors will also complete other customized evaluations as scheduled by the program.
5. Preceptors should bring specific areas of concern directly to the attention of the RPD, via phone call or email. Performance concerns should also be documented within PharmAcademic, providing specific description on the related objective, activity and providing formative feedback on the concern and actionable instruction on how to improve to meet satisfactory progress. If an issue is identified, the resident should be provided regular, no less than weekly, feedback on the improvement process. Any

performance that may lead to a *needs improvement* (NI) should be explicitly discussed with the resident and provided opportunity for improvement during the learning experience if able, including actionable feedback to move to *satisfactory progress* (SP) (see “Evaluation and Criteria” below).

### **Expectation of the Residency Program Director**

1. The RPD is responsible for reviewing entering resident assessments (Interests, Self-Evaluation, Readiness Assessment) and developing an individualized Development Plan specific to each resident. The RPD must meet with residents to discuss the initial development plans as well as quarterly training plans. The individualized Development Plans must be made available and updated quarterly in PharmAcademic.
2. The RPD will utilize preceptor evaluations, resident self-evaluations as well as other relevant information to assess resident progress on a quarterly basis.

### **Expectation of Non-Preceptor Pharmacy Personnel**

Many members of the pharmacy staff will interact with residents throughout the year and have opportunities to influence resident development. Pharmacy personnel should deliver both verbal and written feedback to residents when appropriate, such as before and at Pharmacotherapy Updates: Lecture Series & Continuing Education (PULSE) or during resident operational responsibilities. Pharmacy personnel should share both positive and negative feedback regarding residents with the appropriate preceptor.

### **Expectation of the Residency Program**

1. The residency programs must provide sufficient information to residents, preceptors and non-preceptor pharmacy personnel so that they may effectively participate in the Resident Assessment Program. Knowledge and understanding of purpose, outcomes, goals and objectives at both the residency and learning experience level are essential for participating.
2. Educational Components include Resident Orientation, New Preceptor Orientation and Preceptor and Staff Refresher. At least two sessions of preceptor development will be delivered through the year.
3. Evaluations of Preceptors and Evaluations of Learning Experiences should be reviewed by the RPD on a quarterly basis to identify opportunities to improve learning experiences and preceptor interactions. The RPD may discuss with the RPC and/or RAC where systematic changes are needed during the year. The RPD and RPC and/or RAC will conduct a yearly quality review of the program.

### **Resident Evaluation Criteria, Definitions and Remediation:**

#### Summative Evaluations (ASHP Formal Evaluation)

Standard definitions of progress toward achieving goals and objectives will allow for consistent interpretation and help provide consistent assessment and subsequent feedback across all programs. The following definitions will be used for needs improvement (NI), satisfactory progress (SP), achieved (ACH), and achieved for residency (ACHR) will be used in all PharmAcademic evaluations. All NI and SP will provide criteria-based feedback that is actionable, forward facing and provide specific examples for improvement. Timeliness of

feedback is important to allow for correction and growth. Evaluations should be completed no later than 7 days after the due date.

### NI = Needs Improvement

- Definition: Resident is not meeting expectations. The resident is performing below the level that would be expected of a resident at this point in their training program as evidenced by meeting 1 or more of the following characteristics:
  - o Requires direct and repeated supervision, guidance, intervention, or prompting greater than 50% of the time
  - o Make questionable, unsafe, or non-evidence-based decisions
  - o Repeatedly fails to complete tasks in a time appropriate manner
  - o Repeatedly fails to incorporate or seek out feedback
  - o Acts in an unprofessional manner
- Preceptor Action: The preceptor is required to document criteria-based, specific comments within PharmAcademic, citing specific example(s) why NI was assigned, and providing direction on how the resident may improve their performance. When applicable, the preceptor should contact the RPD early in the learning experience if resident performance concerns are noted that would lead to a NI evaluation. The preceptor should discuss with the resident that the current performance requires improvement and provide formative feedback on how to reach SP by the end of the experience. The resident's progress should be communicated to the RPD in a timely fashion and subsequently with the RAC to reinforce further development.
- Remediation of learning objective: When a NI is assigned to an objective for the learning experience, the RPD should determine when and how to reevaluate the objective that for which a NI was assigned. This remediation plan will be discussed with the resident and outlined in writing with resident acknowledgment. The RPD will document progress and program changes within the development plan.
  - o This plan may include but is not limited to the following: 1) identification of an existing learning experience already assigned the goal/objective; 2) addition of the objective in an upcoming learning experience; 3) remediating an activity outside of learning experience; or 4) repeating the learning experience.
  - o Progress from NI to SP for the identified objective should occur by the end of the following quarter and may necessitate a change in resident schedule. If an NI remains at the end of the following quarter, see Resident Remediation and Dismissal Policy.

### SP = Satisfactory Progress

- Definition: Resident is meeting expectations. The resident is performing at the level that would be expected of a resident at this point in their training program as evidenced by meeting the following characteristics:
  - o Requires infrequent supervision, guidance, intervention, or prompting (50-79% of the time)
  - o Makes appropriate, safe, or evidence-based decisions
  - o Completes tasks in a time appropriate manner with limited prompting and guidance
  - o Incorporates feedback from preceptors with minimal prompting
  - o Acts in a professional manner
- Preceptor Action: The preceptor is required to document criteria-based, qualitative written comments that are specific and actionable, that will allow the resident to progress. Feedback should acknowledge the resident's skill progression within PharmAcademic.



### ACH = Achieved

- Definition: Resident is consistently meeting expectations. Resident is independently performing at or above the level of performance expected at the conclusion of the residency program. Resident displays all the following characteristics:
  - Consistently makes appropriate, safe, or evidence-based decisions on an independent basis seeking appropriate guidance when needed. (>80% of the time)
  - Independently and competently completes assigned tasks
  - Consistently demonstrates ownership of actions and consequences
  - Accurately reflects on performance and can create a sound plan for improvement
  - Acts in a professional manner
- Preceptor Action: The preceptor must document criteria-based, specific comment(s) and example(s) within PharmAcademic to justify ACH.

### ACHR = Achieved for Residency

- Definition: Resident demonstrates sustained performance of independently meeting the goal/objective through the following criteria:
  - For objectives that are evaluated in more than one learning experience
    - Objective marked achieved in at least 2 learning experiences
    - Objective marked as achieved in the final scheduled evaluation
  - For objectives that are evaluated only once
    - Objective marked as achieved
  - Any previous NI have been resolved for the objective
- Once a goal is marked as ACHR, further comments need not be provided unless a new item for feedback arises on subsequent experiences.
- The RPD will determine ACHR through review of summative assessments, feedback from preceptors and advisors (where applicable). Documentation (within PharmAcademic) of a resident's achievement of a goal/objective for the residency program will be the responsibility of the RPD. This can be done at any point throughout the year, ideally in coordination with a formalized process for resident evaluation such as quarterly evaluations/development plans.
- If a resident regresses in performance after a goal is marked as ACHR, it may be unchecked by the RPD. Documentation of the reason for regression, an actionable plan on how to again meet ACHR should be shared with the resident and documented within the development plan.

Review of Assessment Components						
	Documentation	Completed by	Reviewed By	Entry	Completion	Review
Resident Objective Based Self-Assessment	PharmAcademic	Resident	RPD	X		Upon entry
Resident Development Plan	PharmAcademic	RPD	RPD Preceptors	X	Quarterly	Quarterly
Resident Readiness Assessment, when available	Written documentation	PGY1 Residents	RPD	X – within first 8 weeks of residency	End of residency	As completed
Orientation	PharmAcademic	Resident Preceptor	RPD		End of Orientation	As completed
Evaluation of Resident	PharmAcademic	Resident Preceptor	RPD		End of Learning Experience. Quarterly, if longitudinal	End of Learning Experience Quarterly
Evaluation of Learning Experience	PharmAcademic	Resident	RPD		End of Learning Experience	Quarterly
Evaluation of Preceptor	PharmAcademic	Resident	RPD		End of Learning Experience	Quarterly
Feedback	PharmAcademic and Verbal	Resident Preceptor pharmacy personnel	RPD		Minimum – weekly	Quarterly
Resident Research	PharmAcademic Written documentation	Resident Mentor	RPD		Quarterly	Quarterly
Resident Teaching	PharmAcademic Written Verbal	Resident Mentor	RPD		Quarterly and after activity	As completed
PULSE and Clinical Pearl (when assigned)	Written Verbal	Resident Preceptor Attendees	RPD		After Presentation	As completed
Medication Use Evaluation (when assigned)	PharmAcademic Written document	Resident Preceptor	RPD		As Assigned	As completed
Formulary Review (when assigned)	PharmAcademic Written document	Resident Preceptor	RPD		As Assigned	As completed

## **Residency Goals**

See PGY2 Oncology Residency Program specific section for complete list of goals and corresponding objectives.

