

# Senior Scientist, Preclinical Magnetic Resonance Imaging

## Who we are:

Calico (Calico Life Sciences LLC) is an Alphabet-founded research and development company whose mission is to harness advanced technologies and model systems to increase our understanding of the biology that controls human aging. Calico will use that knowledge to devise interventions that enable people to lead longer and healthier lives. Calico's highly innovative technology labs, its commitment to curiosity-driven discovery science, and, with academic and industry partners, its vibrant drug-development pipeline, together create an inspiring and exciting place to catalyze and enable medical breakthroughs.

# **Position Description:**

We are looking for an outstanding and innovative senior scientist to join our team to derive transformative biological insights from preclinical imaging studies. A key responsibility of the role is the development and implementation of new magnetic resonance imaging (MRI) methods as well as utilizing imaging methods to plan and execute imaging studies in rodents to derive quantitative biomarkers for basic research and translational development. These projects will be conducted in collaboration with translational and research scientists, machine learning engineers and data scientists in a dynamic collaborative environment. Calico provides a stimulating working environment focused on fundamental discovery research and a commitment to translate scientific advances to realize their therapeutic potential.

#### **Responsibilities:**

- Design and execute preclinical imaging studies for basic research and drug development
- Lead collaborative studies and closely work with multidisciplinary project teams
- Implement, optimize, and validate new MRI methods
- Implement and utilize image processing/analysis pipelines to generate quantitative readouts from in-vivo imaging data
- Develop, characterize and validate image-based biomarkers of diseases and aging processes
- Communicate scientific findings internally and externally

# **Position Requirements:**

- Ph.D. degree in Physics, Biomedical Engineering, Computer Science or related field with at least 5 years of related work or postdoctoral experience
- Highly experienced in animal MRI on Bruker MRI systems, good understanding of MRI methods and protocol development
- Strong skills in advanced image analysis and programming (MATLAB, Python, R)
- Experience in rodent handling and procedures
- Self-motivated with a "can-do" attitude
- Flexible, able to respond quickly to shifting priorities
- Strong communication and presentation skills
- Highly organized and able to solve complex problems independently
- Ability to work collaboratively with multidisciplinary teams
- Must be willing to work onsite 5 days a week

## Nice to Have:

- Research experience in neurodegenerative disorders and rodent brain imaging
- Familiarity with cardiovascular imaging methods and disease models
- Experience with ML-based image processing
- Experience with pulse sequence programming using ParaVision
- Experience with statistical analysis of longitudinal data
- Experience with additional preclinical imaging modalities (uCT, ultrasound, BLI/fluorescence imaging)
- A good understanding of the clinical validity of in vivo models
- Experience with genetic and pharmacological approaches to modulate pathways of interest

The estimated base salary range for this role is \$166,000 - \$191,000. Actual pay will be based on a number of factors including experience and qualifications. This position is also eligible for two annual cash bonuses.