PGY-1 Pediatric Pharmacy Residency Program
PhORCAS Program Code 190313

Valley Children’s Hospital, located in Madera, California, is a not-for-profit, state-of-the-art children’s hospital on a 50-acre campus with a medical staff of more than 550 physicians. In California, Valley Children’s treats more inpatient cases than any pediatric hospital north of San Diego, making it the second-largest children’s hospital in the state. This 358-bed facility is one of the largest hospitals of its type in the nation.

**Pediatric Pharmacy Residency Program (PGY1)**
Valley Children’s Hospital offers a one-year, postgraduate residency program in pharmacy practice with an emphasis in pediatrics. This program will teach you to convert didactic concepts into sound drug therapy using a hands-on approach. Throughout the year, resident activities will include providing patient-specific clinical pharmacology in both inpatient and outpatient areas, providing drug education to medical residents and nurses, precepting pharmacy students, and participating in administrative activities.

**Period of Appointment:** 12 months

**Salary:** Approximately $39,500 annually, paid biweekly

**Health Benefits:** Residents are entitled to full health benefits. Plans will be selected upon arrival. Supplemental coverage for family members may be purchased.

**Weekend Staffing:** Residents are required to staff the inpatient pharmacy every third weekend. Staffing time is considered overtime.

**Professional Leave:** Residents are encouraged to attend and participate in conventions and professional meetings. Residents are required to attend the Western States Conference in May where they will present their yearlong research project. Other possible conferences to attend include the Pediatric Pharmacy Advocacy Group Annual Conference, ASHP Midyear Clinical Meeting and CSHP Seminar.

**Vacation/Sick Days:** Residents will earn hours of paid time off (PTO) every pay period. PTO includes hours taken for both vacation and sick days and must be approved by the Residency Director.

**Examination and Licensure:** Residents are required to take the NAPLEX and CPJE (California Pharmacy Jurisprudence Examination) prior to the start of residency. Residents must have a California Intern License if exam results are not back before the start of the residency. Residents failing to pass the required board exams within the first 90 days of the residency will be dismissed from the ASHP accredited residency program. Per ASHP Residency Standards (2014), residents must be licensed for at least 2/3 of the residency year. Therefore, after passing exams, licensure must be obtained within the first 17 weeks of starting the residency or residents will be dismissed from the program.
Rotations

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<th>Required Rotations</th>
<th>Elective Rotations**</th>
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| **Direct Patient Care Rotations** (six weeks each) | • General Medicine  
• Pediatric Intensive Care Unit  
• Neonatal Intensive Care Unit  
• Hematology/Oncology  
• Infectious Diseases | • Parenteral Nutrition  
• California Poison Control System |
| **Ambulatory Care Rotations** (six weeks each) | • Neurology Clinic | • Primary Care Clinic |
| **Operational Rotations** (six weeks each) | • Pharmacy Operations (staffing)  
• Pharmacy Administration  
• Medication Utilization Subcommittee/Pharmacy & Therapeutics Utilization Committee (12 weeks) | • Information Technology Service |
| **Longitudinal Experiences** (yearlong) | • Pharmacy Operations (staffing)  
• Anticoagulation Clinic  
• Research Project  
• Teaching and Education | • Committee Member |

**Resident is allowed to choose one six-week elective for the end of the residency year. Elective may be a rotation he or she has already completed.

Presentations and Teaching
- Journal club presentations, patient case presentations, drug consults every six weeks
- 10-minute PowerPoint presentation at monthly Pharmacy Staff and Technician meetings
- A one-hour didactic lecture for APPE pharmacy students from local schools of pharmacy
- Resident research project CE offered to local CSHP members
- Active role in precepting pharmacy students on rotation at Valley Children’s Hospital

Other Learning Opportunities
- Weekly pediatric core topic lectures lead by pharmacists (July-December)
- Biweekly medical staff disease state lectures lead by medical specialists

Description of Rotations

**General Medicine** – Residents will attend morning report, radiology rounds and medical rounds with the medical team and answer all questions that may arise. Residents will also manage aminoglycoside, vancomycin, heparin, warfarin and enoxaparin protocol patients daily and utilize basic kinetics to adjust dosing. Residents are expected to review various topics that they encounter proactively and educate medical residents and medical/pharmacy students as needed.