## **Resident Experiences**

### **Resident Attendance**

The responsibilities of a resident do not coincide with a 40-hour workweek. Residents may expect to be on the premises in general from 7:30-5pm Monday-Friday. However, these general expectations may vary with individual learning experiences, committee meetings, and staffing commitments. In addition, the resident is responsible for prompt attendance of all clinical rotations and other activities outlined by a preceptor/program director that may be outside these hours. The preceptor and/or program coordinator has the authority to make additional requirements that fall outside the above weekday or weekend requirements. (See duty hours policy)

The residency coordinator will enter pharmacy resident schedules into the MedHUB system. This will serve as a time log for duty hours and pay periods – therefore, it must be accurate. **Residents are required to report hours in MedHub weekly. Corrective action may be necessary for residents who do not meet this expectation. See Policy and Procedures RXPS-11057 Tracking of Duty Hour Procedures below.**

### **Scheduling**

Each resident's schedule is devised based on the program requirements and each resident's specific goals. Each resident will complete the Pre-Residency Interest Survey which may be amended to the ASHP Entering Resident Survey to determine career goals and interest in certain experiences/rotations. This should be completed upon entering the program and must be completed no later than mid-June to help create a schedule to accomplish his/her goals. Based on this information, an individualized development plan and schedule is created for each resident at the beginning of the year and used as an assessment tool throughout the year.

### **Patient Care**

The specific patient care learning experiences are outlined within the PGY2 Oncology Residency Program specific section.

### **Teaching**

Teaching activities are a part of resident development. There are a multitude of opportunities to teach in various settings within UPMC and Pitt Pharmacy. The exact requirements for teaching are delineated in the PGY2 Oncology Residency Program specific section. The University of Pittsburgh School of Pharmacy is committed to supporting the development of pharmacy residents as they seek knowledge and opportunities to further abilities in teaching. The Teaching Mastery Program is offered to interested residents of affiliated programs to provide a structured academic program in developing teaching skills. See the individual program appendix for required teaching activities and the Pitt Pharmacy Residency Affiliation Agreement for information on the Teaching Mastery Program.

### **Project / Research**

All residents will be provided with a list of project / research ideas upon their arrival and choose an idea of interest by the designated deadline. The resident and project advisors will follow the 6/22/2017; update 7/27/18; 12/1/19; 6/20/2019; 7/3/19; 6/25/20; 6/17/21; 7/14/21

requirements addressed in the Residency Research Series section or their individual program's longitudinal research program of the Pitt Pharmacy Residency Affiliation Agreement.

### **Professional Presentations**

All residents will provide presentations as part of professional development and present at least one Pharmacotherapy Updates: Lecture Series & Continuing Education (PULSE) as outlined below. Requirements for presentations outside PULSE are outlined within the individual program appendix.

Residents are assigned to present during Pharmacotherapy Updates: Lecture Series & Continuing Education (PULSE). PULSE is a weekly, ACPE-accredited, departmental continuing education series for pharmacists. Sessions are provided in a lecture format, with Q&A session at the end. Active learning strategies are encouraged, for example, interactive questions, periodic assessments with the audience, or case-based teaching. The purpose of PULSE is to provide the residents with an opportunity to give a formal presentation for faculty, peers and students that could be used during an employment interview or platform presentation at a professional meeting. Residents receive immediate feedback from preceptors and mentors.

### **Pharmacy Operations**

Pharmacy residents provide scheduled pharmacy services within the Department of Pharmacy to provide patient care as well as fulfill learning requirements of individual residency programs. Residents will be provided with a pharmacist training manual during orientation. Residents will be assigned a primary preceptor for the learning experience associated with the provision of pharmacy services.

Exact service expectations may differ slightly by residency program and hospital regarding holiday and on-call requirements. Pharmacy operation requirements for each program are provided within the hospital department policy and procedures as outlined below.

### **Requirements for Obtaining Residency Certificate**

A list of specific requirements is found in the PGY2 Oncology Residency Program specific section and in the Program Specific Appendix A. A general summary follows.

### **Learning Experiences**

The resident must successfully complete all learning experiences (i.e., no Needs Improvement) as outlined for the individual program and complete all required associated evaluations. Specific experiences are outlined in the PGY2 Oncology Residency Program specific section.

### **Resident Performance**

The resident must reach Achieved for Residency (ACHR) on 80% of overall program goals and objectives. The resident cannot have any objectives with Needs Improvement that has not been resolved (i.e., obtained a subsequent SP or ACH) by the end of the program. Individual program may outline certain goals that must be 100% achieved such as those related to patient care. See the PGY2 Oncology Residency Program specific section for specific goals and objectives and requirements for program completion.

### **Completion of Research/Quality Improvement/Research Project**

The resident must present findings of research or quality improvement project at the Pitt Pharmacy Resident Research Day. The resident should have a completed manuscript

6/22/2017; update 7/27/18; 12/1/19; 6/20/2019; 7/3/19; 6/25/20; 6/17/21; 7/14/21

completed within 2 weeks of the end of the program. However, if extenuating circumstances out of the resident's control do not allow for the manuscript to be completed by end date of the program and all other program requirements are met, the resident may receive his/her certificate if a written plan is in place with a timeline for completion of the manuscript within 60 days of the program completion. The resident will recognize that if they fail to provide the manuscript in the agreed upon timeframe, the project mentor may then submit the work for publication and the resident will forgo the right of primary author.

### **Completion of Teaching Experiences**

Requirements for individual residency programs and denoted in PGY2 Oncology Residency Program specific section.

### **Presentations**

Requirements for individual residency programs and denoted in PGY2 Oncology Residency Program specific section.

## **Pharmacy Residency Policy and Standard Operating Procedures**

The Standard Operating Procedures (SOPs) for the Department of Pharmacy Presbyterian Shadyside provide oversight to the residency program in addition to the general residency policies of Graduate Medical Education (GME). Where there are similar GME policies, the pharmacy SOPs incorporate and/or refer to these policies. The SOPs are reviewed at least yearly by the Residency Advisory Committee and departmental management. Prospective candidates and residents during orientation will be provided with an appendix with the files for ease of review. The department SharePoint contains the current approved and official pertaining to UPMC PUH/SHY department of pharmacy activities and employees which includes residents. Any changes to the policies during the resident year will be brought to the attention of the resident by the RPD. The resident related SOPs are outlined below with the correlated link to the documents within the department SharePoint.

Western Psychiatric Hospital residents abide by the same operating procedures and can be found within the WPH Department of Pharmacy. To avoid duplication of content are not included below. WPH operations is outlined as the only variation.

Access to all department of pharmacy policy and procedures can be found at:

<https://upmchs.sharepoint.com/sites/PUH/pharmacy/Policies%20and%20Procedures/SitePages/Home.aspx>

## **Pharmacy Licensure**

RXPS-11058

<https://upmchs.sharepoint.com/sites/PUH/pharmacy/Policies%20and%20Procedures/Lists/PandPManual/Attachments/1223/RXPS-11058%20SOP%20UPMC%20Pharmacy%20Resident%20Licensure.pdf>

## **Tracking of Duty Hours**

RXPS-11057

<https://upmchs.sharepoint.com/sites/PUH/pharmacy/Policies%20and%20Procedures/Lists/PandPManual/Attachments/1222/RXPS-11057%20SOP%20UPMC%20Pharmacy%20Resident%20Tracking%20of%20Duty%20Hours.pdf>

## **Resident Moonlighting**

RXPS-11060

<https://upmchs.sharepoint.com/sites/PUH/pharmacy/Policies%20and%20Procedures/Lists/PandPManual/Attachments/1225/RXPS-11060%20SOP%20UPMC%20Pharmacy%20Resident%20Moonlighting.pdf>

## **Resident Paid Time Off and Leave**

[Policy and Procedure Manuals - UPMC Pharmacy Resident Paid Time Off \(sharepoint.com\)](#)

## **Resident Well Being**

RXPS-11061

<https://upmchs.sharepoint.com/sites/PUH/pharmacy/Policies%20and%20Procedures/Lists/PandPManual/Attachments/1226/RXPS-11061%20SOP%20UPMC%20Pharmacy%20Resident%20Well-Being.pdf>

## **Resident Staffing**

RXPS-11059

<https://upmchs.sharepoint.com/sites/PUH/pharmacy/Policies%20and%20Procedures/Lists/PandPManual/Attachments/1224/RXPS-11059%20SOP%20UPMC%20Pharmacy%20Resident%20Staffing.pdf>

## **Resident Remediation and Dismissal**

RXPS-11075

[Policy and Procedure Manuals - UPMC Pharmacy Resident and Fellow Remediation and Dismissal \(sharepoint.com\)](#)

## **Resident Early Commitment for PGY2**

RXPS-11074

[Policy and Procedure Manuals - UPMC Pharmacy Resident and Fellow Early Commitment \(sharepoint.com\)](#)

## **Graduate Medical Education Policies and Procedures**

Policies pertaining to graduate medical education and trainees can be found electronically on the MedHub site → Resource and Documents →UPMC ME Policies and Guidelines.

