THE HOSPITAL

Opened in 1855 as the nation’s first children’s hospital, The Children’s Hospital of Philadelphia is dedicated to improving the health of children in our region and around the globe through excellence in patient care, innovative research and high-quality education. The US News and World Report annual guide to “America’s Best Hospitals” and Parents magazine have consistently ranked the hospital the No. 1 pediatric hospital in the US. The Children’s Hospital of Philadelphia is a tertiary care facility and Level I trauma center serving the Delaware Valley, a tri-state area consisting of southeastern Pennsylvania, southern New Jersey and Delaware. The Children’s Hospital of Philadelphia also regularly accepts international referrals from Europe, Africa and the Far East. Today, the Hospital has 516 beds and had more than 1 million outpatient and inpatient visits last year.

The Children’s Hospital of Philadelphia is also a teaching hospital, training pediatricians, pediatric subspecialists, pharmacists, nurses, other health care professionals and basic scientists for positions in academic medicine, community practice, and medical research around the world.

HOSPITAL MISSION STATEMENT

“The Children's Hospital of Philadelphia, the oldest hospital in the United States dedicated exclusively to pediatrics, strives to be the world leader in the advancement of health care for children by integrating excellent patient care, innovative research and quality professional education into all of its programs.”

HOSPITAL VALUES
Commitment
We demonstrate by our action and ongoing spirit and enthusiasm for our purpose and mission.

Communication
We listen carefully to patients, families and each other and respond in a helpful manner. We are open in the sharing of information.

Compassion
We demonstrate sensitivity and caring toward patients, families and each other.

Family-Centered Care
We promote the role of family as the constant in the child's life. We link families with one another in common support. We implement systems that are responsive to families' needs.

Innovation
We develop and apply new knowledge and creativity in patient care, research and education.

Respect
We treat each other, patients, families and visitors with the highest level of courtesy, professionalism and kindness. We appreciate and value individual differences, diversities and functions.

Service Excellence
We deliver extraordinary services to patients, families, visitors and each other.

Teamwork
We collaborate with each other in providing quality patient care in a cost-effective manner and in advancing knowledge.
PHARMACY DEPARTMENT

The Department of Pharmacy Services provides pharmaceutical care through decentralized teams of staff pharmacists and technicians to meet the needs of patients and health care professionals. The Department maintains state-of-the-art inpatient satellites, off-site surgi-center pharmacies, and an oncology care clinic pharmacy. Pharmacy personnel consist of 12 clinical pharmacists, 56 staff pharmacists, 59 pharmacy technicians, 13 administrative staff, 3 residents, 13 support staff and 8 pharmacy interns.

Our clinical pharmacists are highly trained in pediatric pharmacotherapy and specialize in the following areas:

- General Pediatrics
- Cardiac Intensive Care
- Neonatal Intensive Care
- Pediatric Intensive Care
- Investigational Drug Services
- Infectious Diseases
- Oncology/Bone Marrow Transplantation
- Transplantation
- Drug Information

The Department of Pharmacy Services, through our pediatric specialists, provides a full complement of clinical services including:

- Drug information
- Pharmacokinetics and pharmacotherapy consultations
- 24 hours a day, 7 days a week clinical on-call service
- Medication policy development
- Professional staff development

In addition, our specialists are integral members of multidisciplinary committees, such as Therapeutic Standard Committee (P&T Committee), Adverse Drug Reactions Subcommittee, Drug Use Evaluation Subcommittee, Formulary Committee, Medication Safety Committee, Institutional Review Board and various Continuous Quality Improvement Committees (CQI).
PHARMACY DEPARTMENT MISSION AND PRIMARY FUNCTION

The Department of Pharmacy Services of The Children's Hospital of Philadelphia is dedicated to providing the highest quality of pharmaceutical services, integrating dispensing and clinical activities directed toward providing excellence in patient care and the advancement of education and research. In collaboration with physicians and other allied health-care providers, the Department:

- Promotes health throughout the patient care continuum by ensuring the optimal and cost-effective use of medications;
- Exercises leadership in all institutional matters related to the use of drugs;
- Actively promotes programs that enhance knowledge of the optimal use of medications and supports the concept of patient-focused, outcome oriented, pharmaceutical care;
- Commits to basic and clinical research activities dedicated to the advancement of pediatric treatment modalities or delivery systems through the support or initiation of institutional research activities.

