### Postdoctoral Research Position in Joint Biomechanics in Hemophilia

### **Overall Description**

The Hemophilia and Thrombosis Center (HTC) Biomechanics Laboratory is seeking a postdoctoral research candidate to work on a project examining how bleeding in genetic bleeding disorders relates to movement patterns and modeled joint and muscle forces. The work is directed by Dr. Beth Warren (University of Colorado Anschutz Medical Campus, Department of Pediatrics) with co-mentorship by Dr. Brecca Gaffney (University of Colorado Anschutz Medical Campus, Departments of Mechanical Engineering and Bioengineering). This position is funded for 1 year. The salary structure is both attractive and nationally competitive. Other benefits include health/dental insurance, vacation/sick leave and access to all University facilities. The position is available immediately.

## Laboratory Focus

Persons with bleeding disorders are at risk of joint and muscle bleeding, which can cause long-term hemophilic arthropathy. The goal of the HTC Biomechanics Laboratory is to understand the relationship between movement patterns and bleeding so that bleeding can be better prevented, for example with targeted physical therapy. Our lab uses an on-site motion capture space, including an instrumented treadmill, force plates, and motion analysis cameras.

# Specific Position Duties

Responsibilities will include modeling of joint and muscle forces using OpenSim from data collected from participants with and without bleeding disorders, and adapting models to investigate methods of injury prevention. The postdoc on this project will work with a team that includes an engineer, a technician, physicians, research coordinators, and physical therapists.

### Qualifications

Minimum Requirements:

- Applicants must hold a Ph.D. in biomedical, chemical, mechanical, or electrical engineering, applied physics, cell biology, or closely related field.
- The successful candidate must have a strong publication record in high-impact journals and demonstrate the ability to conduct independent research.

# Desirable Qualifications/Experience:

• Expertise in motion analysis and modeling are of particular interest.

#### Salary and Benefits:

Salary will be based on the current NIH postdoctoral pay scale guidelines, and is commensurate with skills and experience. The University of Colorado offers a full benefits package. Information on University benefits programs, including eligibility, is located at <u>www.cusys.edu/pbs</u>.

<u>Application Details</u> Applications should include a letter of interest, CV, and a list of three references.

Please email applications to: Beth Warren, MD Department of Pediatrics University of Colorado, Denver | Anschutz Medical Campus beth.warren@cuanschutz.edu

#### Special Notices to Applicants

The University of Colorado at Denver is committed to providing a safe and productive learning and living community. To achieve that goal, we conduct background investigations for all final applicants being considered for employment. Background investigations include a criminal history record check, and when appropriate, a financial and/or motor vehicle history.

The Immigration Reform and Control Act require that verification of employment eligibility be documented for all new employees by the end of the third day of work. The University of Colorado strongly supports the principle of diversity. We encourage applications from women, ethnic minorities, persons with disabilities and all veterans. Alternative formats of this ad are available upon request for persons with disabilities.

Please be advised that the University does check references as part of the employment process, and selection committee members may choose to contact work references during the search process other than those listed in your application.

# The University of Colorado is committed to diversity and equality in education and employment.