**NICU** – This Neonatal Intensive Care Unit (NICU) rotation is pharmacist-centered and does not consist of daily rounds with physicians. Residents are in charge of medication monitoring including epoetin alfa, vancomycin and aminoglycosides. Residents are responsible for writing orders based on currently
established protocols. The resident and preceptor will have topic discussions and hold walking rounds throughout the rotation on various patients. With the flexibility of this rotation, it is easy to tailor this to each individual resident’s interest.

**PICU** – On the Pediatric Intensive Care Unit (PICU) rotation, the resident attends teaching rounds and identifies and resolves medication therapy issues that may arise. The resident initiates and documents clinical interventions, provides therapeutic drug monitoring and is involved in educating medical staff and patients. The resident will work closely with the PICU clinical pharmacist to address medical issues and develop therapeutic monitoring plans.

**Rehab (elective)** – Valley Children’s has the only independent pediatric rehabilitation center in California accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF). This rotation rounds on a weekly basis and covers a diverse set of patients that allows residents to develop a variety of problem-management skills in disease states such as pain management, anxiety, insomnia and diabetes insipidus. This rotation focuses on helping healthcare providers optimize medication regimens. When patients are ready, residents prepare and dispense medications for patient Community Reorientation Leaves (CRL), which allow patients to leave the hospital for 4-8 hours. The resident will dispense medications needed to cover the patient during this time period and provide proper medication counseling.

**Pharmacy Operations** – Within this rotation, residents learn to be a part of the inpatient pharmacy workflow. Each resident will learn all the roles and responsibilities of pharmacists and pharmacy technicians to develop a better understanding of how all products are made, recorded and delivered. Throughout the day, residents will perform tasks such as checking/updating medication carts, review medication orders and profiles, perform medication reconciliation and research drug information questions. By the end of the rotation, the resident should have a strong understanding of the inpatient pharmacy operations. Residents will also be required to staff on weekends within the main pharmacy or at the pharmacy satellites, utilizing the experience they obtain during this rotation.

**Anticoagulation** – Each resident will be trained on the pharmacist run anticoagulation protocol and is assigned specific patients for the year to follow. While working in conjunction with preceptors, residents take on the responsibility of monitoring and adjusting anticoagulation medication doses and schedules based on patient’s specific INR/PTT levels and information obtained from patient/parent interview. Residents will follow-up on lab tests, write new/refill prescriptions and update chart documentation. This yearlong rotation allows the residents to develop relationships with their patients and stress the importance of patient therapy and compliance.

**Administration** – The objectives of this rotation are to understand the principles of various approaches to department planning, evaluate current protocols, review regulatory agencies and effectively communicate verbally and in writing. Residents will work directly under the guidance of the pharmacy director, operations manager, clinical coordinator or other administrative leaders depending on the project at hand. Residents will attend meetings, develop and implement policy and procedures and assist in ensuring departmental compliance with regulatory requirements. Residents will develop knowledge of the organizational structure of the hospital, pharmacy department, and medical staff/committees.
Neurology – The resident works closely with neurologists, nurse practitioners and the clinical pharmacist in the neurology outpatient clinic. The resident is responsible for identifying and resolving medication therapy issues for patients and optimizing outcomes by providing evidence-based, patient-centered medication therapy. Residents help triage phone calls, evaluate charts for medication refills, perform pharmacokinetics for anticonvulsant medications and research drug information requests. Disease states covered during this rotation will include seizure disorders, headaches/migraines, chronic pain, movement disorders and behavioral disorders.

Oncology – The pharmacy resident is responsible for providing pharmacy services to both inpatient and outpatient oncology patients. This includes, but is not limited to, participating in weekly rounds with the multi-disciplinary oncology service team, timely and accurate dispensing of chemotherapy agents, assisting with pharmacist order entry/verification, initiating and following pharmacy protocol patients including aminoglycosides, vancomycin, and anticoagulation, and providing drug information for both nurses and physicians as needed.

Infectious Disease – Infectious Disease (ID) is a required longitudinal rotation for pharmacy residents and is an optional six-week elective. Residents round with the ID team once a week. The resident assists with patient services working alongside ID physicians, medical residents, medical students and the clinical pharmacist. The resident serves as a resource to optimize antimicrobial therapy by providing evidenced-based, patient-centered recommendations to the ID team.