RESIDENCY STATEMENT OF PURPOSE

The purpose of the Pediatric Specialty Residency at The Children's Hospital of Philadelphia is to cultivate future leaders in pediatric pharmacy practice. Pharmacists completing this residency will master the principles of pediatric pharmacotherapy and be competent and confident pediatric practitioners capable of providing direct patient care in various pediatric subspecialties. They will understand the principles of a sound pediatric pharmacy operational system and be able to integrate these principles into their clinical practice. These pharmacists will be skilled in educating other health care professionals, patients, and the community on pediatric medication-related issues and will be capable of conducting basic clinical research to answer medication-related questions in the pediatric population. They will demonstrate professional maturity by following a personal philosophy of practice, monitoring their own performance, exhibiting commitment to the profession, and exercising leadership in improving the safety of the medication-use system.

DESCRIPTION OF THE PEDIATRIC SPECIALTY RESIDENCY
The Pediatric Specialty Residency Program is a one-year training program generally lasting from the first week in July through June 30th of the following year. The residency program is accredited by the American Society of Health-System Pharmacists (ASHP). A Certificate for completion of the Pediatric Specialty Residency Program will be conferred to the resident at the completion of the program requirements.

The residency is designed to foster clinical expertise in pediatric pharmacotherapeutics, an understanding of the practical and administrative considerations of providing pharmaceutical care to pediatric patients and experience in teaching as well as clinical research. The resident will function as an active member of various multidisciplinary pediatric teams. He or she will be able to tailor the learning experiences to best meet his or her professional goals. The residency program consists of nine months of required rotations and three months of elective rotations.

Required rotations include:

- Decentralized pharmacy training
- Drug Information/Management/Med Safety/ADRs
- Pharmacokinetics
- General Pediatrics
- Cardiac Intensive Care
- Neonatal Intensive Care
- Pediatric Intensive Care
- Solid Organ Transplant
- Oncology & Bone Marrow Transplantation
- On Call Training

Longitudinal Experience Options:

- Investigational Drug Service
- Bone Health Clinic
- BMT / Oncology Clinic
- Transplant Clinic
- Pulmonary Hypertension Clinic
- Integrated Care Service Clinic
- Anticoagulation Clinic

Elective rotations include, but are not limited to:

- Medication Safety
- Infectious Diseases
• Cardiac Care Unit (CCU), Cardiology
• Nutrition Support
• Pharmacy Administration
• Poison Control
• Other pediatric subspecialties

Additional experiences include participation in the pharmacokinetics/pharmacotherapeutics consultation service, clinical on-call service, drug utilization evaluations, formulary management, multidisciplinary committees, staff development, journal clubs, case presentations, emergency response, pharmacy outreach, seminars and student preceptorship.

RESIDENCY DIRECTOR

Evan Zachary Ramsey, Pharm.D., BCPPS, Clinical Specialist in Education
Zach Ramsey graduated from Hampden-Sydney College in Virginia with a BS in Chemistry and Virginia Commonwealth University School of Pharmacy with a Doctor of Pharmacy degree. He completed both a Pharmacy Practice Residency (PGY1) and a Pediatric Specialty Residency (PGY2) at the University of Kentucky Chandler Medical Center in Lexington, Kentucky. His research has included examining the stability of an extemporaneously prepared hypertonic saline nebulization solution for use in cystic fibrosis patients, antifibrinolytic prophylaxis during on-pump cardiac surgery, the use of prostacyclin therapies in pulmonary hypertension, and the role of hypothermia in drug clearance. He is an active member of PPAG and ASHP and has served on numerous multidisciplinary quality improvement committees within The Cardiac Center of The Children’s Hospital of Philadelphia. Dr. Ramsey holds a faculty appointment at Wilkes University School of Pharmacy and Jefferson School of Pharmacy and coordinates the Pediatric Pharmacotherapy elective courses there. He is actively involved in ASHP, ACCP, and PPAG.

