



**LOYOLA
UNIVERSITY
HEALTH SYSTEM**

We also treat the human spirit.®

Pharmacy Residency Manual

Loyola University Medical Center

Table of Contents

- [Letter of Welcome](#)
- [Introduction](#)
- [Non-Discrimination Statement](#)
- [Loyola University Medical Center General Information](#)
- [Loyola University Medical Center Mission Statement](#)
- [Department of Pharmacy Services](#)
- [Organizational Chart](#)
- [The Loyola University Medical Center Pharmacy Residency Programs](#)
 - [PGY1 Purpose](#)
 - [PGY2 Purpose](#)
 - [LUMC Pharmacy Residency Experience](#)
- [LUMC Residency Program Leadership](#)
- [LUMC Residency Program Preceptors](#)
- [All Programs Rotation List](#)
- [Longitudinal Experiences and Administrative Rotations](#)
 - [ED On Call](#)
 - [Code Blue Response](#)
 - [Code Stroke Response](#)
- [Pharmacy Residency Requirements](#)
 - [Research Project](#)
 - [CE presentation](#)
 - [MUE](#)
 - [Committee Responsibilities](#)
 - [Writing Project](#)
 - [Practice Management](#)
 - [Teaching and Learning Certificate](#)
 - [Additional projects/presentations](#)
 - [Chief Residents](#)
- [Staffing Responsibilities and Requirements](#)
 - [PGY1 Staffing](#)
 - [PGY2 Critical Care Staffing](#)
 - [PGY2 SOT Staffing](#)
- [Evaluation Procedures](#)
- [Pharmacy Residency Certificate](#)
- [Pharmacy Residency Position Descriptions](#)
- [PGY1 Resident Mentor](#)
- [Pharmacy Residency Committees](#)
- [General Employment Information and Pharmacy Resident Benefits](#)
 - [Benefits](#)
 - [Time Off](#)
 - [Attendance and Leave Policies](#)
 - [Illinois Licensure](#)
 - [Performance Improvement Plans \(PIP\)](#)
 - [Corrective Disciplinary Action](#)
 - [Moonlighting](#)
 - [Duty Hours](#)
 - [Travel Expenses Policy](#)
- Appendix 1: [PGY1 Pharmacy Residency Program Overview](#)
- Appendix 2: [PGY2 Critical Care Pharmacy Residency Program Overview](#)
- Appendix 3: [PGY2 Solid Organ Transplant Pharmacy Residency Program Overview](#)
- Appendix 4: [Duty Hour Requirements](#)
- Appendix 5: [Additional Pharmacy Resident Benefits and Services](#)

Additional appendices

- Appendix 6: CE, Case, and Journal Club Guidance Documents and Evaluation Forms
- Appendix 7: Resident Recruitment and Hiring Process
- Appendix 8: Preceptor Development Policy
- Appendix 9: PGY1 Pharmacy Residency Program T/E Grid
- Appendix 10: PGY2 Critical Care Pharmacy Residency Program T/E Grid
- Appendix 11: PGY2 Solid Organ Transplant Pharmacy Residency Program T/E Grid

Dear Resident,

On behalf of the Department of Pharmacy Services, welcome to Loyola University Medical Center! As you progress through your residency year, we ask you to be mindful of the mission and core values of Loyola University Medical Center. We use these values every day to guide us in all that we do including residency training.

Our Mission:

The Pharmacy department is focused on excellent patient care experiences through collaboration with other healthcare professionals, safe and effective medication optimization and distribution, use of innovative technology, and evidence-based medicine. We foster a culture of teamwork, commitment to quality, courtesy, compassion, education and respecting the dignity and confidentiality of the patient. The Pharmacy department is committed to consistently delivering the highest quality patient care and services through best practices of both clinical and operational programs.

Our Core Values:

Reverence: We honor the sacredness and dignity of every person.

Commitment to Those Who are Poor: We stand with and serve those who are poor, especially those most vulnerable.

Safety: We embrace a culture that prevents harm and nurtures a healing, safe environment for all.

Justice: We foster relationships to promote the common good, including sustainability of Earth.

Stewardship: We honor our heritage and hold ourselves accountable for the human, financial and natural resources entrusted to our care.

Integrity: We are faithful to who we say we are.

We believe you've made a great career choice in choosing to do your residency at Loyola University Medical Center. We want you to be successful in all that you do. We want you to be an excellent representative of this residency program and department. Please do not hesitate to ask for help from any member of our department.

Sincerely,

Travis Hunerdosse, PharmD, MBA
Regional Director of Pharmacy Services

Kevin Chang, PharmD, BCCCP
PGY1 Residency Program Director

Lisa Peters, PharmD
Regional Director of Clinical Pharmacy Services
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Grace E. Benanti, PharmD, BCCCP
PGY2 Critical Care
Residency Program Director

John Lyons, PharmD, BCPS, BCTXP
PGY2 Solid Organ Transplant
Residency Program Director

Introduction

This manual is a guide and reference for all pharmacy residents and residency preceptors. The purpose of written policies is to establish guidelines regarding Loyola University Medical Center (sometimes referred to as Loyola or LUMC) and the responsibilities expected of a pharmacy resident. This policy manual, however, is not a contract of employment or a guarantee of future training or employment for a particular period. Contracts of employment are recognized only when they are in writing and signed by a designated official of Loyola University Medical Center.

Please read the contents of this manual carefully. This is one of the many channels of communication we maintain to create a productive learning environment. All pharmacy residents should use this manual as a reference to answer questions regarding all of our policies. We hope that the use of these policies will assist in working in a fair and equitable manner.

This manual is used as an ongoing document that will be amended and updated as needed. Pharmacy residents are expected to become familiar with and comply with all policies set forth in this manual.

Non-Discrimination Statement

Loyola abides by all applicable provisions of Federal, State and Local law. Loyola does not discriminate in its employment policies and practices on the basis of race, color, religion, (except where religion is a *bona fide* occupational qualification for the job), national origin or ancestry, gender, sexual orientation, age, marital status, veteran's status, or any other classification protected by law. Otherwise qualified individuals are not discriminated against on the basis of physical or mental disabilities. Loyola will not tolerate racial, sexual or other forms of harassment of students, faculty, employees or patients and has established policies and procedures to promptly address any complaints.

Loyola University Health System – General information

Loyola University Health System, which is a member of Trinity Health, is multi-campus organization that includes the Loyola University Medical Center campus in Maywood (570 beds including the Cardinal Bernadin Cancer Center, the Ronald McDonald Children's Hospital of Loyola, the Burn/Trauma Center, and the Center for Heart & Vascular Medicine), MacNeal Hospital in Berwyn and Gottlieb Memorial Hospital in Melrose Park. Loyola offers a wide range of medical, surgical and obstetrical services including many specialty services. Loyola University Medical Center is the only academic teaching hospital in the western suburbs of Chicago and is also a large referral center for this area. Loyola is an accredited Level I Trauma Center, a Burn Center, a Comprehensive Stroke Center, and is served by an aeromedical program that transports patients from up to 150 miles away to Loyola. Specialty services include solid organ transplantation, cardiovascular surgery, oncology, women's health, primary care, and pediatrics among many others. Loyola University Medical Center houses nine discrete critical care units (neurological, medical, cardiovascular, cardiac, surgical/trauma, bone marrow transplant, burn, pediatric, and neonatal). Also located on the Maywood campus is the Loyola University Chicago Stritch School of Medicine and the Loyola University Chicago Marcella Niehoff School of Nursing.



In addition to the Maywood, Berwyn and Melrose Park campuses, Loyola has an extensive network of primary and specialty care centers in Chicago's western and southwestern suburbs. The Loyola University Health System promise, "We also treat the human spirit," encapsulates Loyola's Catholic-Jesuit, ethical and spiritual values. These Magis values of care, concern, cooperation and respect for others suggests the spirit of generous excellence in which we believe our ministry should be carried forward. These key values form the heart of our Catholic identity and Jesuit mission and guide our employees including faculty members, residents, and fellows.

LUMC Mission Statement

Loyola University Medical Center is committed to excellence in patient care and the education of health professionals. We believe that our Catholic heritage and Jesuit traditions of ethical behavior, academic distinction, and scientific research lead to new knowledge and advance our healing mission in the communities we serve. We believe that thoughtful stewardship, learning and constant reflection on experience improve all we do as we strive to provide the highest quality health care.

We believe in God's presence in all our work. Through our care, concern, respect and cooperation, we demonstrate this belief to our patients and families, our students, and each other. To fulfill our mission, we foster an environment that encourages innovation, embraces diversity, respects life, and values human dignity.

We are committed to going beyond the treatment of disease. We also treat the human spirit.

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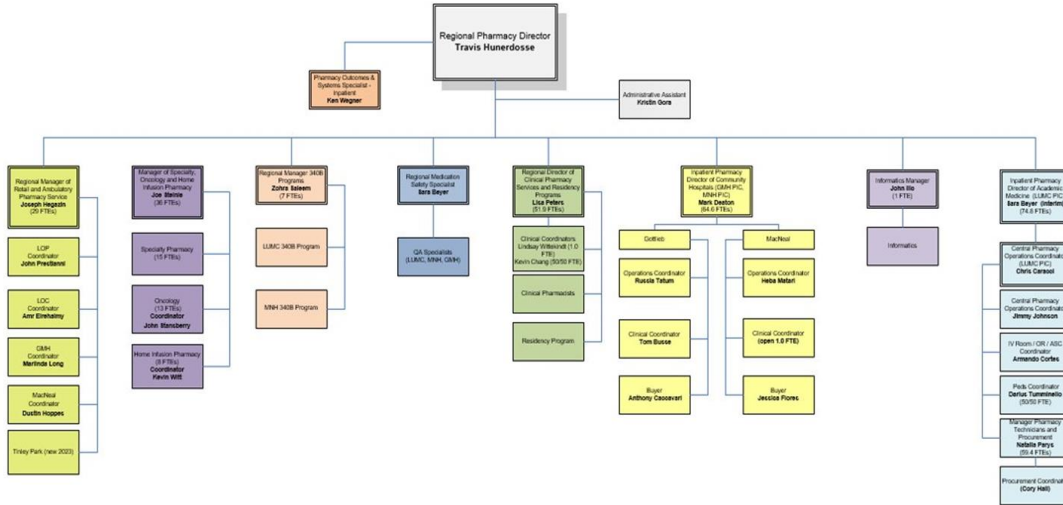
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Organizational Chart

Regional Pharmacy Service Line Organizational Chart



Loyola University Medical Center Pharmacy Residency Programs

PGY1 Purpose

PGY1 residency programs build upon Doctor of Pharmacy (PharmD) education and outcomes to develop pharmacist practitioners with knowledge, skills, and abilities as defined in the educational competency areas, goals, and objectives. Residents who successfully complete PGY1 residency programs will be skilled in diverse patient care, practice management, leadership, and education, and be prepared to provide patient care, seek board certification in pharmacotherapy (i.e., BCPS), and pursue advanced education and training opportunities including postgraduate year two (PGY2) residencies.

PGY2 Purpose

PGY2 residency programs build upon Doctor of Pharmacy (PharmD) education and PGY1 pharmacy residency training to develop pharmacist practitioners with knowledge, skills, and abilities as defined in the educational competency areas, goals, and objectives for advanced practice areas. Residents who successfully complete PGY2 residency programs are prepared for advanced patient care or other specialized positions, and board certification in the advanced practice area, if available.

LUMC Pharmacy Residency Experience

Loyola University Medical Center offers a one-year post-graduate year one (PGY1) pharmacy residency, a one-year post-graduate year two (PGY2) Critical Care (CC) pharmacy residency, and a one-year post-graduate year two (PGY2) Solid Organ Transplant (SOT) pharmacy residency. The program is designed to offer a wide variety of clinical practice experiences in critical care medicine and surgery, general medicine, cardiology, pediatrics, transplantation, hematology/oncology and infectious diseases. Graduates of this program will be well-rounded practitioners with the skills to practice in a variety of care settings. Graduates will possess the knowledge and critical thinking skills to function as members of a multidisciplinary team to provide patient-centered care to patients with a wide variety of disease states.

Pharmacy residents are provided the opportunity to accelerate their growth beyond entry-level professional competence in patient-centered care and in pharmacy operational services, and to further the development of leadership skills that can be applied in any position and in any practice setting. Pharmacy residents acquire knowledge required for skillful problem-solving, refine their problem-solving strategies, strengthen their professional values and attitudes, and advance the growth of their clinical judgment.

LUMC Residency Program Leadership

Lisa Peters, PharmD
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Bone Marrow Transplant

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All Programs Rotation List

Clinical Rotations Offered				
Unless otherwise specified duration is 4-5 weeks				
*Denotes different duration				
(R=Required; E=elective; N=Not offered)				
Rotation title	Description	PGY1	PGY2 CC	PGY2 SOT
Orientation* (duration is program specific)	Pharmacy residents will complete LUMC new employee orientation as new LUMC employees. Pharmacy residents will also complete an orientation period of 2-6 weeks focused on introducing pharmacy residents to the various components of the pharmacy residency program including pharmacy operations, the pharmacy resident research project, evaluation procedures, the seminar presentation, and additional required projects and presentations.	R	R	R
General Medicine	There are eight general medicine services at LUMC; four are teaching services comprised of an attending, 2 medical residents, and medical students. and an attending, and The other four are uncovered hospitalist services run by one attending hospitalist and no trainees. The patient population includes a wide variety of disease states including infectious diseases, pulmonary disease, cardiovascular disease, gastrointestinal disorders, among others.	R	N	N
Cardiology	The general cardiology service primary team manages floor service patients only. The service list caps at 17 patients with disease states including acute decompensated heart failure, acute coronary syndrome, managing pre and post PCI care, . We also manage a variety of cardiac arrhythmias such as atrial fibrillation and Ventricular Tachycardia. We work closely with other sub-specialties of cardiology including electrophysiology (EP) as well as interventional cardiology, and 25-300 heart transplants per year and has a rapidly expanding implants ~15-20 left ventricular assist devices (LVAD). program.	R or E	N	N
Hepatology	Hepatology consists of multiple teams 2 primary services (resident-run) and 1 consult service (fellow/attending), all provide care to patients with varying degrees of liver disease such as decompensated cirrhosis, alcoholic hepatitis, acute liver injury, and post-liver transplant patients who are re-admitted. Comprehensive patient care often includes ID, pulmonary, and cardiovascular diseases. This rotation offers exposure to the multiple phases of the liver transplant process.	R or E	N	R
Infectious Diseases	LUMC has 2 infectious diseases consult services that serve (1) general medicine/surgical patients and critical care patients (i.e., medical, surgical, and oncology) and (2) transplant patients. Additionally, the ID pharmacist team runs a hospital-wide antimicrobial stewardship service the residents have the opportunity to rotate through. ID clinical specialists also assist in monitoring home care antibiotic patients and attend HIV clinics. The ID team consists of an attending infectious diseases physician, an infectious diseases fellow, medical residents, medical students and an infectious diseases clinical pharmacist. PGY-1 residents will rotate through a combination of ID consult and antimicrobial stewardship services. PGY-2 residents generally rotate with the ID consult team most appropriate to their specialty.	R	R	N
Medical ICU	The MICU is a 16-bed unit. The patient population includes patients with severe sepsis and/or pneumonia, acute and/or chronic renal failure, diabetic ketoacidosis, severe asthma exacerbations, hepatic failure, GI bleeds, and other medically unstable patients.	R or E	R	E
Surgery/Trauma ICU	LUMC is a State of Illinois designated Level I Trauma Center for adults and pediatric patients, a status that has been verified by the American College of Surgeons. LUMC is the only hospital in Illinois to earn such a distinction. The Surgery/Trauma ICU consists of a 24-bed unit divided into 3 pods. The patient population includes blunt force trauma, penetrating trauma injuries, and critically ill surgical patients.	R or E	R	E

