

Faculty Opportunity – AI for Breast Cancer Imaging
Department of Radiology, Memorial Sloan Kettering Cancer Center (MSKCC)

The **Department of Radiology at Memorial Sloan Kettering Cancer Center (MSKCC)** invites applications for a **Faculty position (Assistant Professor)** in the area of Artificial Intelligence for Breast Cancer Imaging. This position is ideal for a recent Ph.D. graduate, postdoctoral fellow nearing transition, or early-career researcher seeking to launch an independent research trajectory within a world-class clinical and computational ecosystem.

MSKCC has consistently ranked highly in U.S. News & World Report's "Best Hospitals" list for cancer care. MSKCC is a leader in cancer care and research, actively involved in clinical trials and developing new treatments. Within MSKCC, the Evelyn H. Lauder Breast Center provides pioneering breast cancer services that go beyond the standard of care. We offer prevention, diagnosis, treatment, and support, all under one roof, in a setting where breast cancer is recognized as a treatable and often curable disease. Convenience and comfort are hallmarks of the Evelyn H. Lauder Breast Center. Making the patient experience less daunting makes for better interactions with the care team and empowers the patient to become an active partner in the care. The center promotes new diagnostic technologies and targeted treatments, less-invasive surgery, molecular pathology, more effective chemotherapies, vaccine development, and prevention. There are also many opportunities to collaborate among different departments, including Medical Physics, Pathology, Computational Oncology in the Department of Epidemiology and Biostatistics, etc. For example, the translational focus lies in breast cancer, in which the computational oncology team

has pioneered the discovery of prognostic mutational signatures and large-scale studies of mutational landscapes and the evolution of these cancers.

Research Program Overview

This NIH- and institutionally funded initiative focuses on leveraging state-of-the-art AI to improve breast cancer detection, risk assessment, and treatment decision-making through the integration of:

- Mammography, breast MRI, and digital pathology
- Genomic, radiologic, and histologic features for multimodal learning
- Explainable AI models suitable for clinical translation
- Longitudinal clinical data and prospective validation studies

You will join a high-impact, collaborative research group at the forefront of AI-based clinical tools, working alongside radiologists, pathologists, oncologists, and data scientists.

Candidate Profile

- Ph.D. in Computer Science, Electrical/Biomedical Engineering, Medical Physics, MRI Physics, or a related discipline.
- Strong record of peer-reviewed publications in top venues (JMRI, MRM, *NeurIPS*, *CVPR*, *MICCAI*, *IEEE TMI*, *Nature Medicine*, etc.).
- Expertise in deep learning, MRI, and large-scale model development (CNNs, Transformers, foundation models, multimodal fusion).
- Proficiency in Python and frameworks such as **PyTorch or TensorFlow**.
- Preferred: experience with breast MR imaging data, histopathology, or clinical AI applications.
- Demonstrated ability to lead independent research and collaborate across clinical and computational domains.

Appointment Details

- Position title: Assistant Attending (Professor)
- Full-time academic appointment with **renewable contracts** and opportunities for promotion.
- Access to **high-performance computing**, curated clinical datasets, and expert mentoring for early-stage faculty development.
- Competitive compensation and **full MSKCC benefits** package, including health.

• Opportunities for **grant development, first-author publications**, and **conference presentations** (e.g., RSNA, ISMRM, MICCAI, ISBI, AACR).

Application Instructions

Please submit the following materials in a **single PDF** to Dr. Kimberly Feigin (email: feigink@mskcc.org) and Dr. Amita Shukla-Dave (email: davea@mskcc.org) with the subject line:

Application – Faculty: Breast Imaging AI – [Your Full Name]

- 1. Cover letter describing your research background, fit for this role, and future vision.
- 2. Curriculum Vitae, including full publication list and links to representative work.
- 3. Names and contact information of 2–3 referees.

Applications will be reviewed on a rolling basis. Early submission is highly recommended.

Join us in shaping the future of AI-driven breast cancer diagnosis and personalized care at one of the world's premier cancer centers.