



Non-Match Medical Physics Residency Positions at the University of Chicago Medicine

The Medical Physics Residency Program in the Department of Radiation and Cellular Oncology at the University of Chicago Medicine is pleased to announce **two Clinical Physics Resident positions beginning July 1, 2027**.

This is a **three-year, CAMPEP-accredited residency program** designed for highly motivated candidates seeking comprehensive clinical training and preparation for a career in **academic medical physics, advanced radiation therapy, and clinically driven research**.

A Comprehensive Three-Year Clinical and Academic Training Program

The two clinical training years provide intensive, comprehensive training in **Radiation Oncology Physics**, with progressive development of technical knowledge, clinical skills, and independent practice. Residents receive extensive hands-on experience across the full spectrum of modern radiation oncology physics, working closely with experienced medical physicists, dosimetrists, radiation oncologists, and other members of the multidisciplinary cancer care team.

The one **research year is dedicated to advanced clinically driven projects** that bridge clinical practice and research, allowing residents to translate innovations into improved patient care.

Residents have the opportunity to develop expertise in areas such as:

- Computational medical physics and radiation oncology
- Artificial intelligence and medical imaging
- Adaptive radiation therapy (ART)
- Image-guided radiation therapy (IGRT)
- Advanced treatment planning and delivery
- Stereotactic radiosurgery and stereotactic body radiation therapy (SRS/SBRT)
- Clinical implementation and evaluation of emerging technologies

The program is designed to prepare residents for **independent professional practice and successful ABR certification** while providing a strong foundation for those who wish to pursue an **academic career in medical physics**.

Why Train at the University of Chicago Medicine?

The University of Chicago Medicine offers an exceptional environment in which clinical training, advanced technology, and academic research are closely integrated. Residents benefit from:

High-volume, hands-on clinical training.

Residents are exposed to a broad and diverse clinical practice and progressively assume greater responsibility as they develop competency and clinical independence.

Advanced radiation therapy technology.

The department operates a modern radiation therapy program incorporating advanced Varian and



Siemens platforms, including **TrueBeam, Edge, and Ethos** systems. Clinical practice encompasses a broad range of contemporary techniques, including **VMAT, IGRT, SGRT, SRS, SBRT, adaptive radiation therapy, IMTBI, HDR brachytherapy, and TSET**.

A strong computational and AI environment.

The department has advanced GPU computing infrastructure supporting research in **artificial intelligence, medical imaging, computational radiation oncology, and radiation medicine**. Residents interested in developing computational skills can pursue clinically relevant projects that connect emerging technologies with patient care.

Integration of clinical care and research.

The department actively participates in national cooperative-group clinical trials as well as institutional clinical and translational research. Residents are encouraged to identify important clinical problems and develop projects that have a direct pathway toward implementation and improved patient care.

Research training and scholarly output.

Residents select and carry out their research projects, with support in study design, data analysis, and scientific writing. They are encouraged to present at national meetings such as AAPM and ASTRO and to publish in peer-reviewed journals.

Grant-writing experience.

Residents who are interested can learn how to prepare competitive grant applications by taking part in proposal development, for example by helping draft specific aims and preliminary data, and by applying for pilot or society funding. This supports a transition into independent academic research.

Dedicated faculty mentorship.

Each resident works with faculty mentors who provide guidance on clinical development, research, career planning, and ABR preparation. Mentors are available for regular check-ins and for support in building a professional network.

Training within a major academic medical center.

Residents work in a multidisciplinary environment alongside radiation oncologists, medical oncologists, surgeons, physicists, dosimetrists, therapists, physicians in training, and biomedical researchers. This provides an opportunity to understand not only the physics of radiation therapy, but also its integration into comprehensive cancer care.

Preparation for a long-term academic career.

The three-year structure provides dedicated time to develop advanced clinical expertise while pursuing meaningful clinical and computational projects. The program is particularly well suited for candidates who envision a career combining **clinical medical physics, innovation, teaching, and research**.



Our goal is not only to familiarize residents with radiation oncology technology, but to train independent, thoughtful, and highly capable academic clinical medical physicists who will advance and lead the field.

Eligibility Requirements

Applicants must hold either:

- A **Ph.D. from a CAMPEP-accredited graduate program in Medical Physics**, or
- A **Ph.D. in Physics or a related scientific discipline**, followed by completion of a **CAMPEP-approved Medical Physics certificate program**.

Application Instructions

Applications will be accepted until **December 31, 2026**.

The Admissions Committee will review applications in January 2027. Selected candidates will be invited for interviews, and offers are expected to be extended in **February 2027**.

Applicants should submit the following materials:

- Curriculum vitae
- Official academic transcripts from undergraduate and graduate programs, and from a CAMPEP certificate program when applicable
- Three letters of recommendation
- A one-page personal statement describing the applicant's interest in medical physics residency training, relevant experience, and career goals

Please submit all application materials by email to:

Kamil M. Yenice, Ph.D.

Director, Medical Physics Residency Program

University of Chicago Medicine

Email: kyenice@uchicagomedicine.org

Incomplete applications missing any of the required documents will not be considered.

UChicago Medicine is an equal opportunity employer. We evaluate qualified applicants without regard to race, color, ethnicity, ancestry, sex, sexual orientation, gender identity, marital status, civil union status, parental status, religion, national origin, age, disability, veteran status, or other legally protected characteristics.

As a condition of employment, all employees are required to complete a pre-employment physical examination, background check, and drug screening and to comply with applicable influenza vaccination requirements before beginning employment. Medical and religious exemptions from influenza vaccination will be considered consistent with applicable law.