Neurosciences ICU	LUMC is a designated Comprehensive Stroke Center serving patients with both ischemic and hemorrhagic stroke. The service consists of a 13-bed ICU serving stroke patients as well as patients with status epilepticus, unstable intracranial aneurysms, spinal cord injuries, arteriovenous malformations, brain tumors, cranial trauma, and other unstable neurologic/neurosurgical patients. PGY1 Pharmacy residents will be required to complete 1 four-week rotation in the MICU, SICU, CVICU, or Neuro ICU to satisfy the critical care rotation requirement. Residents will round alongside an attending physician, neurology residents and a nurse practitioner.	R or E	R	N
Cardiovascular ICU	The Cardiovascular CV surgery ICU consists of a 156-bed unit housing patients with recent cardiothoracic surgeries (CABG, valvular, thoracic, heart and lung transplant, LVADs, aortic, etc) and patients undergoing workup or awaiting transplant. Temporary mechanical circulatory support includes IABP and Impella, which may be seen in CVICU or CCU, and ECMO which is only in the CVICU. including lung and heart transplants, LVAD implants, valve replacements, coronary artery bypass grafts (CABG), and thoracotomies, etc. The rounding team consists of an attending, anesthesia residents, nurse practitioners, and/or students/fellows/etc, with input from surgery colleagues.	R or E	R	E
Cardiac ICU	The cardiac ICU is a 10 bed unit, though census varies greatly, consisting of patients with acute decompensated heart failure, arrhythmias, post intervention (PCI, TAVR, mitraclip, etc), cardiogenic shock, ACS, hypertensive emergencies, TTM, etc. CCU is considered an elective rotation in the second half of a resident's year due to it being considered a more independent rotation, as the primary preceptor would be rounding in the CVICU. The rounding team consists of an attending, fellow, and residents.	E	E	E
Burn ICU* (2-4 weeks)	The Burn rotation encompasses both the 10-bed Burn ICU but also the step down burn service patients. The Burn center provides comprehensive care for adults and children with thermal injuries, electrical burns, chemical injury, frostbite, toxic epidermal necrolysis, inhalation injury, and complex soft tissue infections. Burn ICU is considered an elective rotation in the second half of a resident's year as it is a more independent rotation with the primary preceptor rounding in the SICU. The rounding team consists of an ICU attending, nurse practitioner, surgery residents and/or students and traveling fellows.	E	E	N
Nutrition* (2 weeks)	The nutrition rotation is a 2-week elective experience for the PGY-2 Critical Care Pharmacy Resident. The primary goal of this rotation is for the resident to develop an independent, systematic approach to problem-solving, evidence-based practices, and nutritional care for patients requiring nutrition support.	N	E	N
MacNeal ICU	MacNeal's ICU is a 17-bed mixed medical and surgical critical care unit at a community teaching hospital. It has a varied patient population that consists of patients with the following conditions: acute and/or chronic renal failure, acute and/or chronic hepatic failure, diabetic ketoacidosis, severe alcohol withdrawal, severe sepsis, pneumonia, severe pulmonary illnesses, GI bleeds, and other medically unstable conditions, as well as critically ill surgical patients.	E	E	N
MacNeal ED	MacNeal's ED is a 33-bed unit at a community teaching hospital. It is designated as a Level II Trauma Center and is approved for the care of pediatric patients by the State of Illinois. In addition to pediatric and lower severity trauma patients, MacNeal's ED sees patients with complaints relating to cardiac, neurological, endocrine, hepatic, renal, musculoskeletal, and other organ systems.	E	E	N
ICU Float* (2-4 weeks)	The ICU float rotation is a mixture of AM ICU and PM ICU experiences. The float will practice as a pharmacist on a high volume service or a service that does not normally have a dedicated rounding pharmacist (ie. CCU, Burn ICU, one of the MICU teams). The PM ICU experience will be working on the PM shift with a preceptor to cover all drug information, order verification, and emergency responses for the ICU patients on the evening shift.	E	E	N

<p>Pediatrics/Pediatric ICU</p>	<p>The Pediatric Department is divided into three units: the general pediatric floor, which has 20 beds; the intermediate care unit (IMC), which has 14 beds; and the pediatric intensive care unit (PICU), which has 14 beds. These units provide care for children requiring a range of support from close monitoring to advanced life support. Patients on these units can range from infants to adulthood. Common diagnoses seen are general pediatric illnesses, renal, hepatic, and gastrointestinal disorders, sepsis, shock, infectious diseases, fluid and electrolyte disorders, respiratory disorders, malignancies, and neurologic disorders, among many others. There are 3 rounding teams (two in pediatrics and one in PICU) that consists of an attending, pediatric and medicine/pediatric residents, and students. There also is a Pediatric Pharmacy Satellite on the pediatric floor that services pediatric patients on the general pediatrics floor, IMC, PICU, NICU, and pediatric patients in the emergency department as well as the burn unit throughout the hospital and the emergency department. PGY-1 residents will have a choice between Neonatal Intensive Care Unit (NICU) and Pediatrics/Pediatric Intensive Care Unit (PICU) for the required pediatric rotation.</p>	<p>R or E</p>	<p>E</p>	<p>N</p>
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<p>Neonatal ICU</p>	<p>The NICU at LUMC is a 50-bed Level III facility that treats neonates with prematurity, congenital heart disease, infectious diseases, and chronic lung disease. PGY-1 residents will have a choice between Neonatal Intensive Care Unit (NICU) and Pediatrics/Pediatric Intensive Care Unit (PICU) for the required pediatric rotation.</p>	<p>R or E</p>	<p>E</p>	<p>N</p>
<p>Abdominal Transplant</p>	<p>Abdominal transplant is a surgical service (advanced practice provider-run) providing immediate post-operative care to kidney, liver, and pancreas transplant recipients and continuity of care to kidney and pancreas transplant recipients. LUMC offers both living and deceased donor kidney transplants and is a part of the National Kidney Registry (NKR). LUMC performs ~200 kidney, 70-80 liver, and 5-10 kidney/pancreas transplants per year and consistently ranks top 3 in the number of transplants performed across transplant centers in IL. An Advanced Abdominal Transplant rotation will be offered as an elective to the PGY2 Solid Organ Transplant resident.</p>	<p>R or E</p>	<p>E</p>	<p>R and E</p>
<p>Abdominal Transplant Ambulatory Care</p>	<p>The abdominal (kidney, liver, and pancreas) transplant ambulatory care rotation provides the opportunity to participate in the management of both acute and chronic complications post-transplant and other co-morbidities. There is also involvement in the evaluation and education of pre-transplant candidates undergoing workup. An Advanced Abdominal Transplant Ambulatory Care rotation will be offered as an elective to the PGY2 Solid Organ Transplant resident</p>	<p>N</p>	<p>N</p>	<p>R</p>
<p>Lung Transplant</p>	<p>LUMC is the largest lung transplant center in the Chicago area, performing about 40 lung transplants each year. Lung transplants may be performed for various indications including cystic fibrosis, pulmonary arterial hypertension, idiopathic pulmonary fibrosis, and severe chronic obstructive lung disease (COPD). An Advanced Lung Transplant rotation will be offered as an elective to the PGY2 Solid Organ Transplant resident.</p>	<p>R or E</p>	<p>E</p>	<p>R and E</p>
<p>Heart Transplant/Advanced Heart Failure Inpatient</p>	<p>LUMC is one of several heart transplant and LVAD centers in the Chicago area and performs an average of ~25-300 heart transplants and ~15-20 LVADs each year. The inpatient service consists of approximately 50% advanced heart failure, 25% LVAD, and 25% heart transplant patients. The pre-transplant patient population includes patients with ischemic cardiomyopathy, peri-partum cardiomyopathy, viral myocarditis, and congenital heart disease, and drug-induced cardiomyopathy among others. An Advanced Heart Transplant/Advanced Heart Failure rotation will be offered as an elective to the PGY2 Solid Organ Transplant resident.</p>	<p>R or E</p>	<p>E</p>	<p>R and E</p>
<p>Heart Transplant/Advanced Heart Failure Outpatient</p>	<p>PGY1 residents are able to select the rotation as an elective. The resident will join the multidisciplinary Advanced Heart Failure team in the outpatient caring for patients with advanced heart failure (HF), awaiting heart transplant or left ventricular assist device (LVAD), and those who are post-transplant or post-LVAD with associated medical issues. The resident will also assist with management of anticoagulation for LVAD</p>	<p>E</p>	<p>N</p>	<p>E</p>

	patients. The average number of patients the resident may encounter during their clinic day may range from 5 to 20 patients.			
Emergency Department	The Emergency Department at LUMC sees about 45,000 patients every year. The 27-bed unit contains specialty areas for trauma, cardiac care and pediatrics. LUMC boasts the only 24-hour pediatric trauma program in the Chicago suburbs and accepts aeromedical transfers from facilities up to 200 miles away.	R or E	R	N
Bone Marrow Transplant	LUMC offers a wide variety of hematology and oncology services including bone marrow and stem cell transplants.	R or E	N	N
Pediatric Transplant* (2-4 weeks)	An elective off-site rotation is available at Ann & Robert H. Lurie Children's Hospital of Chicago for experience in pediatric heart, intestine, kidney, and liver transplant.	N	N	E
Transplant Infectious Diseases	LUMC has 2 infectious diseases services that serve (1) general medicine/surgical patients and critical care patients (i.e., medical, surgical, and oncology) and (2) transplant patients. ID clinical specialists also assist in monitoring home care antibiotic patients and attend HIV clinics. The transplant ID team consists of an attending infectious diseases physician, an infectious diseases fellow, medical residents, medical students and an infectious diseases clinical pharmacist.	E		R
Medication Safety	The medication safety rotation focuses on a review of the culture of safety at LUMC. Residents will participate in the patient safety and medication error report system. Residents will also review Joint Commission, CMS, Health Resources and Services Administration (HRSA), Illinois Department of Public Health (IDPH), Drug Enforcement Agency (DEA) and other regulatory requirements relevant accreditation and patient safety	E	E	E

Longitudinal Experiences and Administrative Rotations				
(R=Required; E=elective; N=Not offered)				
Rotation title *denotes longitudinal	Description	PGY1	PGY2 CC	PGY2 SOT
ED On Call*	<p>Pharmacy residents will participate in Emergency Department (ED) Coverage on Monday through Friday evenings (1700-2200). The goal of this shift is to provide additional clinical coverage to the Emergency Department while allowing the resident to practice with an increased amount of autonomy. See Section on Resident Staffing responsibilities for additional information.</p> <p><u>Responsibilities during evening ED clinical shifts</u></p> <ul style="list-style-type: none"> Respond to code and stroke pages throughout the hospital Attend medical emergencies within the ED Answer drug information questions and provide recommendations as needed Complete new start warfarin and vancomycin consults Perform medication reconciliation as time permits Other duties as assigned by the evening clinical pharmacists (PM ICU or PM Gen Med) Sign in to code and stroke pagers at 4pm Pharmacy residents are required to attend a weekly or twice weekly ED coverage on call meeting to discuss cases and receive feedback on case management 	R	R	N
Code Blue Response*	Pharmacy residents are expected to attend all "Code Blue" emergencies throughout the hospital during regular working hours under the supervision of a preceptor when the resident is on a critical care rotation and/or when the resident is assigned to respond. The pharmacy resident will serve as the primary critical care pharmacist, with preceptor supervision, for adult medical emergencies. Pharmacy residents will be expected to complete BLS and ACLS certification within the first month of residency.	R	R	N

	<p>Expectations: Assist Code Blue team in obtaining necessary medications from the crash cart, Pyxis, and/or central pharmacy Make intravenous drips from the crash cart when needed Assist Code Blue team with therapeutic interventions, including drug and dose recommendations</p>			
Code Stroke Response*	Pharmacy residents are expected to attend and actively participate in code stroke responses when they are assigned stroke response pager. See the LED for more details on time and expectations	R	R	N
Project Month	All residents will participate in the Project Rotation during the month of December. Pharmacy residents will be given time off-service to work on research projects in preparation for presentation at the Great Lakes Pharmacy Residency Conference in April and other professional conferences. Residents may also use this month to prepare for additional residency projects including: CE Seminar, case presentation, research manuscript, research presentation, writing project, practice management project (MUE, protocol/guideline), and/or other assigned projects.	R	R	R
Administration	The Pharmacy Administration rotation is a supervised management experience in the hospital central pharmacy setting. The pharmacy resident will expand his/her pharmacy administration knowledge by attending various committee meetings and through the completion of various projects including drug use evaluations, drug class reviews, drug monographs, etc.	R	N	N
Pharmacy Operational Staffing*	The PGY1 pharmacy resident will participate in a regular central pharmacy staffing rotation of every third weekend. Activities will include order verification, checking filled medications prior to dispensing, reviewing Pyxis medication fills, preparation of crash cart trays and stroke kits, etc. In addition, residents will respond to code strokes and code blues during their staffing shifts.	R	N	N

Pharmacy Clinical Staffing*	<p>The PGY2 pharmacy resident will participate in a specialized clinical shift every third weekend. PGY-2 CC will staff either AM PIC or a clinical shift and will serve as back up to the PGY1 attending medical emergencies within the hospital. PGY-2 SOT will only staff clinical shifts. Refer to "Staffing responsibilities" for more detail.</p>	N	R	R
Participation in Recruitment Activities	Pharmacy residents will be required to actively participate in recruitment efforts of the program because they are an excellent source of information and advice for potential candidates. Current pharmacy residents will be allotted time to meet with perspective pharmacy residents during the interview process. In addition, current pharmacy residents will be expected to provide information to interested parties during the ICHP Residency Showcase and the ASHP Midyear Clinical Meeting Residency Showcase and during other LUMC functions (i.e. job fairs, showcases, etc.).	R	R	R
Specialty Conference	Weekly meetings for PGY2 programs within their specialty. PGY2 residents will be expected to present topics, case presentations, journal clubs, or education in another format. See PGY2 specialty appendices or LEDs for additional information. PGY1s on either critical care or solid organ transplant rotations are also expected to attend the respective conference.	E	R	R

