

RADIOLOGY

RESEARCH

FELLOWSHIP

PROGRAM



**Children's Hospital
of Philadelphia®**

Department of Radiology

Welcome from the Radiologist-in-Chief and Chair, *Dr. Kassa Darge*



Research, along with clinical service and education, is one of CHOP's and the Department of Radiology's strategic pillars. Research in our Department extends from basic to translational to clinical. We invest significant resources to advance research and achieve innovations in the subspecialty of pediatric radiology. One of the recent highlights in the advancement of research in our Department has been the creation of a well-structured and well-supported program of a Research Fellowship in various highly subspecialized areas. This program has proven to be an academic career propeller for the research fellows as well as a major source of academic transformation within the Department. We have learned the value and impact of focused research in an area of pediatric radiology, even within a limited time. This brochure describes the Research Fellowship program at CHOP and highlights the possibilities that such a program can open for participants. I very much hope that through this introduction we have spurred your interest and created a pathway for you to connect with us.

Welcome from the Vice Chair for Clinical Research, *Dr. Hansel Otero*



To all pediatric radiologist colleagues around the world I encourage you to consider the unique opportunity offered by the CHOP family with our Pediatric Radiology Research Fellowship. This program is designed for subspecialist pediatric radiologists looking to launch an academic career with the backing of the multitalented faculty of a world class institution. For international graduates this is an opportunity to enter an alternative pathway for achieving board certification through a research program, while bolstering their CV with impactful publications in our subspecialty. We offer unique research support in our field of pediatric radiology through our Clinical Research Core as well as a rich patient environment and a deep PACS archive. This confluence of components presents a rare opportunity for motivated junior pediatric radiologists to continue to be financially compensated while performing various kinds of pediatric radiology research.

Children's Hospital of Philadelphia



Nighttime view of CHOP's main hospital.

Children's Hospital of Philadelphia (CHOP) is the nation's oldest hospital dedicated exclusively to the care of children. Since 1855, CHOP has been the setting for many dramatic firsts in pediatric medicine. Today, families facing complex conditions come to CHOP from all over the world. Our care and innovation repeatedly earn us a spot on U.S. News & World Report's

Honor Roll for the nation's top Best Children's Hospitals. CHOP is a 546-bed tertiary care hospital. The hospital handles approximately 29,000 inpatient admissions, more than 80,000 emergency department visits, and over 1 million outpatient visits per year. Its catchment area includes West and Southwest Philadelphia, for which CHOP serves as a community hospital. CHOP is also a major tertiary referral center for the entire Delaware Valley, which has a population of approximately six million. In addition to our main campus, CHOP has established a Care Network that includes 31 primary care practices, 16 specialty care centers, and 5 surgery centers. Combined, the ambulatory network currently provides more than 1,290,000 outpatient visits a year. This number will increase significantly after the opening of an additional 105-bed inpatient hospital in King of Prussia (CHOP KOPH) in late 2021. More than 20,000 people work at CHOP, including over 2,000 physicians in various pediatric subspecialties.

CHOP is an independent entity but has strong ties with the University of Pennsylvania. Most investigators at CHOP are faculty members of the Perelman School of Medicine of the University of Pennsylvania. Together, these two institutions form an extraordinary intellectual and scientific community that includes the sharing of staff and resources with their corresponding departments.



CHOP's Roberts Center for Pediatric Research.

Department of Radiology

The Department of Radiology at Children's Hospital of Philadelphia comprises over 500 vibrant medical staff committed to the discipline of pediatric radiology. Our team of about 50 pediatric radiologists perform clinical services in one or more of the five clinical divisions, including the Division of Interventional Radiology, Division of Nuclear Medicine, Division of Fetal Imaging, Division of Neuroradiology, and Division of Body Imaging (with subspecialty sections in Musculoskeletal Imaging, Emergency Radiology, Genitourinary Imaging, Gastrointestinal and Hepatic Imaging, Oncologic Imaging, Cardiovascular and Lymphatic Imaging, Pulmonary Imaging, Neonatal Imaging, and Fetal MR Imaging). In addition, we have about 15 clinical fellows in body imaging, neuroradiology and interventional radiology. About 50 residents from different programs rotate through our Department annually. The Department of Radiology has all kinds of imaging modalities at the high-end level, including 12 MR and 1 PET MR scanners. Currently, our Department of Radiology performs more than 250,000 imaging examinations per year.

The Department of Radiology uses cutting-edge technology in all imaging modalities and undertakes research initiatives in both clinical and basic science. Exciting research possibilities include projects in Contrast-Enhanced Ultrasound (CEUS), 3T MR imaging, 64-detector CT scanning, PET/CT and PET/MR imaging, SPECT CT, and Magnetoencephalography (MEG). Research takes place in a state-of-the-art translational research building with availability of all imaging modalities for animal research.