Poison Control (elective) – Residents may be asked to staff the Poison Control Center located on the Valley Children’s Hospital campus, one of only 61 centers operating in the United States. The resident must monitor telephones for various questions throughout the day and utilize databases at hand to answer drug toxicology questions effectively and efficiently. Pharmacists staffing the Poison Control Center often call emergency departments (ED) when patients are en route to help ED staff prepare or even to answer ED calls about a patient currently being seen. Pharmacists have also determined the need to send an ambulance to a patient’s home if the situation was warranted. From this rotation, residents will learn to navigate through toxicology based questions and be confident in making decisions and providing education over the phone.

MU/PTU – The Pharmacy, Therapeutics and Utilization (PTU) Committee has representatives from each medical staff department. The purpose of the PTU Committee is to ensure continuous improvement of the quality of patient care and outcomes. The Medication Utilization (MU) Subcommittee is part of the PTU committee and is responsible for development and implementation of any changes to patient care guidelines, policies/procedures or protocols that are medication or pharmacy related. The resident will serve on both committees. Some of the activities the resident takes part in include formulary review, medication utilization evaluations, evaluation of ISMP recommendations and alerts, reviewing quarterly reports of PRN indications, unapproved abbreviations and drug recalls.

Outpatient Primary Care (elective) – Residents will work alongside the clinical pharmacist at the Charlie Mitchell Children’s Clinic (CMCC). CMCC is known for its care of children with multiple or complex chronic disease states and their well siblings. Residents will become familiar with general medicine disease states (otitis media, asthma, etc.) and outpatient treatments, as well as assessing medication regimens for complex disease states. Residents will conduct patient
consultations, provide drug information, act as a liaison between physician and retail pharmacy, assist with medication school forms and review medications for RN home health visits.

**Information Technology (elective)** – The resident will work on projects that involve information systems relating to automated medication dispensing, robot systems, CPOE and medication bedside scanning. The resident will learn how information systems are managed, maintained, upgraded and implemented, and how pharmacy information is processed and managed within the hospital setting. Residents will learn computer programming skills and shadow the IT pharmacists as they attend meetings and preform their daily duties.

**Parenteral Nutrition** – Residents will work with pharmacist preceptors to prepare and dispense total parenteral nutrition (TPN). Residents will review patient labs, nutritional status and disease state then work with providers to optimize parenteral nutrition. Disease states covered include prematurity/low birth weight, inflammatory bowel disease, short bowel syndrome and malnutrition syndromes. Residents will gain an understanding of pediatric and neonatal nutritional needs, fluid and electrolyte balance, interpretation of blood gas values and laboratory values, and sterile compounding including USP Chapter 797 guidelines.
Application Processes and Requirements

Final deadline for submission of all application materials is Jan. 3, 2017. Candidates must complete both standard application requirements in PhORCAS and meet/submit the program supplemental requirements listed below:

- Doctor of Pharmacy degree from an ACPE accredited school of pharmacy; a M.S. or B.S. in Pharmacy with equivalent clinical experience
- Be eligible for licensure in the state of California
- Completed online application for employment at valleychildrens.org
- Three professional recommendations in PhORCAS (completion of standard reference form in PhORCAS) Example: Two references from preceptors who can speak of your clinical abilities and one reference from your pharmacy employer. If you have completed a pediatric rotation, one reference should be from that pediatric preceptor
- Your letter of intent uploaded to PhORCAS should answer two questions
  - Why you want to complete a pediatric residency
  - Why you want to complete a pediatric residency at Valley Children’s Hospital
- Your transcripts must include the most recent rotation grades (or have your preceptor email your grade directly at the completion of the last rotation of the year)
- Be available for interview in late January or February
- A 15-minute PowerPoint presentation on a pediatric topic is required during the interview – check online for list of topics. Website: http://bit.ly/ValleyChildrensPGY1

It is highly recommended that candidates complete a pediatric rotation prior to application submission or on site interview. If candidates are unable to obtain a pediatric rotation, there must be some pediatric experience documented in the extracurricular information portion on PhORCAS and on your Curriculum Vitae.

If there are additional questions about the residency program or application requirements please email at pharmacy@valleychildrens.org.

For more information, visit our website or email any of the current residents.

Website: http://bit.ly/ValleyChildrensPGY1

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