Pharmacy Residency Requirements

Required Residency Projects/responsibilities (R=Required; E=elective; N=Not offered)				
Project title *denotes longitudinal	Description	PGY1	PGY2 CC	PGY2 SOT
Research Project	<p>All pharmacy residents are required to complete one project designed either to improve the services or function of the pharmacy department or to achieve a specific research objective prior to completion of the pharmacy residency. Each pharmacy resident will have a research advisor for the duration of his or her research project. A schedule of deadlines will be established for the research project within the first 2 months of the residency. Failure to meet the agreed upon deadlines may result in disciplinary action including but not limited to academic probation and/or additional project/presentation assignments as determined by the respective RAC and the RPD.</p> <p><u>Requirements for completion</u></p> <ul style="list-style-type: none"> • Attend Monthly Research/MUE Committee Meetings • Write and present one research pearl during the Research committee meeting • Design and complete one research project • Submit a manuscript suitable for publication • Present project at Great Lakes Pharmacy Resident Conference (Spring) • Submit project as a poster to a professional meeting upon completion (during or at the end of residency) • Submit an idea for a future research project prior to graduation 	R	R	R
CE Presentation	<p>Each pharmacy resident will be required to prepare and present one ACPE (American Council on Pharmacy Education)-accredited continuing education seminar during the pharmacy residency program. Pharmacy residents will select their seminar topic with the guidance of a seminar preceptor (chosen by the resident). Topics should include therapeutic or clinical practice controversies or updates. The goal of the seminar is to develop the pharmacy resident's communication skills, literature evaluation skills, and presentation techniques. The pharmacy resident will also be responsible for creating a self-assessment for audience ACPE-accredited CE credit.</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Improvement of presentation and communication skills • Enhancement of critical thinking skills, particularly involving literature evaluation and ability to respond to audience questions • Provision of continuing education to pharmacists • Development of ability to accept constructive criticism and/or comments <p>See CE Presentation Appendix for additional details</p>	R	R	R

<p>Medication Use Evaluation (MUE)</p>	<p>All pharmacy residents are required to complete one project designed either to improve the services or function of the pharmacy department or to achieve a specific medication use evaluation (MUE) objective prior to completion of the pharmacy residency. Each pharmacy resident will have an MUE advisor for the duration of his or her MUE project. A schedule of deadlines will be established for the MUE project within the first 2 months of the residency. Failure to meet the agreed upon deadlines may result in disciplinary action including but not limited to academic probation and/or additional project/presentation assignments as determined by the respective RAC and the RPD.</p> <p><u>Requirements for completion</u></p> <ul style="list-style-type: none"> • Attend Monthly Research/MUE Committee Meetings • Design and complete one MUE project • Present project at Resident Poster Session at ASHP Midyear Clinical Meeting and/or Midyear Vizient poster session (Winter) • Submit written report of MUE as determined by the MUE preceptor to be presented to an appropriate LUMC committee (during or at the end of residency) • Based on findings and conclusions from MUE, initiate and / or complete action items for process improvement as outlined • Submit an idea for a future MUE project prior to graduation 	<p>R</p>	<p>R</p>	<p>R</p>
<p>Committee Responsibilities</p>	<p>Involvement in pharmacy and hospital committees is an important part of active clinical practice and is highly encouraged. Each pharmacy resident will be assigned to a committee for the duration of the residency year. Pharmacy residents are expected to attend pertinent committee meetings with preceptors whenever possible as a part of regular rotation activities. Required committee activities for a given rotation will be determined at the discretion of the individual preceptor. The PGY2 transplant resident will be given the opportunity to attend and participate in the multidisciplinary review board (MRB) meetings and Quality Assessment Process Improvement (QAPI) meetings for the respective transplant specialty while on rotation. Pharmacy residents may present one MUE and/or one drug monograph (PGY1 and PGY2 if applicable during the course of their year) to the P&T Committee during the course of the year. Available committees include Pharmacy Informatics Committee, Unit Quality Improvement Committees, Medication Safety Committee, Sepsis Committee, P&T Subcommittees, etc. Pharmacy residents are required to attend monthly Pharmacy Department Research Committee meetings.</p>	<p>R</p>	<p>R</p>	<p>R</p>
<p>Writing Project</p>	<p>PGY2 residents will be required to complete a writing project, which may include a case report, review article, etc.</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Improvement of writing skills and identification of appropriate journal selection and requirements • Enhancement of critical thinking skills, particularly involving literature evaluation, clinical application, and ability to summarize clinical relevance • Development of ability to accept constructive criticism and/or comments and collaborate with other team members <p>PGY1 residents may pursue an additional writing project if they wish as long as this additional responsibility is communicated to and approved by the RPD.</p>	<p>E</p>	<p>R</p>	<p>R</p>
<p>Practice Management</p>	<p>The PGY1 and PGY2 resident will participate in many areas of pharmacy practice management and improvement including taking action on results from a medication utilization evaluation (MUE), regulatory compliance, hospital committee participation, medical staff education (i.e. physician, nursing, pharmacy in-services), and policy/guideline revision or development. Pharmacy residents will be required to have ongoing participation in a hospital committee. Additionally, PGY2 residents may be required to complete a drug monograph as applicable to the specialty practice. The practice management requirement is flexible to allow for projects to occur organically during the year, but this project will be in addition to the other required projects (ie. Completing an MUE does not complete the practice management requirement).</p>	<p>R</p>	<p>R</p>	<p>R</p>

<p>Teaching and Learning Certificate (TLC)</p>	<p>See the Teaching and Learning Certificate Syllabus for details about the program. The Teaching and Learning Certificate program offered through LUMC for pharmacy residents is an application-based program that prepares pharmacists to become effective teachers. Effective teaching extends beyond residency training and impacts numerous disciplines. Through an interactive environment, the participant will be introduced to the skills needed to grow as an educator and advance the profession of pharmacy.</p> <p>All PGY1 residents and any PGY2 residents who have not already completed a Teaching and Learning Certificate are required to participate in the LUMC Teaching and Learning Certificate Program. PGY2 residents who have completed a Teaching and Learning Certificate will be expected to participate as a preceptor in the Teaching and Learning Certificate curriculum.</p>	<p>R</p>	<p>R/N</p>	<p>R</p>
<p>Additional Presentations and Projects</p>	<p>The pharmacy resident will gain experience by giving various types of presentations throughout the year to a variety of healthcare professionals, including pharmacists, physicians, and nurses. The goal of these presentations is to enhance the resident's presentation, communication, and teaching skills as both a clinician and an educator. Completion of required presentations will be monitored by the pharmacy resident and pharmacy resident presentation preceptor. Residents may be asked to repeat presentations or to complete additional projects/presentations. This will be determined at the discretion of the respective RAC and the RPD.</p>	<p>Required, as needed</p>		
<p>Chief Resident</p>	<p>Each resident will be required to serve as Chief Resident for 1 month during the residency year. PGY1 residents will be assigned as Chief Resident during their Pharmacy Administration Rotation. PGY2 residents will be assigned in the remaining months. Responsibilities of the Chief Resident include:</p> <ul style="list-style-type: none"> • Planning Pharmacy Week activities • Coordinating Midyear activities and travel plans • Coordinating Great Lakes activities and travel plans • Coordinating Grand Rounds meeting requirements, such as ensuring weekly presentations are sent out to the pharmacy department in conjunction with the presenter, printing evaluation forms to be available at Grand Rounds, assisting with virtual Teams meeting, etc. • Other duties as assigned/approved by the RPD • Each Chief Resident will be responsible for coordinating a minimum of one social event to include residents and/or preceptors. 	<p>R</p>	<p>R</p>	<p>R</p>

Staffing Responsibilities and Requirements

- I. Pharmacy residents will be exempt from staffing on the following weekends:
 - a. ASHP Midyear Clinical Meeting (December)
 - b. If other weekends are required for travel to a meeting or other residency related activity, finding coverage for the assigned shifts that weekend is the responsibility of the resident.
- II. PGY1 and PGY2 Critical Care residents are pre-approved to be excused from ED on Call shifts for the following events:
 - a. Fall resident/preceptor social event
 - b. Winter Holiday resident/preceptor social event
 - c. Midyear Clinical Meeting (Monday through Thursday)
 - d. Cubs Game resident/preceptor social event
 - e. Great Lakes Pharmacy Residency Conference (Wednesday through Friday)
 - f. Graduation resident/preceptor social event
 - g. Last Friday of Residency
 - h. Pre-approved social event days off of ED on Call are subject to change and contingent upon resident attendance at social events.
 - i. For any other days needed off, including but not limited to PTO days, sick days, other conference attendance days, or anything not listed here, residents are responsible for switching shifts with their coresidents.
 - j. If residents are unable to find coverage or any other issues, questions should be directed to both the PGY1 RPD and PGY2 Critical Care RPD.
- III. PGY1 Residents
 - a. The goal of the longitudinal pharmacy operations experience is to ensure that the pharmacy resident is able to function independently as a pharmacist both from a clinical and operational perspective. As a PGY1, staffing focuses primarily on the operational aspect.
 - b. The PGY1 pharmacy resident will be required to work two 8.5-hour shifts every 3rd weekend on the AM counter shift (0630-1500), mid counter shift (1030-1900), or counter PM shift (1230-2100).
 - c. PGY1 pharmacy residents will be required to work three holidays each.
 - d. PGY1 residents may be required to staff up to an additional 10 shifts per year to support the operational needs of the pharmacy department. These shifts will be scheduled a minimum of 3-4 weeks in advance as part of the pharmacist schedule when possible and as indicated to meet the needs of the pharmacy department.
 - e. Responsibilities during staffing shifts (refer to training materials provided during orientation for a complete list)
 - i. Order verification for the whole hospital
 - ii. Medication checking and dispensing
 - iii. Antimicrobial stewardship of restricted antimicrobials
 - iv. Answering drug information questions
 - v. Emergency response to stroke codes in the hospital and ED
 - vi. Emergency response to code blues in the hospital
 - vii. Additional roles as needed
- IV. PGY2 Critical Care Residents

- a. The goal of the longitudinal pharmacy operations experience is to ensure that the pharmacy resident is able to function independently as a pharmacist both from a clinical and operational perspective.
- b. The PGY2 pharmacy resident will be required to work two 8.5-hour shifts every 3rd weekend on one of the day shifts (0730-1600).
- c. Holidays: PGY2 pharmacy residents will be required to work two LUMC holidays each.
 - i. Internal residents will be asked to work July 4th as a central staffing shift to support the transition period between residency classes. This will count towards their two holidays for the year.
 - ii. If there are no internal residents for the year, the 6th holiday will be the Friday after Thanksgiving.
- d. PGY2 Residents may be required to staff up to an additional 10 shifts per year to support the operational needs of the pharmacy department. These shifts will be scheduled a minimum of 3-4 weeks in advance as part of the pharmacist schedule when possible and as indicated to meet the needs of the pharmacy department.
- e. Responsibilities during AM PIC staffing shifts (refer to training materials provided during orientation for a complete list)
 - i. Order verification for the whole hospital
 - ii. Medication checking and dispensing
 - iii. Borrowing, lending medications if appropriate
 - iv. Additional roles as needed
- f. Responsibilities during clinical staffing shifts (refer to training materials provided during orientation for a complete list)
 - i. Pharmacokinetics consults – assigned units
 - ii. Anticoagulation consults – assigned units
 - iii. Double check of TPNs in CAPS and EPIC
 - iv. Follow-up on all clinical sign outs from service clinicians
 - v. Documentation of interventions in the I-Vent system
 - vi. Dispensing of parenteral prostacyclins as needed based on sign outs from service clinicians
 - vii. Order verification as needed for assigned inpatient units
 - viii. Additional roles as needed

V. PGY2 SOT Residents

- a. The goal of the longitudinal pharmacy operations experience is to ensure that the pharmacy resident is able to function independently as a pharmacist both from a clinical and operational perspective.
- b. The PGY2 pharmacy resident will be required to work two 8.5-hour shifts every 3rd weekend on one of the clinical shifts (0730-1600).
- c. Holidays: PGY2 pharmacy residents will be required to work two LUMC holidays each.
 - i. Internal residents will be asked to work July 4th as a central staffing shift to support the transition period between residency classes. This will count towards their two holidays for the year.
 - ii. If there are no internal residents for the year, the 6th holiday will be the Friday after Thanksgiving.
- d. PGY2 Residents may be required to staff up to an additional 10 shifts per year to support the operational needs of the pharmacy department. These shifts will be scheduled a minimum of 3-4 weeks in advance as part of the pharmacist schedule when possible and as indicated to meet the needs of the pharmacy department.

- e. Responsibilities during clinical staffing shifts (refer to training materials provided during orientation for a complete list)
 - i. Order verification as needed for assigned inpatient units
 - ii. Pharmacokinetics consults – assigned units
 - iii. Anticoagulation consults – assigned units
 - iv. Follow-up on all clinical sign outs from service clinicians
 - v. Documentation of interventions in the I-Vent system
 - vi. Dispensing of parenteral prostacyclins as needed based on sign outs from service clinicians
 - vii. Follow-up on immunosuppression therapeutic drug monitoring for assigned services
 - viii. Additional roles as needed

Evaluation Procedures

All evaluations for both residents and preceptors are due on the last day of the learning experience.

During the first month of the pharmacy residency, each pharmacy resident will meet with the RPD to discuss Goals and Objectives and the pharmacy resident's individual goals. They will develop a customized curriculum of learning experiences and projects to help achieve these goals throughout the year.

Evaluation Definitions

- Achieved for the Residency (ACHR): The resident has consistently demonstrated the ability to accomplish the educational goal or objective with little or no instruction. Resident requires facilitation but requires minimal coaching. No further evaluation is required.
- Achieved (ACH): The resident has consistently demonstrated the ability to accomplish the educational goal or objective with minimal instruction. The resident may require some coaching; however, has progressed to the point that preceptor is able to largely facilitate the resident's learning experience with occasional coaching and no modeling.
- Satisfactory progress (SP): The resident has progressed at the required rate to attain full ability to perform the educational goal or objective by the end of the program. The resident demonstrates the ability to adjust performance based on feedback. The resident requires coaching and modeling but is able to work somewhat independently. The preceptor is required to provide specific, actionable feedback on what actions the resident must consistently do to reach "achieved".
- Needs improvement (NI): The resident's level of skill on the educational goal or objective does not meet the preceptors' standards of "achieved" or "satisfactory progress" due to failure to incorporate feedback and improve performance or inability to assess performance due to lack of rotation participation or attendance. The resident requires significant modeling and coaching and is not able to perform independently. The preceptor is required to provide specific, actionable feedback or a feedback action plan on what actions the resident must consistently do to reach "satisfactory progress".

