One of the greatest challenges of modern biomedical science is the understanding of functionality of the human brain. Ultra High-Field (UHF) MRI with field strengths of 7T and above provides crucial improvement over 3T in spatial resolution and sensitivity for deciphering subtle features that are <1mm in size and could thus allow mapping of intricate detail. There are substantial hurdles to surmount, however, before the promised increases in performance for UHF MRI are fully realized. The goal of the Winkler lab is to develop technology for the understanding of the human brain using UHF MRI in the areas of neurodegenerative and neuropsychiatric disorders/disease and connectomics, and ultimately its clinical applicability. Areas of research for the successful applicant(s) include manipulation of the electromagnetic fields in the scanner, MR safety monitoring, AI/deep learning, and multiphysics analysis.

Highly desired skills:

- Knowledge in one or more of the following:
  - Experience in UHF MRI
  - RF coil building skills
  - Numerical modeling skills
  - Deep learning background
  - Ultrasound/acoustics background

The position will be for one year, renewable.

Weill Cornell Medicine is an equal opportunity employer. EOE/M/F/Vet/Disabled.