RESIDENCY PRECEPTORS

Heather Monk Bodenstab, Pharm.D., Clinical Specialist in Neonatal/Infant Intensive Care
Heather Monk graduated from the West Virginia University School of Pharmacy with her Doctor of Pharmacy degree. She completed both a Pharmacy Practice Residency (PGY1) and a Pediatric Specialty Residency (PGY2) at The Children’s Hospital of Philadelphia. Her research has included gentamicin pharmacokinetics in neonates and the use of levetiracetam in pediatric patients during status epilepticus. Dr. Monk holds appointments at USIP, Jefferson School of Pharmacy, Wilkes University, and University of Charleston. She is also involved in the Bone Health Clinic, Clinical Nutrition Services, and multiple quality improvement committees. Her areas of interest include neonatal
pharmacokinetics, anti-convulsant use in pediatric seizure disorders, and endocrinology.

**Hailey Collier, PharmD, BCPS, BCPPS, Clinical Specialist in Pediatric Cardiology**
Hailey Collier received her bachelor’s degree in Biochemistry from Elmira College and her Doctor of Pharmacy degree from the Massachusetts College of Pharmacy and Health Sciences. Dr. Collier completed both her Pharmacy Practice Residency (PGY1) and Pediatric Specialty Residency (PGY2) at Le Bonheur Children’s Hospital in Memphis, Tennessee. Selected research included evaluation of acid suppression therapy on the incidence of late-onset sepsis, catheter lock therapy for the treatment of central-line associated bloodstream infections, and a pilot study on the infusion of ethanol lock therapy in infants. During her residency, Dr. Collier obtained her teaching certificate from the University of Tennessee and currently holds appointments at Jefferson School of Pharmacy and Wilkes University. Hailey is an active member of the Pediatric Pharmacy Advocacy Group (PPAG). Her areas of interest include cardiology, critical care, nutrition support, and research/statistics.

**Sarah C. Erush, Pharm.D., BCPS, Clinical Manager and PGY1 Residency Director.**
Sarah Erush received her Bachelor's degree from the Massachusetts College of Pharmacy and her Doctor of Pharmacy degree from Philadelphia College of Pharmacy and Science (now USIP). She completed a Drug Information Specialty Residency at Thomas Jefferson University Hospital. She is a Board Certified Pharmacotherapy Specialist (BCPS) and was previously Director of Drug Information Services and Clinical Coordinator and Residency Coordinator at the University of Pennsylvania. Dr. Erush holds appointments at USIP, Jefferson School of Pharmacy and Wilkes University. She is a member of ACCP, ASHP and PPAG. Her other areas of interest include dietary supplements, pharmacoeconomics, medical writing and anticoagulation.

**Jennifer Hewlett, Pharm.D., Clinical Specialist in Solid Organ Transplant and Nephrology**
Jen Hewlett received her Doctor of Pharmacy degree from the University of Maryland School of Pharmacy and completed a Pharmacy Practice (PGY1) residency at Palmetto Health Richland and a Pediatric Specialty (PGY2) at Texas Children’s Hospital. Her area of interest includes immunosuppression in solid organ transplant.

**Rachel Hughes, Pharm.D., BCPPS Clinical Specialist in Neonatal/Infant Intensive Care**
After graduating from the University of Missouri-Kansas City with her Doctor of Pharmacy degree, Rachel Hughes completed her Pharmacy Practice (PGY1) and Pediatric Specialty (PGY2) at The Children’s Hospital of Philadelphia. Her
areas of interest include neonatology, pain management and pulmonary hypertension. Dr. Hughes has conducted research in heparin dosing in patients on ECMO and oral voriconazole dosing in pediatric patients. She also serves as the clinical pharmacist for the Pain Management Service and is a member of ACCP, ASHP, and Kappa Epsilon Pharmaceutical Fraternity.

**Laura Jones, Pharm.D., Clinical Specialist in Cystic Fibrosis Clinic**
Upon receiving her Doctor of Pharmacy degree from the Bouvé College of Health Sciences at Northeastern University, Laura Jones completed a Pharmacy Practice Residency (PGY1) at the University of Rochester Medical Center and a Pediatric Specialty Residency (PGY2) at Nationwide Children’s Hospital. Dr. Jones’ areas of interest include cystic fibrosis, pulmonary diseases, and pharmacy student/resident education. She is an active member of ASHP, PPAG, and ACCP.