Preceptor and Rotation Evaluations

Each pharmacy resident will complete a summative evaluation of both the preceptor and the overall learning experience at the end of each learning experience. Evaluations will be completed via PharmAcademic. Residents are required to submit a minimum of one specific suggestion for improvement for each rotation. These suggestions will be used to develop a yearly preceptor development curriculum.

Rotation Performance Evaluation

Each preceptor will complete a summative evaluation of each pharmacy resident at the end of each learning experience. Evaluations will be completed via PharmAcademic. Preceptors will also complete a less formal (verbal or written) mid-point evaluation of each pharmacy resident. See evaluation definitions above for required documentation according to the evaluation designation. Preceptors must comment on at least 6 objectives per evaluation. Preceptors will review their evaluation with the resident, all feedback provided in the PharmAcademic evaluation should be discussed or provided prior to PharmAcademic submission.

Self-Evaluation

Each pharmacy resident will complete a summative self-evaluation at the end of each learning experience commenting on at least two strengths and two areas for improvement for the rotation. Evaluations will be completed via PharmAcademic.

Quarterly Development Meetings

Pharmacy residents will be evaluated by the RPD on a quarterly basis. Progress toward achieving the criteria-based residency program goals and objectives, individual goals established at the beginning of the residency, and overall residency performance will be evaluated.

The RPD takes into consideration the evaluations from preceptors, the pharmacy resident's self-evaluations, and other pertinent information to complete an assessment of the pharmacy resident's progress using the criteria-based goals and objectives and will then add his/her assessment of the pharmacy resident's progress to the customized plan in PharmAcademic. On completion, the RPD and resident will meet to discuss progress, plans for the next quarter and both will then sign off on the customized plan.

For PGY1 residents, their mentor will also attend quarterly development meetings. For PGY2 residents, the residency coordinator may attend quarterly development meetings as able.

Pharmacy Residency Certificate

A pharmacy residency certificate will be awarded upon successful completion of all pharmacy residency requirements, complete lists of requirements are in each program-specific appendix. All training requirements must be met prior to the end of the residency period.

- It is possible to obtain a limited extension for completion of the research project. If an extension is needed, the resident must request such an extension in writing a minimum of 60 days prior to the end of the pharmacy residency.
- Such requests will be evaluated on a case-by-case basis by the RPD.
- The RPD and the research preceptor must approve all such requests before an extension may be granted.
- Extensions will be limited to a six month period after completion of the pharmacy residency, and the pharmacy residency certificate will be withheld until **ALL** requirements, including the research project, have been successfully completed.

Criteria for Graduation*

*This list applies to all programs, additional criteria for graduation that is program specific in each of the program's appendices.

- ✓ Obtain licensure by the required date
- ✓ Complete all assigned PharmAcademic evaluations and customized plan updates
- ✓ Upload all final presentations and projects listed below to PharmAcademic Files
 - Final MUE Poster
 - Final MUE Write Up
 - Final Research Project Manuscript (deemed publishable by research preceptors) and GLPRC presentation
 - Final CE Seminar Presentation
 - Final Teaching Certificate Portfolio
 - Final Journal Club, Professional Development, and Case Presentation PowerPoints
 - Additional projects as applicable (I.e. monographs, in-services, guideline/order set/protocol revisions, etc.)
- ✓ Receipt of $\geq 75\%$ "Achieved for the Residency" for all program objectives on final residency evaluation
 - Receipt of a minimum of "Satisfactory Progress" on all objectives not marked as "Achieved for the Residency"
- ✓ The final program quarterly development plan is submitted by the RPD.
- ✓ All pharmacademic evaluations are completed by the preceptors and residents.
- ✓ Satisfactory completion of all rotations as determined by the primary preceptor for each rotation
- ✓ Completion of the Teaching and Learning Certificate Program as applicable
- ✓ Completion of all assigned residency projects as determined by the RPD and described elsewhere in this manual.
- ✓ Return of identification badge, pager, keys, etc. is also required prior to receiving the certificate.

Residency Position Descriptions and Responsibilities

I. All programs

A. Residency Program Director (RPD)

- i. Each pharmacy residency training program has a qualified RPD according to the standards set by ASHP who is responsible for the overall quality of the pharmacy residency training program. The RPD is responsible not only for precepting pharmacy residents, but also for the evaluation and development of all other preceptors in the pharmacy residency program.
- ii. Activities of the RPD include recruitment of applicants, selection of applicants, maintaining and updating the pharmacy residency rotation standards, and monitoring of pharmacy resident progress.
- iii. The RPD is responsible for maintaining the pharmacy residents' and preceptors' permanent files.
- iv. The RPD is the Chair of the Pharmacy Residency Advisory Committee (PRAC) and leads that group at meetings and coordinates all the decisions made by the PRAC as pertains to the residency program.

B. Residency Program Coordinator (RPC)

- i. Each pharmacy residency program may have at least one residency program coordinator to assist the RPD with the development of both residents and other preceptors.

C. Pharmacy Residency Preceptor

- i. Preceptors will be qualified according to the standards set by ASHP for either PGY-1 or PGY-2 programs as appropriate.
- ii. Please see Preceptor appendix for additional information.

D. Pharmacy Residents

i. Qualifications of the Pharmacy Residency Applicant

1. Pharmacy residency applicant qualifications will be evaluated by the Pharmacy Residency Program Director through an established formal procedure.
2. The applicant should be a graduate of an Accreditation Council for Pharmacy Education (ACPE)-accredited Doctor of Pharmacy degree program.
3. Applicants who have graduated from and ACPE-accredited Bachelor of Science (B.S.) in pharmacy degree program may also be considered.
4. The applicant must be licensed or eligible for licensure in the State of Illinois
5. If licensure is not obtained prior to entering the residency program, it must be obtained by 120 days from the start of residency.
6. Applicants must participate in and adhere to the rules of the Resident Matching Program (RMP) process.

ii. PGY2 applicants must adhere to the above qualification, and additionally should be a graduate of an ASHP-accredited or ASHP candidate accreditation status PGY1 Residency Program.

1. A copy of the signed certificate demonstrating successful completion of the PGY1 Residency Program must be provided to the PGY2 RPD prior to the start of the PGY2 residency training.

iii. Obligations of the Pharmacy Resident to the Pharmacy Residency Program

1. Pharmacy residents' primary professional commitment must be to the residency program.
2. Pharmacy Residents must manage external activities so as not to interfere with the program.
3. Pharmacy residents are responsible for making any changes necessary to meet the requirements for successful completion of the pharmacy residency.
4. Pharmacy residents must be committed to the values and mission of LUMC.
5. Pharmacy residents must be committed to completing the educational goals and objectives established.
6. Pharmacy residents must seek constructive verbal and documented feedback that directs their learning.
7. Pharmacy residents must be committed to making active use of the constructive feedback provided by Pharmacy Residency Preceptors.

II. PGY-1 Only

A. Resident Mentor

- i. During the first month of the pharmacy residency program, each pharmacy resident will choose a Mentor.
- ii. This person must be one of the Pharmacy Residency Preceptors and/or a member of the Pharmacy Residency Advisory Committee and will serve as the pharmacy resident's "go to" person for any issues or concerns that may arise during the residency year.
- iii. The mentor will serve as a resource and advocate for professional development.
- iv. The pharmacy resident will have a formal meeting with their advisor and RPD on a quarterly basis and may meet more frequently if warranted or desired.
- v. Prior to this quarterly meeting, the pharmacy resident should complete a quarterly self-evaluation that will be discussed with the mentor. See "Evaluation Procedures-Quarterly Progress Meeting" for details.
- vi. The mentor will report to the PRAC regarding the pharmacy resident's progress during PRAC meetings.
- vii. The goals of the relationship between the pharmacy resident and the Pharmacy Resident Mentor are:
 1. Give the pharmacy resident a contact person who will be available for questions and/or concerns, who can assist the pharmacy resident with overall planning for the year, help the pharmacy resident with problem-solving, and serve as a sounding board and advisor to the pharmacy resident as they prepare for their future career.
 2. Give all preceptors a contact person with whom they can discuss the pharmacy resident's progress, and who can then report to the RPD and track the overall progress of the pharmacy resident

III. Pharmacy Residency Committees

A. Residency Education Sub-Committee

- i. Purpose:
 1. Establishes and oversees resident educational activities, namely the Grand Rounds curriculum and presentation expectations.
 2. Ensures all resident presentation instructions, evaluations, and requirements are provided to residents and are followed throughout the year.
 3. Tracks resident progress on presentations throughout the year, ensuring adherence to deadlines.
 4. Tracks preceptor evaluations of resident presentations and ensures residents receive timely feedback.
- ii. The Residency Education Sub-Committee is led by two co-chairs, whose responsibilities include, but are not limited to, leading committee meetings, creating meeting agenda and minutes, ensuring the committee performs its duties, and reporting activities to PRAC, PGY-2 CC RAC, and/or PGY-2 SOT RAC as appropriate.
- iii. The Teaching Certificate Coordinator is a member of the Residency Education Sub-Committee
 1. The Teaching Certificate Coordinator is responsible for developing and maintaining a curriculum and a syllabus for the teaching certificate program.
 2. The coordinator is responsible for organizing seminars and lectures for the program as well as coordinating teaching opportunities for the residents including precepting and lecturing opportunities.

B. Residency Professional Development and Recruitment Sub-Committee

- i. Purpose:
 1. Organize professional development sessions for residency preceptors throughout the year.
 2. Assists in PGY-1 recruitment activities, including, but are not limited to, organization of recruitment events, assistance with residency interviews, and helping the PGY-1 RPD in the management of the LUMC Pharmacy Residency Twitter account.
- ii. The Residency Professional Development and Recruitment Sub-Committee is led by two co-chairs, whose responsibilities include, but are not limited to, leading committee meetings, creating meeting agenda and minutes, ensuring the committee performs its duties, and reporting activities to PRAC, PGY-2 CC RAC, and/or PGY-2 SOT RAC as appropriate.

C. Residency Research & MUE Sub-Committee

- i. Purpose:
 1. Organize monthly resident research meeting curriculum (ie. Resident led topic discussions such as REDCap, SPSS, poster development, manuscript writing, etc.)
 2. Tracks resident research and MUE projects monthly and ensures appropriate progress is being made throughout the year in conjunction with research project preceptors.
 3. Oversees appropriate resident submissions to national conferences, such as ASHP Midyear Clinical Meeting, Vizient, and Great Lakes Pharmacy Residency Conference.

4. Coordinates preceptor research and MUE project proposal list prior to the start of each new residency class and appropriately vets each project via criteria that the committee sets for a feasible resident project
 - ii. The Residency Research and MUE Sub-Committee is led by two co-chairs, whose responsibilities include, but are not limited to, leading committee meetings, creating meeting agenda and minutes, ensuring the committee performs its duties, serving as mentors for both pharmacy residents and preceptors for the research project, working with the research committee and RPDs to determine the feasibility and relevance of proposed projects, developing a timeline for submission of project components (including IRB protocol, posters, presentations, and the manuscript), overseeing the IRB submission process and coordinating the submission of the residents' posters to the ASHP Midyear Clinical Meeting poster session and the Great Lakes Pharmacy Resident Conference, assisting the RPD with evaluations pertaining to the research project and related presentations and posters, and reporting activities to PRAC, PGY-2 CC RAC, and/or PGY-2 SOT RAC as appropriate.
- D. PGY-1 Pharmacy Residency Advisory Committee (PRAC)**
- i. The PRAC is comprised of the Pharmacy Residency Program Directors and Pharmacy Residency Preceptors from all rotation areas as well as the Pharmacy Residency Coordinators.
 - ii. The PGY1 PRAC meets on a monthly basis.
 - iii. Purpose of the PRAC:
 1. Monitoring the progress of all pharmacy residents and facilitating communication regarding their progress amongst all of the pharmacy Residency Preceptors
 2. Evaluating the pharmacy PGY1 program at LUMC and making decisions, through discussion and democratic process, regarding program changes and/or adjustments
 3. Facilitating preceptor education and training
 4. Selection of pharmacy residency program applicants and determination of rank order list
 5. Approval of pharmacy residency project and seminar topics
 - iv. All decisions regarding the structure, content, and pharmacy residency goals and objectives of the program are discussed and then recommendations for any changes made by the committee are ultimately approved or denied by the RPD.
- E. PGY-2 Critical Care Residency Advisory Committee (PGY-2 CC RAC)**
- i. PGY-2 CC RAC is comprised of all the critical care and emergency medicine preceptors. Other preceptors who are precepting a PGY-2 Critical Care Resident will be invited to RAC for the relevant months to discuss resident's progress. Other preceptors may be invited to attend if needed.
 - ii. Meets on a monthly basis to discuss progress of the residents
- F. PGY-2 Solid Organ Transplant Residency Advisory Committee (PGY-2 SOT RAC)**
- i. PGY-2 SOT RAC is comprised of all solid organ transplant preceptors. Other preceptors who are precepting a PGY-2 Solid Organ Transplant Resident will be invited to RAC for the relevant months to discuss resident's progress. Other preceptors may be invited to attend if needed.