Not all policies are specifically pertinent to pharmacy residents. Those with which pharmacy residents should be familiar include:

UPMC Administrative Leave Policy  
UPMC Disability Accommodations  
UPMC Employee Health Policy  
UPMC Family Medical Leave of Absence (FMLA) Policy  
UPMC Fitness for Duty Policy  
UPMC Funeral Leave Policy  
UPMC Harassment-free Workplace Policy  
UPMC Institutional DEA Regulations  
UPMC Paid Parental Leave of Absence (PPLOA) Policy  
UPMC Professional Conduct Policy  
UPMC Personal Leave of Absence Policy  
UPMC Social Networking Policy  
UPMC Vendor Management Policy  
UPMC ME Policy - Disaster or Interruption in Patient Care  
UPMC ME Policy - Grievance and Appeal Policy  
UPMC ME Policy - Institutional and Program Level Agreements  
UPMC ME Policy – Non-Compete Policy  
UPMC ME Policy – Parental Leave of Absence Policy  
UPMC ME Policy - Resident Fellow and Faculty Well-Being and Fatigue Management Policy  
UPMC ME Policy - Resident and Fellow Visa Policy  
UPMC ME Policy - Resident or Fellow Grievance (Non-Academic Issues)  
UPMC ME Policy - Supervision and Progressive Responsibility Policy  
UPMC ME Policy - Trainee Appointment, Renewal, Non-Promotion, Remediation, Probation, & Dismissal  
UPMC ME Policy – Transition of Care Policy

For the Following Policies refer to the corresponding Pharmacy Specific Policy

UPMC ME Policy - Clinical and Educational Work Hours: See Pharmacy SOP Duty Hours

UPMC ME Policy – Moonlighting, and Clinical Skills Enhancement Activities: See Pharmacy SOP Moonlighting

## **Benefits**

### **Health Benefits**

Fringe benefits effective July 1st through June 30th for full-time residents.

- A health insurance plan for the trainee and his/her eligible dependent(s) is provided. Enrollment forms were provided prior to July so that coverage will be in effect July 1<sup>st</sup>.
- Dental insurance, life insurance, paid short-term disability, and long-term disability insurance coverage are provided; details should be discussed with Human Resources as to eligibility.

For additional questions, please speak to Graduate Medical Education (GME) Office at 412-647-6340.

## Resources

The Resident Fellow Assistance Program through *LifeSolutions* provides free 24/7 access to wellness resources including free assessment and short-term counseling and or referrals to appropriate community resources for personal, career, and job-related needs. Contact 412-647-3669 or [www.lifesolutionsforyou.com](http://www.lifesolutionsforyou.com) (Login code:RFAP).

The UPMC Graduate Medical Education WELL (Well-Being, Environment, Living and Learning) Subcommittee focuses on resident engagement activities. Activities and information available through MedHub and <https://gmewellness.upmc.com/>.

## Parking

Parking is available at a UPMC designated lot either by lease or by prepaid debit account.

## Pagers

For institutions that provide pagers for communication, the resident will be provided a pager on the first day of the residency. In July, an introduction to the paging and telephone system will be provided. The expectations of availability are outlined by the individual program's appendix. The resident is responsible for maintaining the pager in good condition during the year. When the resident is outside the short-range limits of his/her pager, the resident is required to have coverage either by their preceptor or by fellow resident. Each resident must return his/her pager to the Program Director as part of the completion of the residency program.

## Office Space, Computer, and Telephone

Each resident will be provided with a designated working space and will be provided with a computer with all necessary programs (i.e., Microsoft Word, PowerPoint and Internet access) and linked to a network printer. A key or card access will be provided to each resident to access appropriate areas. The office will have access to a personal phone and audio system for voicemail.

## Phone Access

Each resident will have access to phone services for in-house, local, and long-distance (US) calls. All phone calls made are logged within the communications department and reported back to the management of this department. When making an in-house call, connection can be made by dialing the last number of the prefix and the four-digit number. To access an outside line, you will need to dial 9 to get out. Most phones in house will require that you insert your personal phone access code to complete a local or long-distance call. Each resident will receive an individual number that should be kept confidential.

Personal phone calls while on distribution services are discouraged. Long-distance access is provided as a professional courtesy and should be used with discretion. Inappropriate use will result in a loss of outside phone privileges.

University of Pittsburgh Extensions: 648, 688, 624, 383

University of Pittsburgh Medical Center Health System Extensions

647 – PUH 648 – MUH 692 – MUH

Shadyside Extension 623

WPH Extensions 246, 586



# **PGY2 Oncology Pharmacy Residency Program UPMC Presbyterian Shadyside Hospital**

## **Philosophy and Purpose of a Postgraduate Year Two (PGY2) Oncology Pharmacy Residency**

PGY2 pharmacy residency programs build on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification.

Specifically, the PGY2 Oncology Pharmacy Residency at UPMC Presbyterian Shadyside Hospital is designed to transition PGY1 pharmacy resident graduates from general practice to specialized practice that meets the needs of patients with a wide variety of hematologic and oncologic malignancies. This accredited program's purpose is to develop a strong, qualified, and competent clinical oncology pharmacist in the areas of hematology, oncology, and bone marrow transplantation. In addition to being focused on oncology pharmacotherapy, clinical research, and academia, this program is meant to increase the resident's knowledge, skills, attitudes, and abilities to raise the resident's confidence and level of expertise in disease state management and clinical and academic leadership.

### **Purpose Statement**

To prepare PGY1-trained residents to assume any of the following roles:

- BCOP-certified clinical pharmacist in the areas of oncology, hematology, and/or bone marrow transplantation
- Clinical Educator
- Clinical Researcher

Our residency graduates are equipped to be fully integrated members of the interdisciplinary oncology team and can make complex pharmacotherapy recommendations in this fast-paced environment. Training focuses on developing resident capability to deal with a wide range of hematologic and oncologic disease states, safe handling, dispensing and administration of chemotherapy/biotherapy and their associated supportive care and adverse event management issues.

Graduates are experienced in designing and conducting research in a hematology/oncology environment and excel in their ability to teach other health professionals and those in training to be health professionals. They also acquire the experience necessary to exercise leadership for this focus in the health system.

## **PGY2 Oncology Residency Program Team**

### **Residency Program Director:**

Timothy L. Brenner, PharmD, BCOP

The Residency Program Director is responsible for the PGY2 oncology residency program. This includes program structure, orientation of residents, preceptor selection and that the overall program and specific learning objectives are met, appropriate preceptorship for each learning experience is provided and resident evaluations are conducted appropriately and in a timely manner.

### **Residency Program Coordinator:**

Amanda S. Agnew, PharmD, BCPS, BCOP

The Residency Program Coordinator supports the Residency Program Director in his responsibilities and assumes a leadership role in program administration.

### **Pharmacist Preceptors:**

Timothy L. Brenner, PharmD, BCOP  
Amanda Agnew, PharmD, BCPS, BCOP  
James J. Natale, PharmD, BCOP  
Shrina Duggal, PharmD, BCOP  
Jason Steele, PharmD, BCOP  
Timothy George, PharmD, BCOP  
Brian Miller, PharmD  
Karen Fancher, PharmD, BCOP  
Breana Goscicki, PharmD, BCPPS  
Louis-Marie Oleksiuk, PharmD, BCPS  
Michael Trisler, PharmD, MPH  
Jeffrey Goff, RPh, MS

Pharmacist preceptors will provide the resident orientation to the specific site activities, personnel, schedule and expectations for successful completion. Preceptors develop and guide the learning experiences to meet the residency program's goals and objectives with consideration of the residents' goals, interests, and skills. The preceptors review the resident's performance, with a final written evaluation at the conclusion of each learning experience. Other responsibilities include but are not limited to assisting with the PGY2 oncology resident interview process, serving as an active member of the Residency Preceptor Advisory Council (RPAC), serving as the preceptor for the educational longitudinal rotation and residency research project mentor.

