

JOB TITLE

Research Assistant | Biomotion Lab | Dept. of BME at SPRI | Vail, Colorado, USA

COMPANY

Steadman Philippon Research Institute

Vail, Colorado, USA

<https://www.sprivail.org/departments/biomed-engineering>

JOB SUMMARY

The Biomotion Research Assistant provides technical, scientific, and general operational support to Biomedical Engineering research projects. The Research Assistant will support many aspects of the Biomotion Lab's research activities through various duties including: research project planning and design, participant recruitment and scheduling, data acquisition, data processing/analysis, manuscript drafting and submission, and preparation of abstracts/posters/presentations. Specific activities vary by assignment.

CLASSIFICATION

This is a temporary (1 year), full-time, non-exempt position with benefits. The opportunity and option may be provided to extend the term an additional year, after the first year of employment.

JOB START DATE

Rolling (per candidate availability)

PRIMARY JOB RESPONSIBILITIES:

- Conduct research under the primary direction of the Director of Biomedical Engineering and secondary direction of departmental staff and investigators.
- Collaborate with BME staff and investigators to plan and design sound research methodologies and experiments.
- Assist in data collection using varied instrumentation including optical motion capture, force plates, electromyography, dynamic stereo X-ray, inertial measurement units, and insole pressure sensors.
- Interact professionally and respectfully with research participants, upholding participant privacy and ethics in accordance with IRB and HIPAA regulations.
- Assist with data analysis using various software; provide proper documentation and organization to ensure integrity and organization of collected data.
- Apply basic statistical knowledge; understand, interpret, and describe complex data by preparing graphs and tables.
- Participate in the preparation, review, and submission of manuscripts and abstracts for publication.
- Follow policies and procedures established in the SPRI Employee Handbook; adhere to SPRI safety policies.
- Maintain a personal commitment to the Steadman Philippon Research Institute mission and values.

JOB REQUIREMENTS:Technical

- Bachelor's degree in engineering (biomedical, mechanical) or scientific discipline. Candidates with a master's degree or those in athletic training or physical therapy programs are encouraged to apply.
- Research experience and practical knowledge of research principles is required whether through previous internship, work experience, or coursework. Experience in a motion capture laboratory, with commonly used biomechanical tools and software (i.e., Qualisys/Vicon, Visual 3D, MATLAB) is preferred.
- Excellent critical thinking skills are required.
- High attention to detail and aptitude for performing repetitive tasks with a high level of accuracy is required.
- Knowledge of and ability to apply the scientific method is required.
- Knowledge of orthopaedic terminology and human anatomy is preferred.

Administrative

- Must be adaptable and possess strong organizational, interpersonal, verbal, and technical writing skills.
- Self-starter with willingness to make decisions independently and solve problems creatively within job scope.
- Ability to manage and complete multiple projects simultaneously while working under occasionally stressful conditions.

General

- Ability to handle confidential/sensitive information and exercise good professional judgment.
- Translate the organization's vision and values into day-to-day activities, behaviors, and decisions.
- Ability to represent SPRI in a mature and professional manner.
- Physically able to conduct research in a dynamic outdoor environment (such as a hiking trail or ski slope) is preferred.

APPLICATION PROCESS

To apply, applicants must submit the following to Travis Turnbull, Ph.D. (tturnbull@sprivail.org): an updated curriculum vitae (3-page max) with a focus on relevant educational background, work experience, academic record of peer reviewed publications and grants, laboratory work experience, computer skills assessment, instrumentation skill sets, and/or programming capabilities. We also require a personal statement (2-page max) detailing how you would contribute to a) the specified job and b) core values of research and education at SPRI. Following our internal selection process, only qualified applicants will be contacted for a phone interview. Letters of recommendation are neither required nor requested at this time. The application process and all associated communications will remain confidential.