- ii. Meets on a monthly basis to discuss progress of the resident

General Employment Information and Pharmacy Resident Benefits

- I. Benefits
 - a. Salary
 - i. Paid every two weeks on Friday
 - ii. If a holiday falls on a Friday in which a paycheck is due, employees are paid the business day prior to the holiday.
 - iii. PGY-1 Salary \$48,662
 - iv. PGY-2 Salary \$49,271
 - b. Health Insurance (Medical, Dental, and Vision)
 - i. All residents holding a valid graduate pharmacy education agreement with Loyola are eligible for health benefits and become covered on the first day of pharmacy residency provided that enrollment takes place within the first 30 days of pharmacy residency.
 - ii. Benefit options are summarized in the benefits package and is described in detail in the individual summary Plan Descriptions.
 - iii. Pharmacy residents must apply for coverage and complete the necessary enrollment forms.
 - iv. Any change in health plans is permitted only during the open enrollment period.
 - v. Open enrollment typically occurs during the fall.
 - vi. Newly eligible dependents may be added within 30 days of marriage, birth or adoption, or loss of current coverage.
 - vii. Otherwise, such additions may only be made during the open enrollment period. Rates are subject to change.
 - c. Time away from the program (ASHP standard limit 37 days):
 - i. Vacation/Professional Days: 20 days
 - ii. Sick Time: 10 days
 - iii. Educational Days: 7 days
 1. Up to 3-4 educational days for travel to the ASHP Midyear Clinical Meeting
 2. Up to 2 educational days for travel to the Great Lakes Pharmacy Residency Conference (PGY1 and PGY2 CC)
 3. Up to 2 educational days for travel to the American Transplant Congress Meeting (PGY2 SOT)
 4. Additional requests for conference time will be addressed on a case-by-case basis

Attendance and Leave Policies

See the LUMC Employee Handbook for further information on Leave Policies

- I. All requests for vacation, holiday, and professional leave must be submitted to the RPD and the preceptor for that month for approval.
 - a. Requests must be submitted via email to the RPD, preceptor, and administrative assistant a MINIMUM of 4 weeks in advance.
 - b. Upon approval of the request, the RPD will forward the request to the department's schedule coordinator.
 - c. A maximum of 5 consecutive vacation days may be used at one time.
 - d. Paid time off time is not cumulative from year-to-year. Payment in advance or payment for unused time will not be permitted.
- II. Absence due to illness

- a. In the case of absence due to illness, the pharmacy resident must notify the preceptor for that month via phone or pager a **MINIMUM** of 2 hours before the resident would be expected to report to rotation.
 - b. Missing a shift due to illness or injury is considered an "unscheduled absence" and will incur one "occurrence" for each instance. One "occurrence" encompasses all consecutive days in one absence period. For example, if the resident is absent for two consecutive days due to the same illness, this is considered one occurrence.
 - c. If an absence due to an illness or injury is 3 or more days or when a pattern of absences develops, the resident will be required to submit a physician's statement confirming the reason for the absence.
 - i. If illness is due to COVID-19, the need for a physician's documentation is usually waived due to the requirement for Employee Health to approve return to work after COVID-19 infection. This is subject to change according to current Employee Health guidance.
- III. Rotation Attendance
- a. Pharmacy residents may be absent (planned or unplanned) from a rotation for a maximum of 25% of the available rotation days.
 - b. If a resident is absent from rotation for more than 25% of available rotation days on a given rotation, the pharmacy resident may be required to extend the rotation accordingly or repeat the rotation at the discretion of the RPD.
- IV. Unapproved Absences/Tardiness: Unapproved absences and tardiness may be considered excessive and corrective action may be administered in accordance with Human Resources Policy G-4 Attendance and Punctuality.
- V. In the event that a resident must take an extended leave that will go beyond the allotted amount of vacation/professional leave and sick days up to a total of 12 weeks, every effort will be made to allow the resident to complete the residency by extending the residency completion date in accordance with the amount of leave required.
- VI. In the event that a resident must take a leave greater than 12 weeks, the resident may be released from the program.

Illinois Pharmacist Licensure

- I. ASHP Standard: A minimum of two-thirds of the residency must be completed as a pharmacist licensed to practice in the program's jurisdiction.
- II. Each pharmacy resident must provide the RPD with the registration number of licensure in all states and/or initiate as early as possible plans for obtaining pharmacist licensure in the State of Illinois.
- III. Each pharmacy resident must obtain and maintain, at their own expense, pharmacy technician licensure in the State of Illinois prior to the start of the residency program.
- IV. In addition, each pharmacy resident must obtain and maintain, at their own expense, pharmacy licensure in the State of Illinois prior to or within 120 days after the start of the residency.
 - a. If the pharmacy resident is unable to obtain licensure within 120 days, the pharmacy resident will be dismissed from the pharmacy residency program.
 - b. The pharmacy resident is responsible for discussing the circumstances with the RPD, and an extension may be granted for circumstances outside of the resident's control at the discretion of the RPD.

- i. If an exception is granted, the residency will be extended to ensure 2/3 of the pharmacy training is completed as a licensed pharmacist.
- ii. A copy of the Illinois License must be forwarded to the RPD as soon as it is available.

Performance Improvement Plans (PIP)

Residents with ongoing educational and/or clinical deficiencies may be placed on a Performance Improvement Plan (PIP) at the discretion of the RPD and / or Director of Clinical Pharmacy Services and Residency Programs and in consultation with Human Resources. The RPD will provide the resident with the PIP in writing, outlining deficiencies that need to be corrected and the timeline for doing so. Failure to make such corrections may result in further action, up to and including termination from the pharmacy residency program. Salary and benefits remain in full force during the period that the PIP is in place.

The RPD shall schedule a meeting with the pharmacy resident to discuss the reason(s) for placement on a PIP, the remedial action(s) required by the pharmacy resident, and the dates for review and/or completion of goal attainment. The RPD will summarize this meeting in writing to the pharmacy resident. A copy of the written document will be placed in the pharmacy resident's file.

The RPD shall meet with the pharmacy resident weekly to review performance. Depending upon the resident's performance, they may be removed from the PIP, be given an extension of the PIP period, or be terminated from the pharmacy residency program.

Resident complaints related to placement on a PIP can be made by following the chain of command or by contacting the Human Resources Department.

Corrective Disciplinary Action

Whenever the professional activities, conduct or demeanor of a pharmacy resident interferes with the discharge of assigned duties or the discharge of duties of other Loyola employees, or jeopardizes the well-being of patients or employees, Loyola, through its administration, reserves the right to institute appropriate corrective measures including disciplinary action up to and including termination.

The following is a list of pharmacy resident actions and behaviors, which may result in disciplinary action, up to, and including termination for the first offense. This list is not exhaustive and other actions or behaviors may lead to disciplinary action, up to and including termination.

- Behavior that threatens the well-being of patients, medical staff, employees or the general public.
- Substantial or repetitive conduct that is considered by the pharmacy resident's supervisor to be professionally or ethically unacceptable or which is disruptive to the normal and orderly function of Loyola.
- Failure to conform to the principles outlined in the Graduate Pharmacy Education Agreement or to the policies and procedures of Loyola.
- Failure to comply with federal, state and local laws (directly or indirectly related to the pharmacy profession.) Convictions for offenses other than minor traffic violations may be cause for dismissal.



- Fraud by commission or omission in application for pharmacy residency position or in completing of other Loyola or patient care related documents.
- Conviction of a criminal offense related to healthcare fraud or exclusion, debarment, sanction or other declaration of ineligibility for participation in a federal or state healthcare program.
- Suspension, revocation or any other inactivation, voluntary or involuntary, of pharmacy licensure by the State of Illinois.
- Continued or unexcused absence from duty assignments.
- Harassment or abuse of patients, other residents or hospital staff.
- Failure to provide safe, effective and compassionate patient care commensurate with the resident's level of advancement and responsibility.
- Breach or violation of patient confidentiality
- Conduct or behavior which may cause embarrassment or bring disrepute to Loyola or its employees.

Initiation of disciplinary action shall be the province of the RPD in conjunction with the Regional Director of Clinical Pharmacy Services and Residency Programs when needed and in consultation with Human Resources. Pharmacy residents may be subject to coaching, written warning, suspension or termination. Discipline may be progressive, in that it follows the order listed. However, depending upon the severity of an incident or extenuating circumstance, discipline may begin at any stage, including termination.

The RPD may issue a letter of warning (verbal or written) to a pharmacy resident in response to an identified problem. The letter will detail the situation, the action required to correct the problem, and the consequences of failing to correct the problem. A copy of the letter will be placed in the pharmacy resident's file.

Suspension is a corrective action where the pharmacy resident is temporarily removed from program duties. Suspensions are unpaid; however, benefits will remain in full force during the suspension. During the suspension, the pharmacy resident will not receive credit for the training time.

The RPD may initiate a suspension when he/she believes that a pharmacy resident's removal from duty is in the best interest of Loyola or its patients. If necessary, pharmacy residents may be suspended pending the investigation of an incident. Upon conclusion of the investigation, the pharmacy resident may be:

- Restored to full duty (Back pay will be awarded if the results of the investigation establish that suspension was unwarranted.); or
- Terminated.

The RPD shall provide the pharmacy resident with a letter detailing the reason(s) for suspension including the length of the suspension, the action required to correct the reason for the suspension and the consequences of failing to correct the problem. A copy of the correspondence shall be placed in the pharmacy resident's file.

If corrective disciplinary action does not improve a pharmacy resident's behavior or actions or if a major violation of Loyola policy or pharmacy residency policy occurs, the pharmacy resident may be terminated from participation in Loyola's pharmacy residency training

program. Termination may occur even if the resident holds a current graduate pharmacy education agreement.

The RPD shall provide a letter to the resident detailing the reason(s) for termination and the effective date. A copy of the correspondence shall be placed in the pharmacy resident's file.

Resident complaints related to formal Corrective Actions may be made as outlined in Trinity Health Human Resources Ministry-Wide Policy No. 1003 – Employee Complaint / Appeal Procedures.

Moonlighting

Moonlighting is defined as voluntary, compensated, pharmacy-related work performed outside the organization (external) or within the organization (internal) or at any of the residency's related participating sites. These are compensated hours beyond the residents' salary and are not part of the scheduled duty periods of the residency program.

Pharmacy residents may be allowed to moonlight internally within LUMC by staffing shifts in the LUMC inpatient pharmacy or the outpatient pharmacy provided that this does not interfere with regularly scheduled residency activities including rotation commitments and project commitments. Any unscheduled staffing shifts (e.g. sick call coverage) will be considered moonlighting and will be compensated accordingly. External moonlighting outside of LUMC (including, but not limited to community pharmacies such as Walgreens or CVS or other hospital pharmacies) is prohibited. Any internal moonlighting must be approved by the RPD. In addition, the resident must adhere to the following rules regarding "moonlighting":

- The resident must notify the RPD of any planned staffing shifts in writing for approval (email is sufficient)
- Moonlighting may not exceed 8 hours in a given 7 day period
- Moonlighting hours will be counted toward the 80 hour per week maximum (see below)
- Moonlighting must not interfere with resident job performance
- If a resident is found to be impaired due to moonlighting while on scheduled duty hours, the resident will be dismissed for the remainder of the work day and will be required to cease moonlighting activities

Duty Hours

More detail provided in Duty Hour Appendix

Duty hours are defined as all scheduled clinical and academic activities related to the pharmacy residency program. This includes all inpatient and outpatient care, administrative duties, scheduled and assigned activities, including conferences, committee meetings, and health fairs that are required to meet the goals and objectives of the pharmacy residency program. Duty hours do not include reading, studying, and academic preparation time for presentations, journal clubs, etc. or travel time to and from conferences. Duty hours also do not include hours that are not scheduled by the RPD or preceptor.

Duty hours must be limited to 80 hours per week, averaged over a 4-week period, including all moonlighting. Residents must have a minimum of one day in seven days free of duty, averaged over 4 weeks. Residents must have 8 hours free of duty between scheduled duty hours. Duty periods should not exceed 16 hours.

Residents will complete a monthly PharmAcademic evaluation to attest to his/her adherence to duty hour requirements.

Residents and preceptors will be educated on the signs of fatigue and sleep deprivation. If at any time a resident's ability to complete patient care responsibilities due to fatigue is in question, the resident and/or preceptor must immediately report the issue to the RPD. If the resident is determined to be unfit for service at that time, the resident will be dismissed for the remainder of the day and will be asked to sign out any pertinent patient care issues to his or her preceptor or another qualified clinical pharmacist.

Travel Expenses Policy

Any changes to the below would be in accordance with the Loyola Travel and Business-Related Expenses Policy

Pharmacy residents will follow the general Loyola Travel Expenses Policy. Each pharmacy resident will receive a \$1500 allotment to fund registration and travel to the ASHP Midyear Clinical Meeting. The pharmacy resident's allotment will be used to pay for registration, airfare, hotel room, and meals for the conference. Expenses will be reimbursed by the Pharmacy Department up to the maximum of \$1500.

Travel expenses to the Great Lakes Pharmacy Residency Conference (including registration, fuel, hotel, and meals) will be reimbursed by the Pharmacy Department (up to a maximum of \$800).

Travel expenses to the American Transplant Congress including registration, airfare, hotel room, and meals for the conference will be reimbursed by the Pharmacy Department up to the maximum of \$1500.

Travel expenses to the Society of Critical Care Medicine including registration, airfare, hotel room, and meals for the conference will be reimbursed by the Pharmacy Department up to the maximum of \$1500.

If a pharmacy resident wishes to attend an additional professional conference, additional funding may be provided in accordance with the Loyola Travel and Business Related Expenses Policy but is not guaranteed.

Appendix 1: PGY1 Pharmacy Residency Program Overview

Program Overview

Formal Journal Club (PGY1 only)

Each pharmacy resident will be required to present one formal journal club during the 1st quarter of the residency. This journal club will be a platform presentation on an article chosen by the resident. Topics should include recently published trials (i.e. within the past 6 months). Pharmacy residents will select their journal club article with the guidance of a preceptor (chosen by the resident). The goal of the journal club is to develop the pharmacy resident's communication skills, literature evaluation skills, and presentation techniques in preparation for the seminar and case conference presentations later in the year.

- Objectives:
 - Improvement of presentation and communication skills
 - Enhancement of critical thinking skills, particularly involving literature evaluation and ability to respond to audience questions
 - Development of ability to accept constructive criticism and/or comments

The formal journal club will be limited to 20-30 minutes with an additional 10 minute period reserved for questions and/or comments from the audience. The presentation should include PowerPoint slides.

Each pharmacy resident will receive a review of the presentation from a minimum of two preceptors, who will evaluate the content of the presentation, the presentation style and the overall performance. The pharmacy resident will receive this review within 3 business days of presenting the presentation. Audience members will be encouraged to provide written feedback to the pharmacy resident as well, using the presentation evaluation form.

Case Conference (PGY1)

Each pharmacy resident will be required to prepare and present one formal case presentation during the pharmacy residency program. Pharmacy residents will select their case conference topic with the option to receive guidance from a case conference preceptor (chosen by the resident). Residents must choose a case that they have seen and with which they have been directly involved for the case presentation. The goal of the case conference is to develop the pharmacy resident's communication skills, literature evaluation skills, clinical application abilities, and presentation techniques.

- Objectives:
 - Improvement of presentation and communication skills
 - Enhancement of critical thinking skills, particularly involving literature evaluation, clinical application, and ability to respond to audience questions
 - Development of ability to accept constructive criticism and/or comments

The case conference will be limited to 25 to 30 minutes with an additional 10 minute period reserved for questions and/or comments from the audience.

Each pharmacy resident will receive a review of the presentation from a minimum of two preceptors, who will evaluate the content of the presentation, the presentation style and the overall content. The pharmacy resident will receive this review within 3 business days of presenting the presentation. In addition, the resident will complete a self-evaluation. Audience members will be encouraged to provide written feedback to the pharmacy resident as well, using the presentation evaluation form.

Additional Presentations and Projects

The pharmacy resident will gain experience by giving various types of presentations throughout the year to a variety of healthcare professionals, including pharmacists, physicians, and nurses. The goal of these presentations is to enhance the resident's presentation, communication, and teaching skills as both a clinician and an educator. Completion of required presentations will be monitored by the pharmacy resident and pharmacy resident advisor. Residents may be asked to repeat presentations or to complete additional projects/presentations. This will be determined at the discretion of the PRAC and the RPD.