### **Pharmacy Operations Lead Preceptor:**

Ernie Sanchez, PharmD

Consistent with the ASHP residency standards, each resident completes a staffing component during their residency. This experience is crucial to the development of professional practice skills. The resident will become proficient in pharmacy operations, including all aspects of order verification, medication preparation and distribution. In addition, the resident develops skills in leadership and personnel management, and gains insight into process improvement issues related to chemotherapy preparation.

## **Residency Preceptor Advisory Council (RPAC)**

The Residency Preceptor Advisory Council (RPAC) is a standing committee of the UPMC Presbyterian Shadyside Clinical Oncology Pharmacy Department created in July 2021. The RPAC will typically meet monthly, or as needed, and is composed of the residency preceptors, residency coordinator and residency program director. The committee serves in an advisory capacity to maintain the quality and consistency of the residency program. The committee provides a forum for preceptors to discuss common concerns, to develop additional learning experiences, and to promote new and innovative areas of practice.

The specific functions of the RPAC include:

- Continuous evaluation of the curriculum, goals, and objectives
- Monthly evaluation of resident progress
- Evaluation and discussion of the resident's development plan quarterly
- Evaluation and support of residency projects
- Resident recruitment and selection
- Formal evaluation of the PGY2 oncology residency program (at least once annually)

## **Preceptor Appointment Criteria**

To be considered for appointment (or reappointment) as a preceptor in the PGY2 oncology pharmacy residency program at UPMC Presbyterian Shadyside, the PGY2 oncology pharmacy preceptor candidate must meet all the following criteria and be approved for appointment by the residency program director:

1. Licensed pharmacist
2. Experience (either a or b is acceptable)
  - a. ASHP-accredited PGY2 oncology residency followed by a minimum of one (1) year of pharmacy practice experience in the advanced practice area.
  - b. Three (3) or more years of pharmacy practice experience in the advanced practice area without completion of ASHP-accredited PGY2 residency.
3. An established active practice for which the pharmacist will serve as preceptor.
4. Ongoing professionalism, including a personal commitment to advancing the profession.
5. Must complete and submit ASHP's "Preceptor Academic and Professional Record" form to residency program director. APR to be updated with department annual performance evaluation each year.

## **Appointment as a Preceptor-In-Training**

If a preceptor candidate is assigned as a preceptor-in-training, he/she will be assigned a preceptor advisor who will work with the preceptor-in-training to write a specific development plan to achieve full preceptorship within two (2) years.

### **Preceptor Reappointment**

- Preceptors will demonstrate a sustained record of contributing to pharmacy practice and to self-development.
- Resident preceptor evaluations will be monitored by the Residency Program Director.
- Reappointment by the residency program director will occur every three (3) years.
- If a resident preceptor's APR is deemed deficient by the RPD, the resident preceptor will be required to make an action plan with the RPD to correct the deficiency and have one year to correct the stated deficiency.

### **Preceptor Development**

- It is the expectation that preceptors will continuously develop their teaching, precepting and mentoring skills.
- Resident preceptors must complete three in-person preceptor development activities in the reappointment cycle (every 3 years). (PITT Pharmacy requires two preceptor development activities per year.)
- Acceptable preceptor development activities may include:
  - Online or live continuing education activities sponsored by an organization (ASHP, ACCP, etc.) or a College of Pharmacy
  - Review and discussion of key articles provided by the RPD or other Pitt Pharmacy Residency Program leadership
  - Live or recorded development activities offered through the department or institution
  - If a preceptor participates in an activity at a conference or meeting that may qualify, he/she may submit supporting documentation (slides, objectives, etc.)
  - Attending a preceptor development conference or meeting (local, regional, or national)
  - PGY2 Oncology Residency Program may provide specific preceptor development in the monthly residency preceptor committee meeting with discussions of residency policies, resident performance, and precepting pearls.
  - Other program/activity/lecture/literature approved by the RPD or the PITT Pharmacy Residency Program.

**PGY2 Oncology Residency Program Structure**

<b>PGY2 ONCOLOGY PROGRAM STRUCTURE</b>	
<b>REQUIRED LEARNING EXPERIENCES (11 required)</b>	
Inpatient Medical Oncology - Team A	4 weeks
Inpatient Medical Oncology - Team B	4 weeks
Leukemia I - Inpatient Hematology	4 weeks
Leukemia II - Inpatient Hematology	4 weeks
Team H - Inpatient Hematology	4 weeks
Inpatient BMT I (Autologous HSCT/CAR-T)	4 weeks
Inpatient BMT II (Allogeneic HSCT)	4 weeks
Investigational Drug Service (IDS)	4 weeks
Outpatient Ambulatory Care Oncology	4 weeks
Oncology Pre-Admissions (OPA)	4 weeks
Professional Development	4 weeks
<b>ELECTIVE LEARNING EXPERIENCES (select 2)</b>	
Infectious Diseases (ID) - Inpatient	4 weeks
Pediatric BMT	4 weeks
Pediatric Oncology	4 weeks
Gynecologic Oncology	4 weeks
Elective of any required learning experience	4 weeks
<b>LONGITUDINAL LEARNING EXPERIENCES</b>	
Administration	12 months
Outpatient Clinic	12 months
Staffing (every 3 <sup>rd</sup> weekend)	12 months

**Resident Attendance**

The responsibilities of a resident do not coincide with a 40-hour workweek. The resident will be required to be on the premises between the hours of 7:30am-5:00pm Monday–Friday. In addition, the resident is responsible for prompt attendance of all clinical rotations and other activities outlined by a preceptor/program director that may be outside these hours. The resident will also be required to performing staffing duties in the Shadyside Hospital Oncology Satellite Pharmacy (7 main pharmacy) approximately every 3<sup>rd</sup> weekend. The preceptor and/or program coordinator has the authority to make additional requirements that fall outside the above weekday or weekend requirements. (See duty hours policy)

## **Resident Summative Evaluations - Definition and Due Date**

### **Summative Evaluations (ASHP Formal Evaluation)**

The PGY2 Oncology Pharmacy Residency uses the same standard definitions of progress toward achieving goals and objectives that are found previously in this residency manual (see section Resident Evaluation Criteria, Definitions and Remediation for detailed content). Needs improvement (NI), satisfactory progress (SP), achieved (ACH), and achieved for residency (ACHR) will be used in all PharmAcademic evaluations. All NI and SP will provide criteria-based feedback that is actionable, forward facing and provide specific examples for improvement. Timeliness of feedback is important to allow for correction and growth. Evaluations should be completed no later than 7 days after the due date. RPD will utilize the Overdue Evaluations report in PharmAcademic to identify any summative evaluations not completed within the 7-day deadline. RPD will contact resident(s) and/or preceptor(s) to reinforce the importance of timely evaluations, as necessary.

### **NI = Needs Improvement**

- Definition: Resident is not meeting expectations. The resident is performing below the level that would be expected of a resident at this point in their training program as evidenced by meeting 1 or more of the following characteristics:
  - o Requires direct and repeated supervision, guidance, intervention, or prompting greater than 50% of the time
  - o Make questionable, unsafe, or non-evidence-based decisions
  - o Repeatedly fails to complete tasks in a time appropriate manner
  - o Repeatedly fails to incorporate or seek out feedback
  - o Acts in an unprofessional manner
- Preceptor Action: The preceptor is required to document criteria-based, specific comments within PharmAcademic, citing specific example(s) why NI was assigned, and providing direction on how the resident may improve their performance. The preceptor should discuss with the resident the current performance requires improvement and provide formative feedback on how to reach SP by the end of the experience.

### **SP = Satisfactory Progress**

- Definition: Resident is meeting expectations. The resident is performing at the level that would be expected of a resident at this point in their training program as evidenced by meeting the following characteristics:
  - o Requires infrequent supervision, guidance, intervention, or prompting (50-79% of the time)
  - o Makes appropriate, safe, or evidence-based decisions
  - o Completes tasks in a time appropriate manner with limited prompting and guidance
  - o Incorporates feedback from preceptors with minimal prompting
  - o Acts in a professional manner
- Preceptor Action: The preceptor is required to document criteria-based, qualitative written comments that are specific and actionable, that will allow the resident to progress. Feedback should acknowledge the resident's skill progression within PharmAcademic.

### **ACH = Achieved**

- Definition: Resident is consistently meeting expectations. Resident is independently performing at or above the level of performance expected at the conclusion of the residency program. Resident displays all the following characteristics:

- o Consistently makes appropriate, safe, or evidence-based decisions on an independent basis seeking appropriate guidance when needed. (>80% of the time)
- o Independently and competently completes assigned tasks
- o Consistently demonstrates ownership of actions and consequences
- o Accurately reflects on performance and can create a sound plan for improvement
- o Acts in a professional manner
- Preceptor Action: The preceptor must document criteria-based, specific comment(s) and example(s) within PharmAcademic to justify ACH.