**Connie Law, Pharm.D., Clinical Specialist in Drug Information and Policy Development**
Connie Law received her Doctor of Pharmacy degree from the University of the Sciences in Philadelphia (USIP) and completed a Pharmacy Practice (PGY1) at The Philadelphia Veterans Affair Medical Center and a Drug Information Specialty (PGY2) at Thomas Jefferson University Hospital. Dr. Law’s areas of interest include pharmacoeconomics, pharmaoinformatics, anticoagulation, and the treatment of diabetes. She has completed research in statin therapy in HCV and non-formulary medication management. Dr. Law is also involved in Anticoagulation Monitoring Program and Drug Use Evaluation committee at CHOP. She is a member of ACCP, ASHP, and MACCP.

**Abby Schumacher, Pharm.D. Clinical Specialist in General Pediatrics**
Abby Schumacher graduated from the University of Rhode Island College of Pharmacy with her Doctor of Pharmacy degree. She completed both a Pharmacy Practice Residency (PGY1) and a Pediatric Specialty Residency (PGY2) at Yale-New Haven Hospital in New Haven, Connecticut. Dr. Melesciuc also completed her teaching certificate through the University of Connecticut School of Pharmacy. Dr. Melesciuc holds appointments at Jefferson School of Pharmacy and Wilkes University. Her areas of focus include neurology, rehabilitation-medicine, and integrative care services. Dr. Melesciuc is a member of ASHP and PPAG. Her areas of interest include epilepsy disorders, ketogenic diet, and pediatric immunizations.

**Krisha Le Palma, Pharm.D., Discharge Counseling Coordinator**
Krisha Le Palma graduated from Philadelphia College of Pharmacy at the University of Sciences in Philadelphia with a Doctor of Pharmacy degree. She completed a Pharmacy Practice Residency (PGY1) at The Children’s Hospital of Orange County (now CHOC Children’s) in Orange, California, and a Pediatric Specialty Residency (PGY2) at The Children’s Hospital of Philadelphia. Dr.
Palma has previous experience as a Clinical Specialist in Solid Organ Transplant & Nephrology, and in 2016 transitioned to her current role, which includes creation of a pharmacist-led discharge medication counseling program. Her areas of interest include immunosuppression, infectious diseases in immunocompromised hosts, management of drug-drug interactions, reduction of alert fatigue and improving nonadherence in the pediatric population.

Neil Patel, Pharm.D., BCOP, Manager, Ambulatory Pharmacy and Investigational Drug Service
Neil Patel received his Doctor of Pharmacy from the Ernest P. Mario School of Pharmacy at Rutgers University in 2008. He completed both a Pharmacy Practice (PGY1) and Pediatric Specialty (PGY2) residency at The Children's Hospital of Philadelphia. Prior to his residency training, Dr. Patel was an intern at CHOP for three years. He is a pediatric oncology clinical pharmacist by training, and served as the clinical pharmacist for oncology and blood/marrow transplant program after completing his residency. Currently, he leads the investigational drug service, oncology clinic pharmacy, ED pharmacy, and interfaces with various ambulatory care service areas as a pharmacy manager and liaison. His research has included tacrolimus dose titrations in pediatric liver or renal transplant recipients, vancomycin dosing requirements in pediatric patients with ventricular CSF shunts, and use of sodium acetate for urinary alkalization in pediatric oncology patients receiving high dose methotrexate. He is a member of ASHP and the Children's Oncology Group (COG).

Joseph Sciasci, PharmD, Clinical Pharmacist in Pediatric Oncology and Blood/Marrow Transplant
Joe received his Doctor of Pharmacy degree from the Philadelphia College of Pharmacy at the University of the Sciences in Philadelphia. He completed a Pharmacy Practice (PGY1) at the Children’s Hospital of Wisconsin, and a Oncology Specialty residency at St. Jude Children’s Research Hospital. His areas of interest include clinical implementation of pharmacogenetics into clinical practice. He is a member of ASHP, PPAG and COG.