Research Fellowship Program

The research mission of the Department of Radiology at CHOP is to pursue and disseminate accurate, innovative work in fetal, pediatric and adolescent imaging. Recognized by the American College of Radiology for our commitment to safe imaging practices in computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine and ultrasound, we aim to strengthen our distinction by becoming the leading site for clinical and translational research in pediatric radiology across the globe.

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The Department conducts a wide spectrum of clinical and translational research related to pediatrics in the areas of interventional radiology, musculoskeletal radiology, cardiovascular imaging, lymphatic imaging, pulmonary imaging, oncologic imaging, emergency radiology, neonatal imaging, gastrointestinal, genitourinary imaging, fetal imaging, neuroradiology, informatics, education, quality improvement, healthcare policy and global health.

The **Radiology Research Fellowship** entails a 2-year commitment. Individuals who have completed radiology residency or, even better, a year of pediatric body radiology, neuroradiology, or interventional radiology training and demonstrated interest in research are encouraged to apply. Salary support will be provided, as will tuition support where applicable.

All Research Fellows have an assigned mentoring committee composed of a primary mentor in their area of research and secondary mentors to further support their work. With their primary mentor they will plan out a research strategy, identify projects and databases, and set out to reach the ultimate goals of publishing and presenting multiple completed works at conferences. They will also be supported to look into possible grant funding of a potential research project. The experience and productivity of the research fellowship is an ideal springboard for launching a highly successful academic career.

The Research Fellows will have access to our dedicated **Clinical Research Core (CRC)**. The CRC team provides a research assistant for each subspecialty in the Department as well as quality improvement and education. The research assistants perform administrative tasks such as IRB applications. In addition, the CRC provides research sonographers, research MR technologists, MRI physicists, a biostatistician, a medical writer, a medical illustrator, a grant support team, and a multimedia specialist to support fellows with their research work.

Our prior and current research fellows have focused on the following subspecialty areas: neuroradiology, fetal imaging, MSK imaging, GU imaging, Non-Accidental Trauma imaging, Cardiovascular and Lymphatic imaging, neonatal imaging, Artificial Intelligence (AI), Education, Center for Pediatric Contrast Ultrasound (CPCU), and Radiology Global Outreach and Education.

Learn more about our research program at
<https://www.research.chop.edu/radiology-clinical-research-core>

Application Process and Selection Criteria

Candidates for the Research Fellowship program can be either a U.S. citizen physician or an international medical graduate. U.S. citizen physicians will be able to dedicate 80% of their time to their research work and 20% to their clinical work. International medical graduates dedicate 100% of their time to their research and are expected to complete their USMLE steps in order to transfer to our Clinical Fellowship program after the completion of their research fellowship.

We review the research track record and interest of prospective Fellows to determine the specific area of research fellowship that they will pursue in our Department. We try to ensure that our fellows cover different areas of research within the Department. We are open to discussion of alternate research areas, but currently we are actively seeking candidates interested in pursuing a Research Fellowship in the subspecialties of pediatric neuroradiology, pediatric contrast ultrasound, patient safety and quality, and gastrointestinal imaging.

Diversity and inclusion are very important to our Department, and we encourage applicants from all backgrounds to apply to our program. Our goal is to create a safe, culturally competent, diverse, inclusive, and caring environment for all of our staff, including Fellows.

The application process begins about a year before the start of the Fellowship. Applications will be accepted on a rolling basis.

Fellows' Benefits and Salary

Fellows are offered a competitive salary and annual funds for research conference attendance. They are provided an office space with a personal computer at the Radiology CRC office complex in the Roberts Research Building. A laptop will also be made available to allow them to work remotely.

Fellows have access to a variety of benefits offered by CHOP including medical, prescription drug, dental, and vision insurance. Fellows also are eligible for the **403(b) retirement plan**, which CHOP will match at a rate of up to 6% of pay after one year of service. CHOP also offers **basic life insurance** as well as additional **supplemental life insurance**. **Short-term** and **long-term disability** benefits are also available.

In addition, CHOP offers various **wellness programs** to help promote the work-life balance of staff. CHOP's partner, Virgin Pulse, offers various programs including health screenings and assessments, Redbrick rewards program, health coaching, diabetes prevention program, a fitness track program, stress reduction program, and a smoking cessation program. In addition, there are various fitness center discounts and reimbursements as well as reimbursements for weight management programs. There is a fitness center within the Roberts Research Building, too. Our Department also offers various wellness activities including an employee shadowing program, monthly wellness talks, career exploration for community outreach, charity support through physical activities, and various team building gatherings.

Testimonials from Current and Prior Fellows



"I have been grateful for the opportunity to be a Radiology Research Fellow in Pediatric Neuroradiology at CHOP. The Department of Radiology has been incredibly welcoming to me as an international medical graduate. In addition to the research and multiple opportunities for collaborative research across the field of Pediatric Neuroradiology and Pediatric Radiology, the Department has afforded and supported me with advanced clinical training in these subspecialties. For me, CHOP and the Department have provided me opportunities that have leveraged my career and allowed me to become a fully trained Pediatric Neuroradiologist and soon, Pediatric Radiologist."