**ACHR = Achieved for Residency**

- Definition: Resident demonstrates sustained performance of independently meeting the goal/objective through the following criteria:
  - o For objectives that are evaluated in more than one learning experience
    - Objective marked achieved in at least 2 learning experiences
    - Objective marked as achieved in the final scheduled evaluation
  - o For objectives that are evaluated only once
    - Objective marked as achieved
- Once a goal is marked as ACHR, further comments need not be provided unless a new item for feedback arises on subsequent experiences.
- The RPD will determine ACHR through review of summative assessments, feedback from preceptors and advisors (where applicable). Documentation (within PharmAcademic) will be the responsibility of the RPD. This can be performed during the resident evaluation or quarterly evaluations/development plans meetings.

**Required PGY2 Oncology Resident Experiences:**

The following learning experience, lectures, seminars, and projects are required.

1. The following **11 required learning experiences** must be completed by the end of the residency year.

<b>Required Learning Experience</b>	<b>Duration (weeks)</b>	<b># of rotations</b>	<b>Notes</b>
Inpatient Medical Oncology	4	2	Non-Teaching (A) or Teaching (B) service
Inpatient Leukemia Service and/or Inpatient Hematology Service	4	3	Leukemia (two) and/or H service
Inpatient BMT I and Inpatient BMT II	4	2	Two consecutive 4-week learning experiences
Outpatient Ambulatory Care Oncology and Oncology Preadmissions	4	2	Will determine site based on resident's area of interest
Investigational Drug Service (IDS)	4	1	
Professional Development	4	1	Will be done throughout the year, but resident will have a dedicated month prior to PPS and HOPA to prepare CV and research project
Electives	4	2	Based on resident's areas of interest

2. Residents must also complete the following **required experiences**:
  - a. Seminar Series (i.e., PULSE) (1 presentations)
  - b. In-services to non-pharmacy health care providers (2 are required)
  - c. In-services to pharmacy staff (2 are required)
  - d. Research Project and participate in the Residency Research Series as well as poster presentation at a national professional meeting (i.e., HOPA)
3. For the experiences above, the percentage of goals that must be met is indicated in the program manual. Residents with “needs improvement” as a final score for any of the required outcomes in any learning experience will not receive a residency certificate.
4. For research, a completed manuscript must be prepared for submission before the end of the residency year.
5. **Optional experience:** Teaching experiences at University of Pittsburgh School of Pharmacy or Duquesne University College of Pharmacy.

### **PGY2 Oncology Pharmacy Residency Goals and Objectives:**

See ASHP Accreditation Standard for a complete list of goals and corresponding objectives. The following competency areas and goals (with corresponding objectives) were selected specifically for our training program. The number indicated parenthetically following the competency area indicates the percentage of goals that must be achieved for each competency area to receive a residency certificate by the end of the residency year.

#### **Competency Area R1 Patient Care: (100%)**

Goal R1.1: In collaboration with the health care team, provide comprehensive medication management to oncology patients following a consistent patient care process.

Goal R1.2: Ensure continuity of care during transitions of oncology patients between care settings.

Goal R1.3: Manage and facilitate delivery of medications to support safe and effective drug therapy for oncology patients.

#### **Competency Area R2: Advancing Practice and Improving Patient Care (100%)**

Goal R2.1: Demonstrate ability to manage formulary and medication-use processes for oncology patients, as applicable to the organization.

Goal R2.2: Demonstrate ability to conduct a quality improvement or research project.

#### **Competency Area R3: Leadership and Management (100%)**

Goal R3.1: Demonstrate leadership skills for successful self-development in the provision of care for oncology patients.

Goal R3.2: Demonstrate management skills in the provision of care for oncology patients.

#### **Competency Area R4: Teaching, Education, and Dissemination of Knowledge (50%)**

Goal R4.1: Provide effective medication and practice-related education to oncology patients, caregivers, health care professionals, students, and the public (individuals and groups).

Goal R4.2: Effectively employ appropriate preceptor roles when engaged in teaching  
6/22/2017; update 7/27/18; 12/1/19; 6/20/2019; 7/3/19; 6/25/20; 6/17/21; 7/14/21



students, pharmacy technicians, or fellow health care professionals in oncology.

**Competency Area R5: Oncology Investigational Drugs (100%)**

Goal R5.1: Appropriately manage oncology investigational drugs and oncology investigational drug services.

**Requirements for Successful Completion of the PGY2 Oncology Pharmacy Residency:**

A residency certificate will be awarded when the following requirements are successfully completed.

1. Pass the exams for licensure as a pharmacist in the State of Pennsylvania by September 30th of the starting residency year or completion of an extended residency experience where at least 9 months of the resident's time they are licensed.
2. "Achieve" all the competency areas and goals established for the oncology residency program as indicated for each learning experience and at the established threshold (see residency goals above).
3. At least 80% completion of all the topics for discussion on the "Disease State and Drug Checklist" (see Program Specific Appendix D)
4. Complete the three (3) longitudinal experiences (i.e., staffing, outpatient clinic, and administration).
5. Complete the seminar and in-service requirements of the residency program.
6. Participation in a research project with associated manuscript in publishable form. (See Project/Research section in residency manual).
7. Pharmacy residents must present the research project at the Pitt Pharmacy Residency Research Day. Specialty practice residents should submit an abstract/poster to a national/international pharmacy meeting (e.g., HOPA, ACCP, ASHP, etc.) prior to the completion of their residency.
8. Participation (encouraged but not mandatory) in the formal didactic lecture series in the oncology course at the University of Pittsburgh School of Pharmacy and/or other similar and appropriate pharmacy therapeutics course at other Schools of Pharmacy (i.e., Duquesne University Mylan School of Pharmacy).

**Program Specific Appendix B**

**EXAMPLE**

**VERIFICATION OF RESIDENT ACCEPTANCE LETTER AND RESIDENCY PROGRAM UNDERSTANDING**

UPMC PGY2 ONCOLOGY PHARMACY RESIDENCY

**Purpose:**

To provide verification to the PGY2 Oncology Pharmacy Residency Program that the PGY2 Oncology Pharmacy Resident has accepted and signed the offer letter (including pre-employment requirements) sent by the University of Pittsburgh Residency Program (and/or Graduate Medical Education (GME)) to signify that he/she understands the list of requirements and expectations of the residency program prior to starting the program.

**Acknowledgement:**

The PGY2 Oncology Pharmacy Residency Program Director and the 202\_\_-202\_\_ PGY2 Oncology Pharmacy Resident acknowledge below (by providing initials) the following list of requirements and expectations have been either provided and/or discussed.

	Resident Initials	RPD Initials
1. Program policies, requirements for successful completion of the program, and expectations of residents in the program was provided (either in print or electronically) to me as an interviewee prior to or on the interview date.	_____	_____
2. Signed acceptance of the offer letter (including _ pre-employment requirements)	_____	_____
3. Program policies appear in the residency manual (written or electronic) or other readily available pharmacy department documents. The following policies and procedures were provided/discussed: • Dismissal policy • Licensure requirements • Moonlighting • Duty hours • Tracking of duty hours and moonlighting • Professional, family, sick and extended leave	_____	_____
4. The list of requirements and expectations for completion are provided in the residency manual (written or electronic) of the residency program that addresses at minimum:	_____	_____

**The following competency areas and goals (with corresponding objectives) were selected specifically for our training program. The number indicated parenthetically following the competency area indicates the percentage of goals that must be achieved for each competency area to receive a residency certificate by the end of the residency year. (See ASHP Accreditation Standard for complete list of goals and corresponding objectives.)**

**Competency Area R1 Patient Care: (100%)**

Goal R1.1: In collaboration with the health care team, provide comprehensive medication management to oncology patients following a consistent patient care process.

Goal R1.2: Ensure continuity of care during transitions of oncology patients between care settings.

Goal R1.3: Manage and facilitate delivery of medications to support safe and effective drug therapy for oncology patients.

**Competency Area R2: Advancing Practice and Improving Patient Care (100%)**

Goal R2.1: Demonstrate ability to manage formulary and medication-use processes for oncology patients, as applicable to the organization.

Goal R2.2: Demonstrate ability to conduct a quality improvement or research project.

**Competency Area R3: Leadership and Management (100%)**

Goal R3.1: Demonstrate leadership skills for successful self-development in the provision of care for oncology patients.