➤ **Required Presentations:**

- 1 Formal journal club presentation (25-30 minutes) (August/September)
 - Topic and preceptor chosen by August 1
- 1 ACPE-approved CE seminar (November to January)
 - Topic and preceptor chosen by August 15
- Case conference (May/June)
 - Topic and preceptor chosen by February 1
- Medication Use Evaluation (MUE) (presented as a poster at ASHP Midyear Clinical Meeting, as well as to the P&T Committee if requested)
 - Topic and preceptor chosen by August 1
- Platform presentation of Research Project at Great Lakes Pharmacy Resident Conference in April
 - Topic and preceptor chosen by August 1
 - Required practice session for preceptors and co-residents prior to conference

<u>Important PGY-1 Dates</u>	<u>Deliverable</u>
July 15 (preferred, subject to ATT and IDFPR)	Deadline for taking NAPLEX and MPJE
August 1	Advisor selection due Committee Preferences ranking due Research Project and MUE topics due (PGY1 and PGY2 CC only) Formal Journal Club topic due (PGY1 only) Society of Critical Care Medicine (SCCM) Congress abstract deadline (PGY2 CC resident)
August 15	Seminar topic due
September 1	IRB deadline, research project 120 days after start date: Licensure deadline
October 14-15	Fellows Symposium in Transplantation (PGY2 SOT)
November 25	ASHP Midyear Poster due to printer (PGY1 and PGY2 CC only)
November (date TBD)	American Transplant Congress abstract due (PGY2 SOT only)
December 5-9, 2023	ASHP Midyear Clinical Meeting
December 1	MUE topic due (PGY2 SOT)
December	TLC portfolio complete
January-February (date TBD)	SCCM Congress
February 1	Case Conference topic due (PGY1 and PGY2 CC only) Writing project topic due (PGY2 SOT) Great Lakes Pharmacy Residency Conference abstracts due (PGY1 and PGY2 CC only)
April 10	Great Lakes Pharmacy Residency Conference presentation due (PGY1 and PGY2 CC only)
April	Great Lakes Pharmacy Residency Conference (PGY1 and PGY2 CC only)
June 4-8	American Transplant Congress
June 15	Research Project Manuscript due
June 15	Writing Assignment Manuscript due (PGY2 only)

PGY 1 Required and Elective Learning Experiences

Learning Experience	Type	Duration	Required/Elective	Quarter(s) Offered*
Orientation	Rotation	4 weeks	Required	1 st
Adult Acute Care (General Medicine, Cardiology, General Medicine/Surgery, or Hepatology)	Rotation	4 weeks	Required	All
Infectious Diseases	Rotation	4 weeks	Required	All
Adult Critical Care (MICU, SICU, CVICU or Neuro ICU)	Rotation	4 weeks	Required	All
Adult Transplant (Abdominal, Lung, or Heart Transplant)	Rotation	4 weeks	Required	All
Pharmacy Administration	Rotation	4 weeks	Required	All
Pharmacy Operations	Longitudinal	12 months	Required	All
Research Project	Longitudinal	12 months	Required	All
Pediatrics (General Pediatrics, PICU or NICU)	Rotation	4 weeks	Elective	All
Cardiology	Rotation	4 weeks	Elective**	All
General Medicine	Rotation	4 weeks	Elective**	All
General Medicine/Surgery	Rotation	4 weeks	Elective**	All
Hepatology	Rotation	4 weeks	Elective**	All
Medical Intensive Care Unit	Rotation	4 weeks	Elective**	All
Surgery/Trauma Critical Care	Rotation	4 weeks	Elective**	All
Neurological Critical Care	Rotation	4 weeks	Elective**	All
Cardiovascular Surgery Critical Care	Rotation	4 weeks	Elective**	All
Abdominal Transplant	Rotation	4 weeks	Elective	All
Lung Transplant	Rotation	4 weeks	Elective	All
Heart Transplant/Advanced Heart Failure	Rotation	4 weeks	Elective	All
Emergency Department	Rotation	4 weeks	Elective**	All
Hematology/Oncology	Rotation	4 weeks	Elective	All
Pediatrics/Pediatric Intensive Care Unit	Rotation	4 weeks	Elective	All
Neonatal Intensive Care Unit	Rotation	4 weeks	Elective	All

*Availability dependent on preceptor's schedule and/or additional clinical commitments

**Residents must complete a minimum of one adult acute care and adult acute care specialty rotation (general medicine, cardiology, general medicine/surgery, or hepatology) and a minimum of one adult critical care and adult critical care specialty or ED rotation (MICU, SICU, CVICU or Neuro ICU), but may complete additional acute care or critical care rotations as electives.

Appendix 2: PGY2 Critical Care Pharmacy Residency Program Overview

Program Description:

Loyola University Medical Center (LUMC) offers a one-year specialty residency in critical care pharmacy practice beginning the first Monday in July. The LUMC PGY2 critical care pharmacy residency program prepares its graduates to assume positions in critical care areas as a clinical specialist employed by an institution or as a clinical faculty member employed by college of pharmacy. Graduates will be prepared to sit for the Board Certification exam in critical care. LUMC is a university teaching hospital providing the unique capability to engage each of our residents in direct patient care activities, research, administration and project management, and teaching skills.

PGY2 residents will gain the skills to function as the primary ICU pharmacist during their required core ICU rotations, with the expectation that the resident will handle all aspects of the medication process from ordering to administration. Primary responsibilities include rounding with the ICU team(s), designing, recommending, monitoring, and evaluating patient-specific therapeutic regimens that incorporate the principles of evidence-based medicine, addressing all pharmacokinetic-monitored medications, being an active member of the Code Blue team, validating pharmacy orders for ICU patients, and overseeing and directing PGY1 resident and pharmacy student activities. This integration of staffing and clinical services prepares residents for any type of practice environment they may encounter in their future jobs by emphasizing the development of essential skills required for an advanced pharmacy practitioner: independent practice skills, multi-tasking and prioritization.

Teaching activities include regular didactic presentations, preceptorship of PGY1 pharmacy practice residents and fourth-year pharmacy students. The ability to work independently and to supervise pharmacy students and residents will be emphasized. The resident will also be involved in a research project. Scientific writing is strongly emphasized and the preparation and submission of a manuscript suitable for publication will be expected.

PGY2 Critical Care Competency Areas, Goals and Objectives (2016 Standard):

- I. Educational Outcome: broad categories of the residency graduates' capabilities.
 - a. Outcome R1: Patient Care
 - b. Outcome R2: Advancing Practice and Improving Patient Care
 - c. Outcome R3: Leadership and Management
 - d. Outcome R4: Teaching, Education, and Dissemination of Knowledge
- II. Educational Goals: Goals listed under each outcome are broad sweeping statements of abilities.
- III. Educational Objectives: Resident achievement of educational goals is determined by assessment of the resident's ability to perform the associated educational objective below each educational goal.
- IV. The resident is encouraged to read detailed information about each goal at the ASHP website (click on Critical Care Pharmacy [PGY2], 2016)
 - a. <https://www.ashp.org/Professional-Development/Residency-Information/Residency-Program-Directors/Residency-Accreditation/PGY2-Competency-Areas>

Obligations of the Pharmacy Residency Program to the PGY2 Critical Care Pharmacy Resident

- I. This program is a twelve-month, full-time position
- II. The PGY2 Critical Care RPD will ensure that neither the educational outcomes of the program nor the welfare of the resident or the welfare of patients are compromised by excessive reliance on residents to fulfill service obligations.
- III. This program will comply with the current duty hour standards of the Pharmacy Specific Duty Hours Requirements for the ASHP Accreditation Standard for Pharmacy Residencies
- IV. This residency program will participate in and adhere to the rules of the RMP
- V. The RPD will provide PGY2 critical care residents who are accepted into the program with a letter outlining their acceptance to the program.
 - a. Letter will contain terms and conditions of the appointment consistent with that provided to pharmacists within the organization conducting the residency
 - b. Will be signed and documented prior to the beginning of the residency
- VI. Loyola will provide a sufficient complement of professional and technical pharmacy staff to ensure appropriate supervision and preceptor guidance to all residents.
- VII. PGY2 critical care residents will have a desk and computer where they can work, access to extramural educational opportunities (e.g., Midyear Clinical Meeting, the Society of Critical Care Medicine Congress), and sufficient financial support to fulfill the responsibilities of the program.
- VIII. The RPD will award a certificate of residency to PGY2 critical care residents who successfully complete the program (see PGY2 Critical Care Pharmacy Residency Certificate section)

- a. Will contain ASHP accreditation status
 - b. Will be signed by the RPD and the Loyola Chief Executive Officer
- IX. The RPD will ensure compliance with the provisions of the current version of the ASHP Regulations on Accreditation of Pharmacy Residencies

Important Dates	Deliverable
July 15	Recommended deadline for taking MPJE
August 1	Committee Preferences ranking due Establish schedule for Code blue/code stroke pager coverage Research Project and MUE topics due Society of Critical Care Medicine (SCCM) Congress abstract deadline (PGY2 CC resident)
August 15	CE Seminar topic due
September 1	IRB deadline, research project 120 days after start date: Licensure deadline
November 20	ASHP Midyear Poster due to printer (approximate, 2 weeks prior to leave for Midyear)
First week of December	ASHP Midyear Clinical Meeting
December	TLC portfolio complete (if completing TLC at Loyola)
January-February	SCCM Congress
February 1	Case Conference topic due Great Lakes Pharmacy Residency Conference abstracts due
April 10	Great Lakes Pharmacy Residency Conference presentation due
April 2024	Great Lakes Pharmacy Residency Conference
June 15	Research Project Manuscript due Writing Assignment Manuscript due

PGY-2 Critical Care Residency Requirements Checklist

Task	Date Completed	Preceptor Initial
Pharmacist licensure		
Research Defense Presentation		
SCCM Abstract (~August deadline)		
Committee Choice		
Formal Patient Case Presentations (2)		
Inservice presentations (2)		
Formal Journal Clubs (2)		
Research Pearl presentation		
Seminar Presentation		
Critical Care Conference Presentations as assigned		
Medication Use Evaluation		
Presentation of Research or MUE at Midyear, SCCM, or other national meeting		
If presenting at Midyear, Vizient poster presentation		
GLPRC Presentation (present research project)		
Order set, guideline, protocol or initiative implemented		
Teaching and Learning Certificate awarded (PGY1 or complete at Loyola)		
Teaching Certificate Presentation (if TC completed in PGY1)		
Research project		
Manuscript for research project submitted		
PharmAcademic evaluations completed		
Submit ALL final projects to Pharmacademic (virtual binder)		
PGY-2 CC topic list complete, signed, turned in to RPD		
ID badge, pager, keys, etc. returned to RPD		
≥ 75% of objectives ACHR		
For any objectives not ACHR, they must be SP		

Signature upon receipt

Signature upon completion

Resident:

Resident:

RPD:

RPD:

Checklist for LUMC Critical Care PGY2 Pharmacy Resident

The resident will demonstrate an understanding of the mechanism of action, pharmacokinetics, pharmacodynamics, pharmacogenomics, pharmacoeconomics, usual regimen (dose, schedule, form, route, and method of administration), indications, contraindications, interactions, adverse reactions, and therapeutics of medications and non-traditional therapies, where relevant, that are applicable to the diseases and conditions and have the ability to design appropriate treatment regimens and treat and assess outcomes. For some diseases and conditions, direct patient care is required. For other diseases and conditions, a case-based, didactic approach may be substituted. In these cases, the resident will demonstrate understanding of the diseases and condition via didactic instruction, case-based application, simulation, or other appropriate approach. For these diseases and conditions, the resident will demonstrate an understanding of signs and symptoms, epidemiology, risk factors and etiology, pathogenesis, pathophysiology, clinical course, and a comprehensive pharmacotherapy treatment plan. **In the list, an asterisk (*) indicates that direct patient care is required.** The other items are required but may be covered in the case-based, didactic approach described above.

	Date/Learning experience completed	Format Completed	Initials of preceptor
Pulmonary			
1. *Acute respiratory distress syndrome			
2. *Severe asthma exacerbation			
3. *Acute COPD exacerbation			
4. *Acute pulmonary embolism			
5. *Acute pulmonary hypertension			
6. *Drug-induced pulmonary disease			
7. *Mechanical ventilation			
8. Chronic severe pulmonary hypertension			
9. Pneumothorax and hemothorax			
10. Chest tubes			
11. Cystic fibrosis			
12. Inhaled medication administration			
Cardiovascular			
1. *Advanced cardiac life support			
2. *Arrhythmias (atrial and ventricular)			
3. *Acute decompensated heart failure			
4. *Acute coronary syndromes			
5. *Hypertensive emergencies and urgencies			
6. *Shock syndromes			
7. Acute aortic dissection			
8. Pericardial tamponade			
9. Mechanical devices (e.g., intra-arterial balloon pumps, ECLS, ECMO)			
10. Invasive and non-invasive hemodynamic monitoring			
11. PALS			
Renal			
1. *Acute kidney injury			
2. *Acid-base imbalance			
3. *Fluid and electrolyte disorders			
4. *Contrast-induced nephropathy			
5. *Drug-induced nephropathy			

6. Rhabdomyolysis			
7. Syndrome of inappropriate antidiuretic hormone			
8. Continuous renal replacement therapies/hemodialysis			
Neurology			
1. *Status epilepticus			
2. *Ischemic stroke			
3. *Subarachnoid hemorrhage			
4. *Intracerebral hemorrhage			
5. *Critical illness polyneuropathy			
6. Intracranial pressure management			
7. Traumatic brain injury			
8. Spinal cord injury			
9. Central diabetes insipidus			
10. Cerebral salt wasting			
11. Encephalopathy in coma			
12. EEG or bispectral monitoring for level of sedation			
13. Ventriculostomies			
14. Targeted temperature management/induced hypothermia			
Gastrointestinal			
1. *Acute upper and lower GI bleeding			
2. *Acute pancreatitis			
3. Fistulas			
4. Ileus			
5. Abdominal compartment syndrome			
Hepatic			
1. *Acute liver failure			
2. *Complications of cirrhosis			
3. *Drug-induced liver toxicity			
Dermatology			
1. Burns			
2. Stevens-Johnson Syndrome			
3. Toxic epidermal necrolysis			
4. Erythema multiforme			
5. Drug Reaction (or Rash) with Eosinophilia and Systematic Symptoms (DRESS)			
Immunology			
1. Acute transplant rejection			
2. Graft-versus-host disease			
3. Management of the immunocompromised patient			
4. Acute management of a solid organ or bone marrow transplant patient			
5. Medication allergies/desensitization			
Endocrine			
1. *Relative adrenal insufficiency			

2. *Hyperglycemic crisis			
3. *Glycemic control			
4. Thyroid storm/ICU hypothyroid states			
Hematology			
1. *Acute venothromboembolism			
2. *Coagulopathies			
3. *Drug-induced thrombocytopenia			
4. *Blood loss and blood component replacement			
5. Anemia of critical illness			
6. Drug-induced hematologic disorders			
7. Sickle cell crisis			
8. Methemoglobinemia			
Toxicology			
1. *Toxidromes			
2. *Withdrawal syndromes			
3. Drug overdose			
4. Antidotes/decontamination strategies			
Infectious Diseases			
1. *CNS infections			
2. *Complicated intra-abdominal infections			
3. *Pneumonia			
4. *Endocarditis			
5. *Sepsis			
6. *Fever			
7. *Antimicrobial stewardship			
8. *Clostridium difficile associated diarrhea			
9. Skin and soft-tissue infection			
10. Urinary tract infections			
11. Wound infections			
12. Catheter-related infections			
13. Infections in the immunocompromised host			
14. Pandemic diseases			
15. Febrile neutropenia			
16. Acute osteomyelitis			
Supportive Care			
1. *Pharmacokinetic and pharmacodynamic alterations in critically ill			
2. *Nutrition (enteral, parenteral nutrition, considerations in special populations)			
3. *Analgesia			
4. *Sedation			
5. *Delirium			
6. *Sleep disturbances			
7. *Rapid sequence intubations			
8. *Venous thromboembolism prophylaxis			

9. *Stress ulcer prophylaxis			
10. Pharmacogenomic implications			
11. Oncologic emergencies			
12. Other devices			
1. Intravascular devices			
2. Peripheral nerve stimulators			
3. IV pumps related topics			

The resident will be able to describe key landmark events in the evolution of critical care pharmacy as a specialty and summarize the findings from key studies documenting the association of critical care pharmacy services with favorable health care outcomes.

