**Postdoctoral Research Scientist**

**MR Technology and Sequence Development for Clinical Spectroscopy**

The Magnetic Resonance Scientific Engineering for Clinical Excellence (MR SCIENCE) Laboratory in the Departments of Biomedical Engineering and Radiology at Columbia University in the City of New York invites applications for a Postdoctoral Research Scientist position.

The focus of the research will be the development and implementation of $B_0$ shim technology and magnetic resonance spectroscopy (MRS) methods for multiple sclerosis research on a 3T Siemens Prisma scanner. The work will involve all aspects of translational research including MR method development and evaluation, study design and organization, subject and patient recruitment, experiment execution and data analysis.

**Minimum Experience and Skills:**
- PhD in physics, engineering, or related discipline
- Hands-on experience with Siemens IDEA sequence design and implementation
- Strong research record and excellent verbal and written communication skills
- Ability and willingness to work in an interdisciplinary team environment
- Matlab and other programming experience

**Desirable Experience and Skills:**
- Experience with magnetic resonance spectroscopy (MRS)
- Experience with clinical research
- Experience with gradient or shim coil design and construction
- Experience with CAD modeling using SolidWorks
- Experience with numerical simulation packages such as Sim4Life or CST
- Workshop experience (e.g. CNC mill, hard soldering, epoxy resin, 3D printing)

The position is **available immediately.** CV and inquiries should be sent directly to Christoph Juchem, Ph.D. (cwj2112@columbia.edu). Review of applications will continue until the position is filled.

Sincerely,

[Signature]

Christoph Juchem, Ph.D.
Associate Professor
Biomedical Engineering & Radiology
Columbia University in the City of New York