Goal R3.2: Demonstrate management skills in the provision of care for oncology patients.

**Competency Area R4: Teaching, Education, and Dissemination of Knowledge (50%)**

Goal R4.1: Provide effective medication and practice-related education to oncology patients, caregivers, health care professionals, students, and the public (individuals and groups).

Goal R4.2: Effectively employ appropriate preceptor roles when engaged in teaching students, pharmacy technicians, or fellow health care professionals in oncology.

**Competency Area R5: Oncology Investigational Drugs (100%)**

Goal R5.1: Appropriately manage oncology investigational drugs and oncology investigational drug services.

## Requirements for Successful Completion of the Residency

A residency certificate will be awarded when the following requirements are successfully completed according to the criteria defined in the corresponding sections of the residency manual and documented in the "Disease State and Drug Checklist" (see Appendix C).

1. Pass the exams for licensure as a pharmacist in the State of Pennsylvania by September 30th of the starting residency year or completion of an extended residency experience where at least 9 months of the resident's time they are licensed.
2. "Achieve" all the competency areas and goals established for the oncology residency program as indicated for each learning experience and at the established threshold (see residency goals above).
3. At least 80% completion of all the topics for discussion on the "Disease State and Drug Checklist" (see Appendix D).
4. Complete the three (3) longitudinal experiences (e.g., staffing, outpatient clinic, and administration).
5. Complete the seminar and in-service requirements of the residency program.
6. Participation in a research project with associated manuscript in publishable form. (See Project/Research section in residency manual).
7. Pharmacy residents must present the research project at the Pitt Pharmacy Residency Research Day. Specialty practice residents should submit an abstract/poster to a national/international pharmacy meeting (e.g., HOPA, ACCP, ASHP, etc.) prior to the completion of their residency.
8. Participation (encouraged but not mandatory) in the formal didactic lecture series in the oncology course at the University of Pittsburgh School of Pharmacy and/or other similar and appropriate pharmacy therapeutics course at other Schools of Pharmacy (i.e., Duquesne University Mylan School of Pharmacy).

**I attest that the UPMC PGY2 Oncology Residency (per RPD or program representative) provided me with the above documents and/or information and I was able to ask questions and/or requested clarification to my satisfaction regarding the above items.**

Resident: \_\_\_\_\_ Resident: \_\_\_\_\_ Date: \_\_\_\_\_  
(PRINT) (SIGNATURE)

RPD: \_\_\_\_\_ RPD: \_\_\_\_\_ Date: \_\_\_\_\_  
(PRINT) (SIGNATURE)

## Program Specific Appendix C

### EXAMPLE

#### PGY2 Oncology Resident Schedule

Learning Experiences, Longitudinal Learning Experiences, Staffing, Research Project

13 - 4-week intervals	Learning Experience	Longitudinal Outpatient Experience	Longitudinal Administrative Experience	Staffing	Research Project
1 (7/1-7/25)	B service				
2 (7/26-8/22)	Leukemia I	Heme Malignancy Clinic (one afternoon each week)	Project #1	Every 3 weeks	Approximately 1-3 hours per week
3 (8/23-9/19)	A service				
4 (9/20-10/17)	BMT 1				
5 (10/18-11/14)	BMT 2		Project #2		
6 (11/15-12/12)	Research				
7 (12/13-1/9)	Outpatient				
8 (1/10-2/6)	H service		Solid Tumor Clinic (one afternoon each week)		
9 (2/7-3/6)	Elective				
10 (3/7-4/3)	IDS				
11 (4/4-5/1)	Elective	Project #4			
12 (5/2-5/29)	Leukemia II				
13 (5/30-6/26)	OPA				

#### Meetings, Presentations, and Other Commitments

13 - 4-week intervals	Research Presentations	National Meetings	Pitt Pharmacy (PULSE) Presentation	Teaching	
1 (7/1-7/25)					
2 (7/26-8/22)			Clinical controversy		
3 (8/23-9/19)					
4 (9/20-10/17)					
5 (10/18-11/14)					
6 (11/15-12/12)		ASHP Midyear			
7 (12/13-1/9)					
8 (1/10-2/6)					
9 (2/7-3/6)				Pitt or Duquesne	
10 (3/7-4/3)	Poster Presentation	HOPA			
11 (4/4-5/1)					
12 (5/2-5/29)					
13 (5/30-6/26)	Pitt Pharmacy Resident Research Day				

**Program Specific Appendix D**

<b>PGY2 ONCOLOGY RESIDENT TOPIC CHECKLIST UPMC Presbyterian-Shadyside 2021-2022</b>
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**PURPOSE**

This document is intended to serve as a guide to key oncology disease states and drugs that the PGY2 Oncology Pharmacy Resident will be exposed to during the residency year. It also provides a practical method to track the resident’s progress throughout the year, with the goal of meeting the requirements of the ASHP PGY2 Pharmacy Residencies in Oncology Appendix, available online at: <https://www.ashp.org/-/media/assets/professional-development/residencies/docs/pgy2-newly-approved-oncology-pharmacy-2016.ashx>. Topics required to be covered per ASHP are denoted on the tables below; see Oncology Topics Key for further information. Additional topics listed, as well as the drug list, are not required to be completed to meet the requirements of the residency program but will be utilized simply as a tracking tool.

**PROCEDURE**

1. After review of a topic or drug, the resident’s preceptor will initial and date that the topic or drug has been completed.
2. The resident will upload evidence of topic/drug review as appropriate to the appendix section of PharmAcademic.
3. The resident’s progress on the checklist will be assessed periodically.
4. A completed checklist will be uploaded into PharmAcademic at the completion of the residency year.
5. The checklist will be updated annually, prior to the beginning of the next residency year, or as indicated.

**REVIEW OF ONCOLOGY TOPICS**

Hematologic Malignancies	Date Reviewed	Preceptor Initials
Acute Lymphoblastic Leukemia (ALL)*		
Acute Myelogenous Leukemia (AML)*		
Acute Promyelocytic Leukemia (APL) †		
Chronic Lymphocytic Leukemia (CLL)*		
Chronic Myelogenous Leukemia (CML)*		
Hodgkin Lymphoma*		
Multiple Myeloma*		
Non-Hodgkin Lymphoma*		
Diffuse Large B-Cell Lymphoma†		
Follicular Lymphoma†		
Mantle Cell Lymphoma†		
Post-Transplantation Lymphoproliferative Disorder (PTLD)†		
Amyloidosis°		
Myelodysplastic Syndromes°		

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Myeloproliferative Disorders°		
Primary CNS Lymphoma°		
Waldenströms Macroglobulinemia°		
*ASHP Required Topic – Direct Patient Care Experience Required °ASHP Elective Topic †Not Required per ASHP		
Hematological Disorders	Date Reviewed	Preceptor Initials
Aplastic Anemia°		
Disseminated Intravascular Coagulopathy (DIC)†		
Hemophagocytic Lymphohistiocytosis (HLH)†		
Hemophilia A°		
Hemophilia B°		
Hemolytic Anemia°		
Immune Thrombocytopenic Purpura (ITP) °		
Iron Deficiency Anemia°		
Paroxysmal Nocturnal Hemoglobinuria°		
Porphyria°		
Sickle Cell Anemia°		
Thrombotic Thrombocytopenic Purpura (TTP)/ Hemolytic Uremic Syndrome (HUS) °		
Von Willebrand’s Disease°		
<b>NOTE:</b> All topics listed in the hematological disorders are considered elective per ASHP. °ASHP Elective Topic †Not Required per ASHP		
Pediatric Malignancies	Date Reviewed	Preceptor Initials
Acute Lymphoblastic Leukemia^		
CNS Tumors^		
Neuroblastoma^		
Non-Hodgkin Lymphoma^		
Wilms Tumor^		
Ewing Sarcoma°		
Osteosarcoma°		
Retinoblastoma°		
Rhabdomyosarcoma°		
^ASHP Required Topic – Case-Based Application Acceptable °ASHP Elective Topic		

