RESEARCH ASSOCIATE II – Cedars-Sinai Medical Center

The Orthopaedic Biomechanics Laboratory at Cedars-Sinai Medical Center is currently seeking applications for a full-time research associate to coordinate and execute biomechanical research studies. Projects will mostly be focused on mechanical testing of current and newly developed clinical devices for the treatment of orthopaedic diseases and disorders. Candidate will utilize SLA 3D printers, motion capture suits/cameras, and material testing systems.

Job Responsibilities: Designing and printing test equipment, specimen collection and preparation, conducting experiments, data collection and processing, and dissemination of results. Need to be comfortable with cadaveric specimens and small animals.

Required Experience and Education: Bachelor’s Degree Required. Mechanical, Biomechanical, or Electrical Engineering, Preferred. Experience in orthopaedics is not required but would be given special consideration.

Required Skills:
- Superior organizational, time management, and communication skills
- Familiar with basic research methodology (and mechanical testing)
- Self-starter, strong initiative. Needs little supervision
- Ability and willingness to learn
- Competent in Python (Matlab also acceptable)
- Basic mechanics of materials knowledge (stress/strain, yield, torque, shear)
- Basic kinematics knowledge (Rotation matrices, quaternions, Euler angles)
- CAD experience (Fusion360, Solidworks, etc.)
- Microcontroller programming (Phidgets, Arduino) and sensor integration (load cells, displacement sensors, IMU’s)

Preferred:
- Machining/Fabrication Experience (or familiarity with power tools)
- Mocap experience
- Image Segmentation
- Linear Algebra (school / prior projects)
- 3D printing experience (or strong interest in 3D printing)

For more information, please contact:

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