Karen Shalaby BS, Pharm.D., Medication Safety Officer/Quality Assurance
Karen Shalaby attended Purdue University where she received her Bachelor of Science and PharmD degrees. Following this, she worked as a Clinical Pharmacist at the Medical University of South Carolina on the Neurology and Orthopedic units. She later completed both a Pharmacy Practice Residency (PGY1) and a Drug Information Specialty Residency (PGY2) at the Hospital of the University of Pennsylvania. She served as a Drug Information Specialist and Medication Safety Officer while employed at the Hospital of the University of Pennsylvania for 15 years. Her areas of interest include medication safety, second victim programs, and quality improvement.

Winson Soo-hoo, R.Ph., MBA, Director of Pharmacy Services
Winson Soo-hoo graduated from Philadelphia College of Pharmacy and Science and received his MBA from Drexel University. He has worked at CHOP in the Department of Pharmacy and, for a brief time, in Health Information Services for more than 30 years. He served as the President of the CHCA Pharmacy Directors Forum and is actively involved with both CHCA and ASHP.

Jeanette Trella, Pharm.D., BCPPS, Managing Director, the Poison Control Center Jeanette Trella graduated from the University of Cincinnati College of Pharmacy with her Doctor of Pharmacy degree. She completed a four year pharmacy internship at Cincinnati Children’s Hospital Medical Center and a PGY1 Residency at The Children’s Hospital of Philadelphia. Upon completion of residency training Dr. Trella was a Clinical Specialist in Integrated Care, Pulmonary, and General Pediatrics at CHOP before stepping into her new role as Managing Director of the Poison Control Center in 2012. Her research has included emergency care for victims of sexual offenses and extended-interval aminoglycosides in pediatric cystic fibrosis patients. Dr. Trella currently holds a faculty appointment at Wilkes University School of Pharmacy and is an active member of the American Association of Poison Control Centers (AAPCC), American Academy of Clinical Toxicology (AACT), ASHP, ACCP, and PPAG.

RESIDENTS SALARY AND BENEFITS

- $50,500 per year stipend
- 25 days per year Paid Personal Leave (PPL) which include vacation and sick days (some of this time will be used as comp. days for working weekends)
- 7 holidays (the resident will work one of the seven holidays)
- As a full time employee, the resident will receive the hospital benefits program which includes medical, dental, vision, prescription, short term disability, life insurance, medical and dependent care reimbursement accounts, and 403b plan.

RESIDENCY TRAVEL

The Department of Pharmacy will provide reasonable reimbursement for travel for the resident during the year for required meetings, including:
ASHP Midyear Clinical Meeting
The resident is expected to attend the ASHP Midyear Clinical Meeting in December of each year. In exchange, the resident will have responsibilities at the Midyear including, but not limited to recruiting future residency candidates, staffing at the residency showcase, and interviewing candidates.

Eastern States Residency Conference or Specialty Meeting (e.g. PPAG)
The resident is expected to attend and present his/her residency project in the spring of the residency year. The Department of Pharmacy will be responsible for the cost of attending the conference.

Attendance at other conferences will be at the discretion of the Director of Pharmacy and the Residency Director.

RESIDENT’S RESPONSIBILITIES

Service Commitment
The resident is required to staff every third weekend and one holiday. Weekend staffing will consist of an 8-hour operations shift or an on-call day during which time the resident will be required to carry the clinical pharmacist on-call pager.

Clinical On-call Rotation
The Department of Pharmacy Services responds to drug information inquiries from health care professionals within the institution as well as from other institutions. A clinical pharmacist also reviews all drug levels reported by the Clinical Laboratory twice daily and the medical staff is contacted with appropriate recommendations if dosage adjustments are required. A clinical pharmacist is available via the clinical pharmacist on-call pager 24 hours a day, 7 days a week for consultations on therapeutic issues. The resident will be part of the clinical on-call rotation after an adequate orientation period.

Residency Project
Each resident is required to complete a residency project. The project must be presented at the Eastern States Residency Conference or appropriate specialty meeting (e.g. PPAG) and should be of benefit to The Children's Hospital of Philadelphia Department of Pharmacy Services. Each resident must have a residency preceptor to act as a mentor for the project. The Residency Director must approve the project prior to commencing.