Resident Signature

Date

Program Director Signature

Date

Appendix 3: PGY2 Solid Organ Transplant Pharmacy Residency Program Overview

Loyola University Medical Center (LUMC) offers a one-year specialty residency in critical care pharmacy practice beginning the first Monday in July.

Program Description:

The LUMC PGY2 Solid Organ Transplant pharmacy residency program prepares its graduates to assume positions in solid organ transplant areas as a clinical specialist employed by an institution or as a clinical faculty member employed by college of pharmacy. LUMC is a university teaching hospital providing the unique capability to engage each of our residents in direct patient care activities, research, administration and project management, and teaching skills.

PGY2 residents will gain the skills to function as the primary transplant pharmacist during their required core rotations, with the expectation that the resident will handle all aspects of the medication process from ordering to administration. Primary responsibilities include rounding with the transplant team(s), designing, recommending, monitoring, and evaluating patient-specific therapeutic regimens that incorporate the principles of evidence-based medicine, addressing all pharmacokinetic-monitored medications, being an active member of the Multidisciplinary Review Boards (MRBs) and Quality Assessment/Process Improvement (QAPI) meetings, validating pharmacy orders for transplant patients, and overseeing and directing PGY1 resident and pharmacy student activities. This integration of staffing and clinical services prepares residents for any type of practice environment they may encounter in their future jobs by emphasizing the development of essential skills required for an advanced pharmacy practitioner: independent practice skills, multi-tasking and prioritization.

Teaching activities include regular didactic presentations, lung transplant immunosuppression presentation to patients, hepatology/nephrology fellows conference presentation, leading noon report for PGY1 pharmacy residents and students (as warranted), and clerkship preceptorship of PGY1 pharmacy practice residents and third/fourth-year pharmacy students. The ability to work independently and to supervise pharmacy students and residents will be emphasized. The resident will also be involved in a research and writing project. Scientific writing is strongly emphasized and the preparation and submission of a manuscripts suitable for publication will be expected.

PGY2 Solid Organ Transplant Competency Areas, Goals and Objectives (2018 Standard):

- Educational Outcome: broad categories of the residency graduates' capabilities.
 - Outcome R1: Patient Care
 - Outcome R2: Advancing Practice and Improving Patient Care
 - Outcome R3: Leadership and Management
 - Outcome R4: Teaching, Education, and Dissemination of Knowledge
- Educational Goals: Goals listed under each outcome are broad sweeping statements of abilities.
- Educational Objectives: Resident achievement of educational goals is determined by assessment of the resident's ability to perform the associated educational objective below each educational goal.
- The resident is encouraged to read detailed information about each goal at the ASHP website (click on Solid Organ Transplant Pharmacy [PGY2], 2018)
 - <https://www.ashp.org/Professional-Development/Residency-Information/Residency-Program-Directors/Residency-Accreditation/PGY2-Competency-Areas>

Obligations of the Pharmacy Residency Program to the PGY2 Solid Organ Transplant Pharmacy Resident

- This program is a twelve month, full time position
- The PGY2 Solid Organ Transplant RPD will ensure that neither the educational outcomes of the program nor the welfare of the resident or the welfare of patients are compromised by excessive reliance on residents to fulfill service obligations.
- This program will comply with the current duty hour standards of the Pharmacy Specific Duty Hours Requirements for the ASHP Accreditation Standard for Pharmacy Residencies.
- This residency program will participate in and adhere to the rules of the RMP.
- The RPD will provide PGY2 solid organ transplant residents who are accepted into the program with a letter outlining their acceptance to the program.
 - Letter will contain terms and conditions of the appointment consistent with that provided to pharmacists within the organization conducting the residency.
 - Letter will be signed and documented prior to the beginning of the residency.
- Loyola will provide a sufficient complement of professional and technical pharmacy staff to ensure appropriate supervision and preceptor guidance to all residents.
- PGY2 solid organ transplant residents will have a desk and computer where they can work, access to extramural educational opportunities (e.g., Transplant Fellows Symposium, Midyear Clinical Meeting, the American Transplant Congress), and sufficient financial support to fulfill the responsibilities of the program.
- The RPD will award a certificate of residency to PGY2 solid organ transplant residents who successfully complete the program (see PGY2 Solid Organ Transplant Pharmacy Residency Certificate section).
 - Will pursue ASHP accreditation status at the start of the PGY1 residency. The residency certificate will be signed by the RPD and the Loyola chief executive officer.
- The RPD will ensure compliance with the provisions of the current version of the ASHP Regulations on Accreditation of Pharmacy Residencies

Weekly Meetings

The PGY2 transplant pharmacy resident will participate in a weekly resident-driven meeting where the resident will have the opportunity to learn from preceptors and teach students, pharmacy/medical residents and transplant colleagues. The meeting may be in the format of a topic discussion, journal club, or case review. A tentative calendar will be provided; however, the resident will have input based on their perceived educational needs.

➤ **Required Presentations (PGY1 and PGY2 unless otherwise noted):**

- 1 Formal journal club presentation (25-30 minutes) (August/September) (PGY1 only)
 - Topic and preceptor chosen by August 1
- 1 ACPE-approved CE seminar (October/November)
 - Topic and preceptor chosen by August 15
- Case conference (May/June) (PGY1)
 - Topic and preceptor chosen by February 1
- Case presentation at Illinois Transplant Pharmacists Association (October/November) (PGY2 SOT only)
- Medication Use Evaluation (MUE) (presented as a poster at ASHP Midyear Clinical Meeting and to the P&T Committee -
 - Topic and preceptor chosen by August 1
 - Poster presentation required for PGY1, PGY2 CC
- Drug monograph (presented to the P&T Committee) (PGY1 and PGY2 residents may complete as applicable)
 - Assigned by the RPD (timing variable)
- Platform presentation of Research Project at Great Lakes Pharmacy Resident Conference in April (PGY1 and PGY2 CC)
 - Topic and preceptor chosen by August 1
 - Required practice session for preceptors and co-residents prior to conference
- Platform presentation of research project at Illinois Transplant Pharmacists Association PGY2 Resident Research Showcase (PGY2 SOT only)
- 4 Journal clubs (PGY1 and PGY2)
- 2 In-service presentations to medical staff (i.e. nurses, physicians, etc.) (PGY1 and PGY2)
- 1 new or revised policy, order set, or guideline (presented to Clinical Pharmacy Committee and Order Set Committee)

PGY2 Solid Organ Transplant Pharmacy Residency Required and Elective Learning Experiences

Learning Experience	Type*	Duration	Quarter(s) Offered**
Orientation	Required	4 weeks	1 st
Abdominal Transplant (inpatient)	Required	4 weeks	All
Hepatology	Required	4 weeks	All
Abdominal Transplant Clinic	Required	4 weeks	All
Lung Transplant	Required	4 weeks	All
Heart Transplant/Advanced Heart Failure	Required	4 weeks	All
Transplant Infectious Diseases	Required	4 weeks	All
Project Rotation	Required	4 weeks	December
Pharmacy Operations	Required, Longitudinal	12 months	All
Research Project	Required, Longitudinal	12 months	ALL
Pharmacy Improvement	Required, Longitudinal	12 months	All
Advanced Abdominal Transplant	Elective	4 weeks	All
Advanced Lung Transplant	Elective	4 weeks	All
Advanced Heart Transplant/Advanced Heart Failure	Elective	4 weeks	3 rd , 4 th
Advanced Abdominal Transplant Clinic	Elective	4 weeks	3 rd , 4 th
Surgery/Trauma Critical Care	Elective	4 weeks	3 rd , 4 th
Cardiovascular Surgery Critical Care	Elective	4 weeks	3 rd , 4 th
Medical Intensive Care Unit	Elective	4 weeks	3 rd , 4 th
Pediatric Transplant	Elective	4 weeks	3 rd , 4 th
Teaching Certificate Program (as needed)	Longitudinal	12 months	All

* At least two required direct patient care rotation must be repeated

**Availability dependent on preceptor's schedule and/or additional clinical commitments

Checklist for LUMC PGY2 Solid Organ Transplant Pharmacy Resident

The resident will demonstrate an understanding of the mechanism of action, pharmacokinetics, pharmacodynamics, pharmacogenomics, pharmacoeconomics, usual regimen (dose, schedule, form, route, and method of administration), indications, contraindications, interactions, adverse reactions, and therapeutics of medications and non-traditional therapies, where relevant, that are applicable to the diseases and conditions and have the ability to design appropriate treatment regimens and treat and assess outcomes. For some diseases and conditions, direct patient care is required. For other diseases and conditions, a case-based, didactic approach may be substituted. In these cases, the resident will demonstrate understanding of the diseases and condition via didactic instruction, case-based application, simulation, or other appropriate approach. For these diseases and conditions, the resident will demonstrate an understanding of signs and symptoms, epidemiology, risk factors and etiology, pathogenesis, pathophysiology, clinical course, and a comprehensive pharmacotherapy treatment plan. **In the list, an asterisk (*) indicates that direct patient care is required.** The other items are required but may be covered in the case-based, didactic approach described above.

	Date/Learning experience completed	Format Completed	Initials of preceptor
Transplant Overview			
1. History of solid organ transplant and associated outcomes			
2. Basics of transplant immunology			
Diseases or conditions that are an indication for transplantation			
1. *Kidney transplantation			
2. *Pancreas and/or islet cell transplantation			
3. *Liver transplantation			
4. Intestinal transplantation			
5. *Heart transplantation			
6. *Lung transplantation			
Pre-transplant phase			
1. *Pre-transplant evaluation review (in person or chart review)			
2. Contraindications to transplant (relative and absolute)			
3. Sensitizing factors			
4. Considerations for induction and maintenance immunosuppression			
5. Immunizations			
6. Care of patients with end-stage organ disease (e.g. cystic fibrosis, complications of cirrhosis, mechanical circulatory devices)			
Peri-operative phase			
1. Basics of transplant surgical procedure			
2. Organ procurement			
3. Preservation process			
Pre- and intra-operative transplant pharmacologic considerations			
1. *Induction considerations			
2. Desensitization strategies			
3. ABO-incompatible transplant strategies			
4. Induction types: <ul style="list-style-type: none"> • Lymphocyte depleting • Non-lymphocyte depleting 			
Post-transplant pharmacologic considerations			

1. *Maintenance immunosuppression/immunomodulation considerations			
2. Maintenance immunosuppression strategies <ul style="list-style-type: none"> • Antimetabolites • Calcineurin inhibitors and minimization • Corticosteroids and avoidance/withdrawal/minimization • Costimulation inhibitors • mTOR inhibitors 			
Rejection and treatment strategies			
1. *Acute cellular rejection			
2. *Acute antibody mediated rejection			
3. Chronic rejection			
Infection considerations			
1. *Infection prophylaxis, monitoring and treatment strategies			
2. *Surgical infectious prophylaxis			
3. Adenovirus			
4. BK polyomavirus nephropathy and screening and treatment			
5. Central venous catheter infections and treatment options			
6. CMV and EBV			
7. Fungus (e.g <i>Candida sp.</i> , <i>Aspergillus sp.</i> , <i>Endemic fungi</i>)			
8. Hepatitis B virus prophylaxis and treatment			
9. Hepatitis C virus treatment			
10. Herpes simplex and zoster			
11. Human immunodeficiency virus			
12. Immunizations post-transplant			
13. Infectious exposure management <ul style="list-style-type: none"> • Measles • Varicella 			
14. Mycobacteria			
15. Nocardia			
16. Parasites			
17. Parvovirus B19			
18. Pneumocystis pneumonia			
19. Sepsis			
20. Tuberculosis			
21. Urinary tract infections/pyelonephritis			
Post-transplant malignancy considerations			
1. Post-transplant lymphoproliferative disease (PTLD)			
2. Risk of new malignancy or recurrent malignancy			
Other post-transplant medical considerations			
1. Management of pregnancy in transplantation			
2. Cardiovascular (e.g. cardiovascular risk management, congestive heart failure (CHF), coronary artery disease (CAD), hemodynamic conditions, hyperlipidemia, hypertension)			

3. Endocrine (e.g. Post-transplant diabetes mellitus (PTDM), metabolic diseases (metabolic syndrome), hyperparathyroidism, osteoporosis/bone disease, gout, pancreatitis, pediatric growth impairment)			
4. Gastrointestinal (e.g. malnutrition/anorexia/nausea/vomiting/diarrhea, eosinophilic esophagitis)			
5. Hematologic (e.g. bone marrow suppression (leukopenia, anemia, thrombocytopenia), post-transplant erythrocytosis (PTE))			
6. Hepatic (e.g. biliary complications and management, hepatotoxicity)			
7. Neurological (e.g. Calcineurin inhibitor neurotoxicity, depression, headache, neurogenic bladder)			
8. Pulmonary (e.g. Bronchiolitis obliterans organizing pneumonia (BOOP), interstitial pneumonitis, pulmonary edema)			
9. Renal (e.g. acute tubular necrosis (ATN), calcineurin inhibitor nephrotoxicity, dehydration, electrolyte imbalances, hemolytic uremic syndrome/thrombotic thrombocytopenic purpura, proteinuria, renal tubular acidosis)			
10. Surgical/technical complications (e.g. bleeding, hydronephrosis, ischemia/reperfusion injury, lymphocele, obstruction/leak, pain, primary graft non-function, technical graft loss, thrombosis prophylaxis and treatment)			
Psychosocial concerns			
1. Nonadherence <ul style="list-style-type: none"> Consequences of nonadherence Factors impacting nonadherence Strategies to improve nonadherence 			
2. Pediatric to adult transition of care			
3. Medication and medical access <ul style="list-style-type: none"> Private vs. public Patient assistance programs 			
Transplant regulations and quality			
1. UNOS/Organ Procurement and Transplantation Network regulations			
2. Centers for Medicare and Medicaid Services regulations			
3. Risk Evaluation and Mitigation Strategies			
4. Organ allocation			
5. Medication distribution programs			

The resident will be able to describe key landmark events in the evolution of solid organ transplant pharmacy as a specialty and summarize the findings from key studies documenting the association of transplant pharmacy services with favorable health care outcomes.