Supportive Care/Symptom Management	Date Reviewed	Preceptor Initials
Anemia*		
Constipation*		
Diarrhea*		
Fatigue*		
Hypercalcemia of Malignancy*		
Infection Prophylaxis and Management*		
Mucositis*		
Myelosuppression*		
Nausea and Vomiting*		
Neutropenic Fever*		
Organ-Systems Toxicity* (i.e., cardiotoxicity, dermatologic toxicity, hepatotoxicity, nephrotoxicity, neurotoxicity, pulmonary toxicity)		
Pain Management*		
Malignant Effusions*		
Spinal Cord Compression*		
Superior Vena Cava Syndrome*		
Thrombosis*		
Tumor Lysis Syndrome*		
Extravasation^		
Hypersensitivity Reactions^		
Radiation Complications^		
Survivorship^		
Infertility°		
Secondary Malignancies°		
Hyponatremia†		
Infusion Reactions†		
Management of High-Dose Interleukin-2 Toxicity†		
Management of Immune-Related Adverse Events (iRAEs)†		
Nutrition/Appetite Stimulants†		
*ASHP Required Topic – Direct Patient Care Experience Required ^ASHP Required Topic – Case-Based Application Acceptable °ASHP Elective Topic		



†Not Required per ASHP

Solid Malignancies	Date Reviewed	Preceptor Initials
<b>NOTE:</b> Must have 15 different types of common solid malignancies (comprised of the 9 listed in the direct patient care column and choose at least 6 more disease states from the case-based column for required direct patient care experiences).		
Breast Cancer*		
Localized Breast Cancer†		
Metastatic Breast Cancer†		
Colon Cancer*		
Melanoma*		
Non-Small Cell Lung Cancer (NSCLC)*		
Ovarian Cancer*		
Pancreatic Cancer*		
Prostate Cancer*		
Rectal Cancer*		
Small Cell Lung Cancer*		
Adult Sarcomas^		
Bladder Cancer^		
Carcinoid Cancer^		
Carcinoma of Unknown Primary^		
Cervical Cancer^		
CNS Malignancies^		
Endocrine Tumors^		
Endometrial Cancer^		
Esophageal Cancer^		
Gastric Cancer^		
Germ Cell Tumors^		
Head and Neck Cancer^		
Hepatobiliary Cancers^		
Hepatocellular Carcinoma†		
Cholangiocarcinoma†		
Mesothelioma^		
Non-Melanoma Skin Cancers^		
Renal Cell Cancer^		

Thyroid Cancer <sup>^</sup>		
Anal Cancer <sup>°</sup>		
*ASHP Required Topic – Direct Patient Care Experience Required <sup>^</sup> ASHP Required Topic – Case-Based Application Acceptable <sup>°</sup> ASHP Elective Topic <sup>†</sup> Not Required per ASHP		
Transplantation – Hematopoietic Stem Cell Transplant (HSCT) & Cellular Therapy – Chimeric Antigen Receptor T-Cell (CAR-T)	Date Reviewed	Preceptor Initials
Autologous HSCT – Infection Prophylaxis*		
Autologous HSCT – Mobilization*		
Autologous HSCT – Preparative Regimens*		
Autologous HSCT – Vaccinations*		
Allogeneic HSCT – Graft-Versus-Host Disease <sup>^</sup>		
GVHD Prophylaxis <sup>†</sup>		
Acute GVHD Treatment <sup>†</sup>		
Chronic GVHD Treatment <sup>†</sup>		
Allogeneic HSCT – Immunosuppression <sup>^</sup>		
Allogeneic HSCT – Infection Prophylaxis <sup>^</sup>		
Allogeneic HSCT – Preparative Regimens <sup>^</sup>		
Allogeneic HSCT – Sinusoidal Obstruction Syndrome <sup>^</sup>		
Autologous HSCT – Vaccinations <sup>^</sup>		
Chimeric Antigen Receptor T-Cell (CAR-T) Management <sup>†</sup>		
Cytokine Release Syndrome (CRS) <sup>†</sup>		
Immune Effector Cell-Associated Neurotoxicity Syndrome (ICANS) <sup>†</sup>		
CAR-T Infection Prophylaxis & Vaccinations <sup>†</sup>		
Cytomegalovirus (CMV) Prevention & Treatment <sup>†</sup>		
Pulmonary Complications of HSCT <sup>†</sup>		
Transplant-Associated Thrombotic Microangiopathy (TA-TMA) <sup>†</sup>		
*ASHP Required Topic – Direct Patient Care Experience Required <sup>^</sup> ASHP Required Topic – Case-Based Application Acceptable <sup>†</sup> Not Required per ASHP		

### ONCOLOGY TOPICS KEY

Designation	Interpretation
Asterisk (*)	ASHP-Required Topic – Direct Patient Care Experience Required
Caret (^)	ASHP-Required Topic – Case-Based Application Acceptable
Degree (°)	Topic Considered Elective by ASHP
Dagger (†)	Topic Not Included on ASHP Appendix

## REVIEW OF ONCOLOGY AGENTS

Drug	Date Reviewed	Preceptor Initials
<b>1)Hormonal Agents</b>		
Anti-Androgens		
Apalutamide (Erleada)		
Bicalutamide (Casodex)		
Darolutamide (Nubeqa)		
Enzalutamide (Xtandi)		
Flutamide (Eulexin)		
Nilutamide(Andandron)		
Anti-Estrogens		
Tamoxifen (Nolvadex)		
Toremifene (Fareston)		
Aromatase Inhibitors		
Anastrozole (Arimidex)		
Exemestane (Aromasin)		
Letrozole (Femara)		
GnRH Antagonists		
Degarelix (Firmagon)		
Relugolix (Orgovyx)		
LHRH Analogs		
Goserelin (Zoladex)		
Leuprolide (Lupron)		
Triptorelin (Trelstar)		
Miscellaneous Hormonal Agents		
Abiraterone (Zytiga)		
Estramustine (Emcyt)		
<b>2)Antimetabolites</b>		
Folate Antagonists		
Methotrexate (Folex)		
Pemetrexed (Alimta)		
Pralatrexate (Folotyn)		
Purine Analogs		
Cladribine (Mavenclad)		
Clofarabine (Clolar)		
Fludarabine (Fludara)		
Mercaptopurine (6-MP, Purixan)		
Nelarabine (Arranon)		
Pentostatin (Nipent)		
Thioguanine (Tabloid)		
Pyrimidine Analogs		
Azacitidine (Vidaza)		
Azacitidine, oral (Onureg)		
Capecitabine (Xeloda)		
Cytarabine (Ara-C)		
Decitabine (Dacogen)		
Decitabine/Cedazuridine (Inqovi)		
Gemcitabine (Gemzar)		
Fluorouracil (5-FU, Adrucil)		
<b>3) Microtubule Inhibitors</b>		
Epothilones		
Ixabepilone (Ixempra)		

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Drug	Date Reviewed	Preceptor Initials
<b>Miscellaneous</b>		
Eribulin (Halaven)		
<b>Taxanes</b>		
Cabazitaxel (Jevtana)		
Docetaxel (Taxotere)		
Paclitaxel (Taxol)/ Albumin-Bound Paclitaxel (Abraxane)		
<b>Vinka Alkaloids</b>		
Vinblastine		
Vincristine (Oncovin)/ Vincristine liposome (Marqibo)		
Vinorelbine (Navelbine)		
<b>4) Topoisomerase Inhibitors</b>		
<b>Anthracyclines</b>		
Daunorubicin/ Daunorubicin liposome (DaunoXome)		
Doxorubicin (Adriamycin)/ Doxorubicin liposome (Doxil)		
Epirubicin (Ellence)		
Idarubicin (Idamycin)		
Mitoxantrone		
<b>Camptothecins</b>		
Inrinotecan (Camptosar)/ Ininotecan liposome (Onivyde)		
Topotecan (Hycamtin)		
<b>Topoisomerase II Inhibitors</b>		
Etoposide (VP-16, Toposar)		
<b>5) Alkylating Agents</b>		
<b>Nitrogen Mustards</b>		
Bendamustine (Bendeka)		
Chlorambucil (Leukeran)		
Cyclophosphamide (Cytoxan)		
Ifosfamide (Ifex)		
Melphalan (Alkeran, Evomela)		
Melphalan flufenamide (Pepaxto)		
<b>Nitrosoureas</b>		
Carmustine (BCNU)		
Lomustine (CCNU)		
Streptozocin (Zanosar)		
<b>Miscellaneous Alkylating Agents</b>		
Busulfan (Busulfex, Myleran)		
Dacarbazine (DTIC)		
Procarbazine (Matulane)		
Temozolomide (Temodar)		
Thiotepa (Tepadina)		
<b>Platinum Agents</b>		
Cisplatin		
Carboplatin		
Oxaliplatin		
<b>6) Monoclonal Antibodies</b>		
Alemtuzumab (Campath)		

