



BIOMEDICAL & HEALTH RESEARCH EXPERTISE

OVERVIEW

Developing enhanced health outcomes to improve people's quality of living and enabling earlier and more accurate diagnoses and treatments for disease.

KEY PARTNERS



GE Healthcare



Northwestern University



Partner with us:

Andrew J. Graettinger, Associate Dean for Research,
andrewjg@uwm.edu 414-229-7389



EXPERT FACULTY AND FACILITIES

Biomechanics & Rehabilitation

Brooke Slavens, Richard and Joanne Grigg Associate Professor, Mechanical Engineering and Biomedical Engineering, slavens@uwm.edu

- Experimental and computational biomechanics
- Pediatric mobility and rehabilitation
- Musculoskeletal imaging
- Gait analysis

Jacob Rammer, Assistant Professor, Biomedical Engineering, jrrammer@uwm.edu

- Advanced biomechanical instrumentation and modeling technique

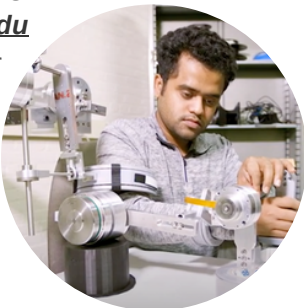
Priya Premnath, Assistant Professor, Biomedical Engineering, premnath@uwm.edu

- Pharmaceutical approaches to improve tissue regeneration
- Targeted biomaterials to treat fractures in osteoporosis and advanced age
- Imaging techniques and animal models to investigate bone healing

Robotics

Habib Rahman, Richard and Joanne Grigg Associate Professor, Mechanical Engineering and Computer Science, rahmanmh@uwm.edu

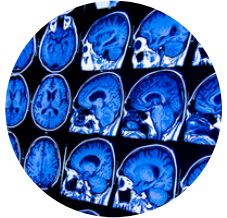
- Designing and creating wearable robots for daily living assistance



Medical Imaging & Modeling

Roshan D'Souza, Richard and Joanne Grigg Associate Professor, Mechanical Engineering, dsouza@uwm.edu

- 4D cardiovascular flow MRI
- Complex systems simulation
- Computational biology



Yongjin Sung, Associate Professor, Mechanical Engineering and Biomedical Engineering, ysung4@uwm.edu

- 3D imaging flow cytometry
- Near-infrared chemical, x-ray phase contrast and radioluminescence imaging
- Non-invasive diagnostics

Qingsu Cheng, Assistant Professor, Biomedical Engineering, chengq@uwm.edu

- Bioimaging and nanotechnology
- Interaction between microenvironmental factors and diseases
- Breast cancer early detection, risk assessment and treatment

Jun Zhang, Professor, Electrical Engineering & Computer Science, junzhang@uwm.edu

- Cardiovascular disease intervention
- Image processing and computer vision

Mahsa Dabagh, Assistant Professor, Biomedical Engineering, dabaghme@uwm.edu

- Diagnosis, prevention, and treatment of cancer and vascular diseases
- Large-scale biomedical models
- Mechanosensors in cancer metastasis, wound healing, and progression of atherosclerosis cardiovascular diseases



Woo Jin Chang, Associate Professor, Mechanical Engineering, wjchang@uwm.edu

- Bionanotechnology
- BioMEMS and biosensors
- Environmental and biomedical monitoring