Resident Signature

Date

Program Director Signature

Date

Appendix 4: Duty Hour Requirements

Definitions:

Duty Hours: Duty hours are defined as all scheduled clinical and academic activities related to the pharmacy residency program. This includes inpatient and outpatient care; in-house call; administrative duties; and scheduled and assigned activities, such as conferences, committee meetings, and health fairs that are required to meet the goals and objectives of the residency program. Duty hours must be addressed by a well-documented, structured process. Duty hours do not include: reading, studying, and academic preparation time for presentations and journal clubs; travel time to and from conferences; and hours that are not scheduled by the residency program director or a preceptor.

Scheduled duty periods: Assigned duties, regardless of setting, that are required to meet the educational goals and objectives of the residency program. These duty periods are usually assigned by the residency program director or preceptor and may encompass hours which may be within the normal work day, beyond the normal work day, or a combination of both.

Duty-Hour Requirements:

Residents, program directors, and preceptors have the professional responsibility to ensure they are fit to provide services that promote patient safety. The residency program director (RPD) must ensure that there is not excessive reliance on residents to fulfill service obligations that do not contribute to the educational value of the residency program or that may compromise their fitness for duty and endanger patient safety. Providing residents with a sound training program must be planned, scheduled and balanced with concerns for patients' safety and residents' well-being. Therefore, programs must comply with the following duty-hour requirements:

- I. Personal and Professional Responsibility for Patient Safety
 - a. Residency program directors must educate residents and preceptors about their professional responsibilities to be appropriately rested and fit for duty to provide services required by patients.
 - b. Residency program directors must educate residents and preceptors to recognize signs of fatigue and sleep deprivation and adopt processes to manage negative effects of fatigue and sleep deprivation to ensure safe patient care and successful learning.
 - c. Residents and preceptors must accept personal and professional responsibility for patient care that supersedes self-interest. At times, it may be in the best interest of patients to transition care to another qualified, rested provider.
 - d. The residency program director must ensure that residents participate in structured handoff processes when they complete their duty hours to facilitate information exchange to maintain continuity-of-care and patient safety.
- II. Maximum Hours of Work per Week and Duty-Free Times
 - a. Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all inhouse call activities and all moonlighting.
 - b. Moonlighting (internal or external) must not interfere with the ability of the resident to achieve the educational goals and objectives of the residency program.
 - i. All moonlighting hours must be counted towards the 80-hour maximum weekly hour limit.
 - ii. Programs that allow moonlighting must have a documented structured process to monitor moonlighting that includes at a minimum:
 1. The type and number of moonlighting hours allowed by the program.
 2. A reporting mechanism for residents to inform the residency program directors of their moonlighting hours.

3. A mechanism for evaluating residents' overall performance or residents' judgment while on scheduled duty periods and affect their ability to achieve the educational goals and objectives of their residency program and provide safe patient care.
 4. A plan for what to do if residents' participation in moonlighting affects their judgment while on scheduled duty hours.
- iii. Mandatory time free of duty: residents must have a minimum of one day in seven days free of duty (when averaged over four weeks). At-home call cannot be assigned on these free days.
 - iv. Residents should have 10 hours free of duty between scheduled duty, and must have at a minimum 8 hours between scheduled duty periods.
 - v. If a program has a 24-hour in-house call program, residents must have at least 14 hours free of duty after the 24 hours of in-house duty.
- III. Maximum Duty-Period Length
- a. Continuous duty periods of residents should not exceed 16 hours. The maximum allowable duty assignment must not exceed 24 hours even with built in strategic napping or other strategies to reduce fatigue and sleep deprivation, with an additional period of up to two hours permitted for transitions of care or educational activities.

Appendix 5: Additional Pharmacy Resident Benefits and Services

Basic Life and AD & D Insurance

All pharmacy residents holding a valid graduate pharmacy education agreement with Loyola are eligible for these insurance benefits. All of the insurance benefits are effective on the first day of pharmacy residency. Basic Life insurance and Accidental Death and Dismemberment insurance are provided to pharmacy residents in the amount of \$25,000 for each plan. Loyola provides this insurance coverage at no cost to the pharmacy resident. Enrollment must be completed within the first 30 days of pharmacy residency and coverage is effective upon completion of the enrollment application.

Long Term Disability Coverage

Loyola also provides Long Term Disability to pharmacy residents at no cost to the resident. This plan provides a maximum monthly benefit of \$2,000 in the event of an accident or illness, which results in disability preventing the pharmacy resident from performing job duties for at least ninety (90) days. The monthly benefit may be reduced by one half of any return to work earnings that the pharmacy resident may receive.

Tax Deferred Annuities

Loyola provides pharmacy residents the opportunity to save additional income on a pre-tax basis via a tax-deferred annuity. All deductions made on a pre-tax basis are subject to maximums established by the U.S. Internal Revenue Service. For additional information, call the Retirement Office.

Tax-sheltered Annuity Program

The Loyola allows pharmacy residents to invest in tax-sheltered Annuity Plan. Money may be deducted from the paycheck on a pre-tax basis, thus reducing the amount of income that is taxed. Residents are able to save money and at the same time, reduce tax liability. ***There is no matching contribution from Loyola University Medical Center. This is a voluntary benefit only.*** Participation in a tax-sheltered annuity program will not reduce any benefits from Social Security or group insurance coverage.

Business Travel Accident Insurance

Loyola provides accident life insurance coverage for all full-time employees while they are traveling on Loyola business. This insurance is in effect from the date of hire and is provided without cost to the employee.

Family Medical Leave Act

It is the policy of Loyola to grant pharmacy residents family leave in accordance with the Family and Medical Leave Act ("FMLA") of 1993. The intent is to provide pharmacy residents up to twelve (12) weeks of job protected leave during any twelve (12) month period. To be eligible for leave, a pharmacy resident must have been employed by Loyola for at least twelve months and worked for at least 1250 hours in the twelve months preceding the leave. A pharmacy resident may request FMLA leave to care for an immediate family member (spouse, child, or parent) who has a serious health condition; the birth, adoption, or foster care placement of a child; for his/her own serious health condition; to care for a spouse, child or next of kin with illness or injury incurred in the line of duty while in the Armed Forces, National Guard or Reserves; or due to any qualifying exigency arising out of the fact that a spouse, child or parent is on active duty or has been notified of an impending call or order to active duty in the Armed Forces in support of a contingency operation.

Typically, a FMLA leave is unpaid; however, a pharmacy resident's available paid time off and, in the case of a pharmacy resident's own illness, sick days will be used concurrently with the FMLA leave. Once a pharmacy resident's available paid time off is exhausted, the FMLA leave will be unpaid.

Pharmacy residents must submit requests for FMLA leave in writing as soon as possible prior to the beginning of leave. The pharmacy resident should provide the RPD and the Department of Human Resources with a copy of the request. Where applicable, the pharmacy resident must also complete appropriate forms with the Department of Human Resources to continue medical, dental, life insurance and long-term disability coverage during the FMLA leave. The pharmacy resident will be billed for the amount of any payroll deductions to continue insurance coverage. If the FMLA leave exceeds the allowable absence by specific board requirements or causes the resident to miss a key rotation, the pharmacy resident must extend his/her training to complete the requirements and/or rotation.

Maternity/Paternity Leave of Absence

It is the policy of Loyola to grant pharmacy residents maternity/paternity leave for the birth, adoption, or foster care placement of a child. In granting maternity/paternity leaves, Loyola will follow the requirements of the Family Medical Leave Act of 1993.

Personal Leave of Absence

A pharmacy resident may request a personal leave of absence from the RPD. Requests for leave of absence in the first twelve (12) months of training are limited to situations that would not otherwise be covered by the Family Medical Leave Act (FMLA). Leave of absences for reasons other than this during the first twelve months of training are not allowed.

To begin the process, the pharmacy resident must submit a written request to the program director at least 30 days prior to the beginning of the leave (except in case of emergency). The Leave of Absence Form, obtainable from the graduate pharmacy education office, must contain the reason(s) for the leave, beginning and return dates, the pharmacy resident's signature, and the RPD approval and signature.

A leave of absence should not exceed eight weeks. Benefits coverage is continued during leave under the conditions specified by the Loyola personnel policy. A pharmacy resident must first use available paid time off and sick time (where applicable). Once available paid time off and sick leave if applicable are exhausted, subsequent leave will be unpaid at which point the pharmacy resident will be responsible for maintaining benefits at their own expense.

A pharmacy resident may be required to extend the training period for any dates of absence in excess of allowable paid time off. During the extension, the pharmacy resident will receive regular salary and benefits except for paid time off allowance.

Bereavement

The pharmacy resident may take up to three workdays off with pay as a bereavement leave benefit, in the event of the death of an immediate family member or parent's loss of a pregnancy. Days do not need to be taken consecutively. Implementation of this benefit is as outlined in the current Bereavement Leave Benefit policy.

Jury Duty

Loyola supports a pharmacy resident's civic duty and responsibility to serve on a jury. When a pharmacy resident is selected for jury duty, they should notify the RPD immediately. Jury duty does not affect continuous stipends or benefits.

Victim's Economic Security and Safety Act (VESSA)

The Illinois Victims' Economic Security and Safety Act (VESSA) provides that an employee who is the victim of domestic violence or who has a family or household member who is the victim of domestic violence may be eligible for a total of 12 work weeks of leave during a twelve month period of time to address the domestic violence. VESSA does not create a right for an employee to take leave that exceeds the time allowed under, or in addition to, a leave permitted by FMLA.

School Visitation Rights Act

The Illinois School and Visitation Act grants eligible employees up to eight hours of unpaid leave to attend primary and secondary school conferences or classroom activities at their children's schools. Employees must be employed at least six months.

Parking

Loyola pharmacy residents are required to park their vehicles in designated parking areas. Pharmacy residents are not permitted to park in areas designated for patient and visitor use (unless authorization is first granted by the Parking Office).

All parking lot assignments are made by the Parking Office. Parking fees are the responsibility of the pharmacy resident. Fees will be assessed in accordance to the Parking Department's standard fee schedule.

All penalties for violation of parking assignments will be the responsibility of the pharmacy resident.

Pharmacy residents reporting after hours for emergency call-in/special assignment may request that an officer accompany them to their parking space and escort them back to the hospital.

Other Available Services

ATM

Automatic Teller Machines are provided on or near the campus. Pharmacy residents may use these machines through their personal bank ATM card.

Bus and Escort Service

A bus is operated at the medical center to provide free transportation to and from parking areas. The schedule may be obtained by calling Physical Plant and Grounds. Escort services are available at other times through the medical center Environmental Services Department.

Cafeteria

Loyola has cafeterias which provide pharmacy residents with comfortable surroundings in which to relax and enjoy meals. Bring your own lunch or take advantage of the meals and snacks, which are available for a modest cost. There is also a cafeteria at the Stritch School of Medicine and a coffee shop in the nursing school.

Credit Union

All pharmacy residents may become members of the Loyola Employees' Federal Credit Union, an independent, employee-owned financial institution. The Credit Union offers convenient savings and lending policies through payroll deduction, interest bearing checking accounts, Visa, Individual Retirement Accounts, and Christmas/Vacation Club savings. The Federal Government up to \$100,000 insures accounts. ATM cards are available.

Direct Deposit

Arrangements may be made through the campus Human Resources Office to automatically deposit an employee's paycheck into one checking or savings account. An employee will receive a non-negotiable direct deposit statement with itemized deductions listed on the stub each payday, but the pay will be directly deposited in a selected financial institution or Loyola's Credit Union.

Employee Assistance Program

The Loyola provides the Employee Assistance Program as a confidential way to offer assistance to individuals experiencing personal problems that may require professional help. EAP is one of the ways that Loyola demonstrates its commitment to and investment in its members, and there is no charge for the services provided directly by EAP.

Some of the problems the EAP handles include marital concerns, family conflict, alcohol/drug abuse, emotional difficulties, and job stress. The service provides free assessment and short term counseling when appropriate. In addition, every effort is made to locate local referral resources that will provide affordable services to Loyola employees and residents. For a confidential appointment call (708) 216.4129.

Loyola University Center for Health and Fitness

Membership for the Loyola athletic/recreational facilities is an annual fee for all LUC and LUMC faculty and staff. These fees may be paid through payroll deductions. For further information, contact the Center for Health and Fitness at 327.2348.

Workers' Compensation

Pharmacy residents are covered by Workers' Compensation for any work-related injury, illness, or exposure incurred on the job while performing regular duties. Occupational injuries, illnesses, and exposures are defined as those that arise out of and in the course and scope of your employment. Workers Compensation covers hospital expenses, medical expenses and provides Temporary Total Disability income for occupational injuries, illnesses, and exposures. All pharmacy residents are eligible for this coverage from the first day of residency.

Injuries or accidents that occur while traveling to and from work or when moonlighting are not covered.

If a pharmacy resident is injured at work, he/she MUST get medical help immediately at the current facility. During the day, he/she must go to Employee Health. When Employee Health is closed, injured pharmacy residents should be seen in the emergency room. The pharmacy resident must report the injury to Loyola University Medical Center Employee Health Office within 24 hours. If off-hours, contact the Employee Health by leaving a message including resident's name and pager number.

If a pharmacy resident receives medical attention for an occupational injury, illness, or exposure and receives a bill for those services, it is the pharmacy resident's responsibility to send the bill to the Workers' Compensation Coordinator in Human Resources. Any follow-up medical care **MUST** be coordinated through Employee Health and be provided through the Worker's Compensation program. Although the resident is not obligated to receive continued treatment at this institution, benefits may be delayed or denied if his/her physician does not furnish information on a timely basis to Loyola's Employee Health Office.

Failure to follow the above procedures may result in rejection of Workers' Compensation claim and denial of any future claims for that particular incident.

Any injury, illness, or exposure incurred as a result of activities directly related to assignment should be reported by completing an incident report online and promptly contacting the Employee Health Office. If you have any questions, call Employee Health at 708-216-3400.

Education Assistance Benefit

Loyola pharmacy residents who meet eligibility requirements in accordance with the Loyola policy may qualify for tuition assistance. Pharmacy residents interested in such benefits should secure the current tuition benefits information from the LUMC Benefits Office.

Loyola is required to report the amount of tuition credited on behalf of employees and their dependents as taxable earnings to the employee in accordance with Internal Revenue Service (IRS) requirements and tax regulations.