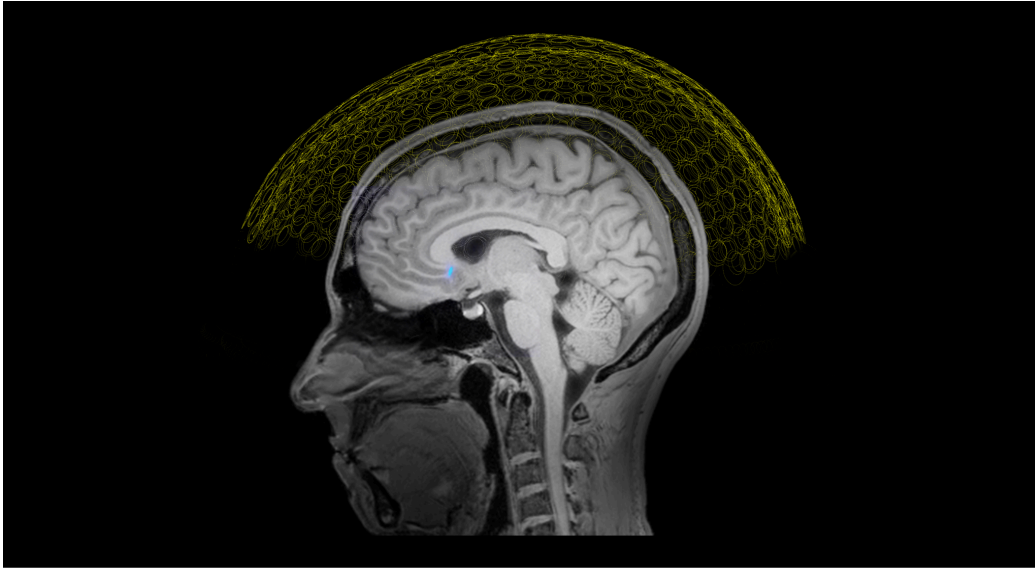


» Nudge



MR Physicist

Location: **San Francisco, On-site**

Type: **Full-time**

About Nudge

At Nudge, our mission is to develop the best technology for interfacing with the brain to improve people's lives. We're starting with an approach that we believe can help the most people the fastest, and also allow us to learn as much about the brain as possible: developing a non-invasive, ultrasound-based device that can stimulate and image the brain at high resolution and depth. This is a vertically integrated effort building cutting-edge hardware, software, and research capabilities to create products that can benefit millions — and eventually billions — of people.

To succeed, we need to assemble world-class teams across everything we do. We hire people who are exceptional at their craft, believe hard things are worth doing, and execute relentlessly — people who expect the highest levels of both rigor and integrity from each other.

About our MRI technology

A core problem we're working on at Nudge is targeting and dosing ultrasound in the brain using MRI. The skull severely distorts and attenuates the ultrasound focus, making it difficult to know where energy is being delivered and how much is actually reaching the target.

We use MRI-based methods such as MR-acoustic radiation force imaging (MR-ARFI) to solve this—finding and correcting the focus position and directly measuring delivered pressure. This requires building extremely sensitive imaging techniques that can robustly measure focal tissue displacements of just a few hundred nanometers (more than 100× smaller than the thickness of human hair) in human volunteers.

We're continuing to push these capabilities forward with new imaging infrastructure, including two new state-of-the-art Siemens Healthineers Cima.X scanners, to accelerate development and achieve unprecedented sensitivity in-device.

About the role

As an MR Physicist at Nudge, you will:

- Develop novel MRI pulse sequences and image reconstruction algorithms that push the envelope of sensitivity and precision for targeting and reading out the effects of ultrasound neuromodulation
- Build, validate, and deploy your applications on our state-of-the-art 3 Tesla Siemens Cima.X scanners
- Own applications from concept through prototyping to deployment in clinical trials
- Work closely with other MR physicists, an RF coil engineer, our software, mechanical, and electrical engineers, and clinical operators

About you

We have a preference for at least 3 years of relevant post-PhD or industry experience.

Regardless of your career level, you should have:

- Strong engineering / physics first principles

- An exceptional track record of building novel MRI sequences using a major MRI vendor API, and associated image reconstruction algorithms
- Expertise in non-Cartesian MRI pulse sequences and image reconstruction
- Expertise in advanced MRI image reconstruction methods including parallel imaging, compressed sensing, and machine-learning
- A degree in Electrical or Biomedical Engineering or similar engineering discipline
- Strong signal processing and inverse problem fundamentals
- Demonstrated history of exceptional technical contribution
- High integrity and strong professional judgement

Please apply here:

https://nudge.com/careers/?ashby_jid=831e0dd0-0784-4bfd-821f-d606233cc413

At ISMRM 2026? Reach out to Will Grissom at the meeting: will@nudge.com