



National Institutes  
of Health

## Radiology and Imaging Sciences National Institutes of Health Clinical Center



### Clinical Research Fellow – Radiology AI

The NIH Imaging Biomarkers and Computer-Aided Diagnosis Laboratory is **world-renowned**, with recent successes including public release of the [NIH Chest X-Ray Dataset](#), the [DeepLesion Dataset](#) and numerous papers in top journals, such as *Radiology*, *Nature* journals, and *Medical Image Analysis*. The focus of the lab is on abdominal radiology. We are seeking a Clinical Research Fellow to support our research and clinical efforts in computer-assisted diagnosis and the identification of imaging-based disease biomarkers. The overarching goal of the lab is to effectively harness patient data and develop tools that are rooted in image analysis, machine- and deep-learning principles for imaging-based biomarker identification. For example, members of the lab routinely use patient imaging studies (CT/MRI/PET/Radiography), radiology reports, and electronic health records to conduct research in a variety of clinically meaningful areas.

While a specialization in radiology may be preferred, it is not required and non-radiologist physicians are encouraged to apply. The incumbent will work closely with a team of computer scientists, post-doctoral scholars and other trainees. The fellow will contribute in myriad ways, such as identifying clinically relevant questions or problem areas, providing critical insights into the radiology workflow that aids collaborators in the development of creative solutions, assist with the annotation of imaging studies and reports to obtain ground truth labels, evaluate machine- and deep-learning models that have been trained by lab members, and write manuscripts (first and co-authored) for submission to conferences and journals.

Applicants must have a medical degree (MD, MD-PhD, or equivalent). Experience with computer programming (Python, R, etc.) is desirable, but not required. Experience with visualization and annotation tools, such as ITKSnap or 3DSlicer, is preferred although not required. Prior experience with or exposure to machine learning is not required, but may be helpful.

This is a full-time postdoctoral fellow appointment through the NIH Intramural Research Training Award (IRTA) Program or Visiting Fellow Program. Health insurance and other benefits are provided. Typical fellowships are for 2-3 years, but longer ones are possible (up to five years in total). More details about these programs can be found at [https://www.training.nih.gov/programs/postdoc\\_irp](https://www.training.nih.gov/programs/postdoc_irp).

HHS and NIH are Equal Opportunity Employers. Candidates are encouraged to apply irrespective of their nationality or citizenship status. Both U.S. and non-U.S. citizens will be considered. All applicants will be subject to a background investigation.

Applications should include a CV, a statement of professional goals, and three letters of reference.

Address applications to:

Ronald Summers, M.D., Ph.D.

Chief, Imaging Biomarkers and Computer-Aided Diagnosis Laboratory  
Radiology and Imaging Sciences  
National Institutes of Health Clinical Center  
Building 10 Room 1C224D MSC 1182  
Bethesda, MD 20892-1182

E-mail: [rms@nih.gov](mailto:rms@nih.gov), Web site: [http://www.cc.nih.gov/about/SeniorStaff/ronald\\_summers.html](http://www.cc.nih.gov/about/SeniorStaff/ronald_summers.html)