Dr. Sara Teixeira, Neuroradiology Research Fellow, 2018-20



"I couldn't be more grateful for the CHOP education research fellowship. The continuous support and mentorship I received made me realize I was not just a researcher, but part of a family. At the same time, this fellowship connected me with healthcare education leaders across the nation and gave me a front row seat in our changing field through leadership positions on national committees, allowing me to be a part of critical deliberations and influence the future of medical education. There is simply no other program that brings together the number of resources and caliber of education scientists to tackle the education landscape of tomorrow. This is where it happens. There is no better opportunity than the CHOP Education Research Fellowship to propel your career to the next level. I cannot thank my research family enough!"

Dr. Ami Gokli, Education Research Fellow, 2018-20



"I have been grateful for the opportunity to be a Radiology Research Fellow in Non-Accidental Trauma at CHOP. The Department of Radiology has been incredibly welcoming to me as a clinical child abuse pediatrician and non-radiologist. The Department has afforded me with multiple opportunities for collaboration in multidisciplinary research, education, and additional advanced training. CHOP and the Department have provided me with mentorship and opportunities that have changed the course of my career."

Dr. Kathleen Henry, Non-accidental Trauma Research Fellow, 2019- 2022

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"Being a Research Fellow at CHOP is one of the most rewarding research experiences of my career. The variety of pathologies and depth of research experience of our mentors provides a rare mix of opportunities. CHOP Radiology Research has a wonderful support team in place which helps us in every step of our research pathway. Along with the resources available at the Academic Training and Outreach Programs, the CHOP Radiology Clinical Research Core provides a unique environment which has allowed me to grow as a researcher, greatly broadening my research scope."

Dr. Adarsh Ghosh, Artificial Intelligence Research Fellow, 2020-22



"As a Global Research, Outreach and Education Fellow, it goes to show that the vision of CHOP extends beyond borders. What drew my attention to CHOP is that important character of inclusivity. CHOP is among the top facilities in the forefront of medicine, research and education and being a part of a global team is an exceptional experience. It has cultivated me to grow academically and reach further. CHOP is a place with a lot of resources and home to a lot of great mentors who go above and beyond to guide, teach and direct. I am grateful to be here."

Dr. Hermon Miliard Derbew, Global Outreach & Education Research Fellow, 2021- current



"I was very grateful to receive an offer of a Research Fellow position at CHOP Radiology in the Cardiovascular and Lymphatic Imaging Center, which is a nationwide reference imaging center. As a general pediatric radiologist, having this position at CHOP has been a great opportunity for me to escalate my experience in cardiovascular imaging and acquire experiences in lymphatic imaging. Working with a rich archive under the supervision of the experienced faculty has been a great experience for me in my academic life. It is also an advantage to work in a systematic and organized manner along with wide facilities and resources."

Dr. Ensar Yekeler, Cardiovascular and Lymphatic Imaging Research Fellow, 2021-22

Learn about our current Research Fellows at

<https://www.research.chop.edu/radiology-clinical-research-core/team>

Philadelphia and the Penn Community

Children's Hospital is situated in the University City section of Philadelphia, accessible by foot or mass transit from center city. Our workforce benefits from close association with and proximity to the University of Pennsylvania, an Ivy League institution recognized for its rigorous pursuit of active pragmatism, innovation, and civic engagement. Penn has a longstanding commitment to diversity and inclusion, reflected in its community establishments like the LGBT Center, Makuu Black Cultural Center, LaCase Latina, Pan-Asian American Community House, and Greenfield Intercultural Center. It is the appreciation and understanding of political, religious, and cultural diversity that make Penn a leading community in today's world.



View of the Philadelphia skyline from CHOP's Roberts Center for Pediatric Research.

An education and economic hub within the Northeast Corridor, Philadelphia is known for its rich colonial heritage and modern urban scene. As the first World Heritage City of the United States, it welcomes millions of tourists each year to the iconic locations and artifacts that tell the story of our nation's beginnings. In addition to its world-class museums and art galleries, Philadelphia is home to a nationally and internationally renowned music scene, dozens of thriving theater and dance companies, and numerous professional sports teams, with the sports complex less than a mile from CHOP's campus. In addition to having an excellent park system, the city is close to the Pocono Mountains and Mid-Atlantic beaches. There are affordable housing options in the heart of Philadelphia as well as the suburbs with a reliable commuter train. Childcare options are available both in the city and surrounding areas.



Philadelphia's City Hall, located in Center City near many historical sites.

Fellowship Program Leadership



Hansel Otero, MD
Vice Chair for Clinical Research



Tigist Hailu, MPH
Director for Radiology Education & Research



Yadel Mekete
Clinical Research Program Manager



Sydney Wieczkowski
Program Coordinator

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