Department of Medical Physics
UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

QUANTITATIVE ULTRASOUND LABORATORY
UNIVERSITY OF WISCONSIN-MADISON

Postdoctoral Research Associate in Super-Resolution Ultrasound Imaging

Department of Medical Physics, School of Medicine and Public Health
University of Wisconsin–Madison

About the position

The Quantitative Ultrasound Lab (QULab) at the University of Wisconsin–Madison is seeking a highly motivated and creative Postdoctoral Research Associate to join our team in advancing super-resolution ultrasound imaging for obstetrics applications. This position is supported by a newly awarded NIH grant and offers a unique opportunity to contribute to cutting-edge research at the intersection of imaging science, maternal-fetal health, and translational medicine.

About the environment

The QULab (https://qulab.medphysics.wisc.edu) is internationally recognized for its contributions to quantitative ultrasound imaging. Our group is part of the vibrant Department of Medical Physics and collaborates closely with clinicians, engineers, industry partners and patient advocacy groups to translate innovations from bench to bedside.

The Department of Medical Physics at UW–Madison is one of the premier programs in the country, renowned for its excellence in research, education, and clinical innovation. As part of the School of Medicine and Public Health (SMPH), the department benefits from a rich interdisciplinary environment and strong ties to clinical practice. UW–Madison fosters a tradition of innovation through the Wisconsin Alumni Research Foundation (WARF), which has supported groundbreaking discoveries and technology transfer for nearly a century.

Madison, Wisconsin offers an exceptional quality of life and a vibrant academic and cultural atmosphere. Home to the flagship campus of the University of Wisconsin System, Madison boasts a dynamic campus life, beautiful lakeside scenery, and thriving arts and food scenes. The city is also a hub for biotechnology and medical device industries, providing ample opportunities for collaboration and professional growth. With its welcoming community and strong connections between academia and industry, Madison is an ideal place to live, work, and innovate.

Position Duties

- Lead the implementation of super-resolution ultrasound imaging for obstetrics
- Coordinate data collection from experiments in virtual and experimental phantoms, animal models, and human subjects
- Direct supervision of one graduate student, and mentorship of students in the lab
- Collaborate with industry and clinical partners
- Participate in teaching and outreach activities
- Draft manuscripts and present findings at national and international conferences
- Actively pursue independent career through grant writing (submission expected in year 2) and professional development activities

Qualifications

Required

- PhD in Medical Physics, Biomedical Engineering, Electrical Engineering, or a related field.
- Experience in diagnostic ultrasound physics and engineering.
- Proficiency in programming and operating a Verasonics ultrasound system.

Preferred:

- Background in ultrasound beamforming and/or super-resolution ultrasound imaging supported by publications in top scientific journals

The selected candidate is expected to uphold the professional conduct guidelines of the School of Medicine and Public Health at UW-Madison and contribute to building a constructive and welcoming academic environment.

Position Details

Start Date: ASAP
Salary: NIH scale
Application Deadline: 10/15/2025
Location: Madison, WI

Application Instructions

Please submit the following materials:

- Cover letter
- Curriculum Vitae (CV)
- Three letters of recommendation

Send applications or inquiries to:
Dr. Ivan M. Rosado-Mendez, rosadomendez@wisc.edu