The residency project must follow a timetable agreed upon by both the resident and the mentor. Sufficient data must be collected at the time the project is presented at the Eastern States Residency Conference or appropriate specialty meeting (e.g. PPAG). In addition, the project must be written up in publishable format upon completion of the residency. Should the resident fail to complete the project prior to the completion of the residency, the Residency Certificate will be
withheld for up to six months to allow for additional time for completion of the project. A Residency Certificate will not be awarded if the resident fails to complete the Residency Project after the 6-month extension period.

Drug Use Evaluation/Formulary Monographs/Adverse Drug Reaction Reporting
Each resident must complete a minimum of one drug use evaluation (DUE), one drug monograph for formulary addition, one formulary category review and actively participate in the reporting of adverse drug reactions.

Presentations
- Each resident is required to present a patient case to the preceptors during each of their required rotations.
- Each resident is required to participate in the weekly Rx Update (journal club).
- Each resident is required to present four formal journal clubs during the year.
- Each resident must present his/her residency project to the pharmacy staff prior to the Eastern States Residency Conference.
- Each resident must create a CE module for the pharmacy staff prior to completion of the residency.

Teaching
The Children's Hospital of Philadelphia Department of Pharmacy Services offers various rotations for students from Wilkes University, Philadelphia College of Pharmacy and Jefferson School of Pharmacy. The resident is expected to participate in the preceptorship of these students to refine his/her teaching skills. Additionally, teaching in didactic lectures and/or facilitation of small group laboratory sessions will be required.

Rotations
Upon completion of orientation, each resident will complete 9 required clinical rotations and has a minimum of 2 months for elective rotations. In addition, each resident will have at least two longitudinal experiences chosen from the list above. These experiences are approximately one half day a week throughout the year. They may also have a concentrated experience in the Investigational Drug Service if they have not had a similar exposure in their PGY1 program.

Evaluations
During each clinical rotation, the resident will receive a midway and final summative evaluation by his/her preceptor. The summative evaluation at the end of the rotation will assess the resident’s progress in meeting the residency goals and objectives.

The summative evaluation is considered the “final grade” of the rotation. The rotation will be graded on a pass/fail basis. Should the resident fail the rotation or not complete the rotation, the rotation must be repeated. Failure of a required rotation twice may lead to dismissal from the Residency Program.
The resident will also complete three additional evaluations at the end of each rotation, a self-evaluation and an evaluation of the preceptor and the rotation.

The Residency Director will also conduct a quarterly evaluation. The purpose of the quarterly evaluation is to keep the resident on track with his/her residency goals and objectives and assigned/required projects. This evaluation will also consist of a review of progress of all the residency goals and objectives to date. The residency training plan may be adjusted at each quarterly evaluation as needed. Any goal/objective that has been evaluated as “achieved” twice in a row, may be considered for elimination from evaluation in future rotations.

If the resident has 30% of their goals or objectives that remain graded as a "Needs improvement" throughout the year, a decision can be made by the Residency Director in conjunction with the preceptors to not award a residency certificate.

Residents and Preceptors must jointly complete the First Day and Last Day of Rotation Checklist and submit it to the Residency Director. Failure to complete the Last Day of Rotation Checklist WILL delay the start of the next rotation! All PharmAcademic evaluations MUST be completed on the last day of the rotation!!!

Residency Meetings
Residents are required to attend weekly Rx Update, scheduled case presentations, and any scheduled Staff Meetings. Periodic residency meetings will be scheduled with the Residency Director to assure the residents are on track with their required projects and timelines. The residents will be required to attend all established meetings.

Resident’s Notebook
Each resident is expected to maintain a Resident’s Notebook. The notebook may be electronic or hard copy. It should contain copies of all completed projects and presentations, as well as any other information the resident or preceptor deems relevant. This information should also be uploaded into PharmAcademic by the resident.

Residency Certificate
The resident will be awarded a Residency Certificate upon successful completion of the following requirements of the residency:
Follow the hospital and departmental policies and procedures
- Successful completion of all required and elective rotations
- Completion of a minimum of one formulary monograph and one formulary category review with presentation to the appropriate committee
- Completion of a minimum of one drug use evaluation with presentation to the appropriate committee
- Completion of a CE module for the Pharmacy Staff
Completion of a Residency Project and preparation of a manuscript in publishable format
Presentation of the Residency Project at the Eastern States Residency Conference (or a suitable alternative conference)

Good Luck in your Residency Year!