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Drug	Date Reviewed	Preceptor Initials
Belantamab Mafodotin-blmf (Blenrep)		
Brentuximab (Adcetris)		
Caplacizumab-yhdp (Cabliivi)		
Crizanlizumab-tmca (Adakveo)		
Eculizumab (Soliris)		
Enfortumab vedotin-ejfv (Padcev)		
Elotuzumab (Empliciti)		
Mogamulizumab-kpkc (Poteligeo)		
Moxetumumab Pasudotox (Lumoxiti)		
Polatuzumab vedotin (Polivy)		
Sacituzumab Govitecan-hziy (Trodelvy)		
CD19 Inhibitors		
Blinatumumab (Blincyto)		
Loncastuximab tesirine-lpyl (Zynlonta)		
Tafasitamab-cxix (Monjuvi)		
CD20 Inhibitors		
Ibritumomab tiuxetan (Zevalin)		
Obinutuzumab (Gazyva)		
Ofatumumab (Arzerra)		
Rituximab (Rituxan)/ Rituximab-Hyaluronidase (Rituxan Hycela)		
CD38 Inhibitors		
Daratumumab (Darzalex)		
Daratumumab and hyaluronidase (Darzalex Faspro)		
Isatuximab-irfc (Sarclisa)		
EGFR Inhibitors		
Amivantamab-vmjw (Rybrevant)		
Cetuximab (Erbix)		
Necitumumab (Portrazza)		
Panitumumab (Vectibix)		
VEGF Inhibitors		
Bevacizumab (Avastin)		
Ramucirumab (Cyramza)		
HER-2 Directed Antibodies		
Ado-Trastuzumab emtansine (Kadcyla)		
Fam-Trastuzumab deruxtecan (Enhertu)		
Margetuximab (Margenza)		
Pertuzumab (Perjeta)		
Trastuzumab (Herceptin)		
IL-6 Inhibitors		
Siltuximab (Sylvant)		
Tocilizumab (Actemra)		
PD-1 and PD-L1 Inhibitors		
Atezolizumab (Tecentriq)		
Avelumab (Bavencio)		
Cemiplimab-rwlc (Libtayo)		
Dostarlimab-gxly (Jemperli)		
Durvalumab (Imfinzi)		
Nivolumab (Opdivo)		
Pembrolizumab (Keytruda)		
CTLA4 Inhibitors		

Drug	Date Reviewed	Preceptor Initials
Ipilimumab (Yervoy)		
<b>7) Tyrosine Kinase Inhibitors</b>		
<b>ALK Inhibitors</b>		
Alectinib (Alecensa)		
Brigatinib (Alunbrig)		
Ceritinib (Zykadia)		
Crizotinib (Xalkori)		
Lorlatinib (Lorbrena)		
<b>BCR-ABL Inhibitors</b>		
Bosutinib (Bosulif)		
Dasatinib (Sprycel)		
Imatinib (Gleevec)		
Nilotinib (Tasigna)		
Ponatinib (Iclusig)		
<b>BRAF Inhibitors</b>		
Dabrafenib (Tafinlar)		
Encorafenib (Braftovi)		
Vemurafenib (Zelboraf)		
<b>EGFR Inhibitors</b>		
Afatinib (Gilotrif)		
Dacomitinib (Vizimpro)		
Erlotinib (Tarceva)		
Osimertinib (Tagrisso)		
<b>HER-2 Inhibitors</b>		
Lapatinib (Tykerb)		
Neratinib (Nerlynx)		
Tucatinib (Tukysa)		
<b>MEK Inhibitors</b>		
Binimetinib (Mektovi)		
Cobimetinib (Cotellic)		
Trametinib (Mekinist)		
<b>MET Inhibitors</b>		
Capmatinib (Tabrecta)		
Tepotinib (Tepmetko)		
<b>RET Inhibitors</b>		
Pralsetinib (Gavreto)		
Selpercatinib (Retevmo)		
<b>TRK Inhibitors</b>		
Entrectinib (Rozlytrek)		
Larotrectinib (Vitrakvi)		
<b>VEGF Inhibitors</b>		
Axitinib (Inlyta)		
Tivozanib (Fotivda)		
<b>Miscellaneous</b>		
Avapritinib (Ayvakit)		
Cabozantinib (Cometriq/Cabometyx)		
Pazopanib (Votrient)		
Regorafenib (Stivarga)		
Ripretinib (Qinlock)		
Ruxolitinib (Jakafi)		
Sorafenib (Nexavar)		

Drug	Date Reviewed	Preceptor Initials
Sotorasib (Lumakras)		
Sunitinib (Sutent)		
Vandetanib (Caprelsa)		
<b>8) Miscellaneous Agents</b>		
Actinomycin D (Dactinomycin)		
Aflibercept (Zaltrep)		
Arsenic Trioxide (Trisenox)		
ATRA (Vesanoid)		
Bacillus Calmette-Guerin, intravesicular (BCG, TheraCys)		
Bleomycin		
Defibrotide (Defitelio)		
Filgrastim (Neupogen, including pegfilgrastim)		
Glucarpidase (Voraxase)		
Interferon (including peg-interferon)		
Interleukin-II		
Daunorubicin and Cytarabine Liposomal (Vyxeos)		
Lurbinectedin (Zepzelca)		
Luspatercept-aamt (Reblozyl)		
Mitomycin C		
Omacetaxine (Synribo)		
Plerixafor (Mozobil)		
Selinexor (Xpovio)		
Sipuleucel-T (Provenge)		
Talimogene laherparepvec (Imlygic)		
Tazemetostat (Tazverik)		
Trabectedin (Yondelis)		
Voxelotor (Oxbryta)		
<b>Asparaginase Derivatives</b>		
L-asparaginase, pegylated (Oncaspar)		
L-asparaginase, <i>Erwinia</i> (Erwinaze)		
<b>Bone-Modifying Agents</b>		
Denosumab (Xgeva)		
Pamidronate (Aredia)		
Zoledronic Acid (Zometa)		
<b>Radiation Therapies</b>		
Lutetium-177 (Lutethera)		
Radium-223 dichloride (Xofigo)		
<b>9) BCL-2 Inhibitor</b>		
Venetoclax (Venclexta)		
<b>10) BTK Inhibitors</b>		
Acalabrutinib (Calquence)		
Ibrutinib (Imbruvica)		
Zanabrutinib (Burkinsa)		
<b>11) Cyclin-Dependent Kinase (CDK) Inhibitors</b>		
Abemaciclib (Verzenio)		
Palbociclib (Ibrance)		
Ribociclib (Kisqali)		
Trilaciclib (Cosela)		
<b>12) Fibroblast Growth Factor Receptor (FGFR) Inhibitors</b>		
Erdafitinib (Balversa)		
Infigratinib (Truseltiq)		

Drug	Date Reviewed	Preceptor Initials
Pemigatinib (Pemazyre)		
<b>13) FLT3 Inhibitors</b>		
Gilteritinib (Xospata)		
Midostaurin (Rydapt)		
<b>14) Hedgehog Pathway Inhibitors</b>		
Glasdegib (Daurismo)		
Vismodegib (Erivedge)		
<b>15) Histone Deacetylase Inhibitors</b>		
Belinostat (Beleodaq)		
Panobinostat (Farydak)		
Romidepsin (Istodak)		
Vorinostat (Zolinza)		
<b>16) IDH Inhibitors</b>		
Enasidenib (Idhifa)		
Ivosidenib (Tibsovo)		
<b>17) Immunomodulators</b>		
Lenalidomide (Revlimid)		
Pomalidomide (Pomalyst)		
Thalidomide (Thalomid)		
<b>18) mTOR Inhibitors</b>		
Everolimus (Afinitor)		
Temsirolimus (Torisel)		
<b>19) PI3K Inhibitors</b>		
Alpelisib (Piqray)		
Copanlisib (Aliqopa)		
Duvelisib (Copiktra)		
Idelalisib (Zydelig)		
Umbralisib (Ukoniq)		
<b>20) PARP Inhibitors</b>		
Olaparib (Lynparza)		
Niraparib (Zejula)		
Rucaparib (Rubraca)		
Talazoparib (Talzenna)		
<b>21) Proteasome Inhibitors</b>		
Bortezomib (Velcade)		
Carfilzomib (Kyprolis)		
Ixazomib (Ninlaro)		
<b>22) Chimeric Antigen Receptor T-Cell (CAR-T) Therapies</b>		
Axicabtagene ciluleucel (Yescarta)		
Brexucabtagene Autoleucel (Tecartus)		
Idecabtagene vicleucel (Abecma)		
Lisocabtagene maraleucel (Breyanzi)		
Tisagenlecleucel (Kymriah)		
<b>23) New Drug Approvals</b>		

Last Updated 6/10/21 – KGW

6/22/2017; update 7/27/18; 12/1/19; 6/20/2019; 7/3/19; 6/25/20; 6/17/21; 7/14/21