The Taylor Collaboration

Orthopaedic Research • Education • Innovation

Research, Engineering, & Device Development Internship

This is a Full-Time Year-Long Training Program. Our rotations are three-months long.
We provide stipends for housing, transportation, and meals.

	First Rotation	*Second Rotation*	*Third Rotation*	*Fourth Rotation*
Focus	Biomechanical Research	Business Development	Design Control	Project Management
Stipend	$16.32/hour	$16.32/hour	$16.32/hour	$16.32/hour

Each rotation will develop the following skills:

Biomechanical & Clinical Research
Journal Club Presentation & Discussion
Business Plan Development
Medical Device Design Control
Cadaver Dissection Safety
Machine Shop Standards
Fluoroscopy Operation
Laboratory Organization and Cleanliness
Basic Surgical Instrumentation
Medical Terminology
Concepts of Data Acquisition
Statistical Analysis and Hypothesis Testing

Work Schedule

8 hours per day, inclusive of a 30 minute unpaid lunch break.
Start times and End times are 9 a.m to 5 pm, but may vary between 7 am to 8 pm respectively
Will occasionally be required to work 12 hours to meet deadlines
Overtime within 4 hours will be compensated at 1.5 times the hourly rate
Breakfast/ Dinner is provided during overtimes earlier than or exceeding, 8 a.m and 6 pm respectively.
Paid Company Holidays are provided. Paid Time off is accrued at a rate of 8 hours per 160 non-overtime hours worked.

Responsibilities are listed in the Job Description on the following page.

Alumni:

Taylor Sandoval Cornell, Mech. Eng. Masters	Connor Purviance K2M, R&D Engineer II	Robin Parrish DRev, Design Engineer	Audrey Martin Dartmouth, Mech. Eng. PhD
James Barry Medtronic Spine, Case Specialist	Andreas Peritos Zipline Medical, Mfg. Eng.	William Camisa Medtronic Endoscopy, Sr. R&D Eng	Roman Dimov Stanford, BS

Email your Cover Letter and Resume to jobs@taylorcollaboration.org
Please include your first and last name in the filename for both resume and cover letter.

Our application deadline is Rolling on a monthly basis.

Job Title	REDDI Intern
Department	Biomechanics
Supervisor's Title	Director
Last Modified	April 2022

Job Summary
REDDI stands for Research, Engineering, and Device Development Internship.
Interns develop skills in Biomechanics, Journals, Design, & Business Development
Interns rotate for 3, 6, 9, or 12--months, with varying Responsibilities & Stipends.

1. **Responsible for all aspects of assigned projects at Taylor**

   Cadaver-based biomechanical research projects
   Journal clubs
   Co-Authorship of several peer-reviewed publications
   Monday morning One-on-Ones for Problem-Solving and Approval to Proceed
   Tuesday 6:30 am Ortho Surgery Anatomy Lab (primarily summer)
   Wednesday lunchtime Staff Meetings
   Thursday 7:00 am Ortho Spine Conference Journal Presentation & Lecture Presentation
   Delegate tasks and manage monthly intern support
   Clinical research projects
   Observe orthopaedic surgeries (as needed)
   Business plan projects
   Medical device design projects

2. **Responsible for operational tasks assigned by supervisors**

   Participating in lab clean-up
   Adhere to operational task schedule

3. **Responsible for wet lab operations for the lab**

   Maintain proper organization of wet lab equipment and tools
   Ensure a safe and effective working environment
   Ensure specimens are ordered and tracked for assigned projects in a timely manner

4. **Responsible for administrative aspects of the lab**

   Follow the established guidelines for purchasing and purchase tracking
   Participate in lab marketing campaigns

5. **Education & Experience**

   Enrolled or graduated from a bachelor's degree program.
   Previous lab research is preferred.
   Background in biomechanics (courses taken), or machine shop skills (preferred), working with hands to build things.
   Mechanical Engineering or Bio/Biomedical Engineering (preferred).

6. **Knowledge, Skills, & Abilities**

   Ability to work with biological tissue (human cadaver-models for orthopaedic surgery uses)
   Knowledge of principles of engineering and mechanical design
   Knowledge of principles of data acquisition and study design
   Familiarity with common machine shop equipment such as CNC milling, lathing, bandsaw, drill/tap
   Strong scientific writing capabilities
   Ability, especially under pressure, to be professional, courteous, and tactful in dealing with staff and clients.
   Ability to establish clear priorities and multi-task in a high-volume setting responsive to externally generated deadlines.
   Exceptional ability to meet multiple deadlines in a fast-paced, academic environment.
   Strong analytical and problem-solving skills.
   Effective verbal and written communication skills.
   Strong customer-service skills with ability to find and implement creative, compliant solutions to satisfy customer needs

7. **Physical Capabilities**

   Occasionally exerts up to 30 pounds of force and/or exerting a small amount of force to lift, carry, push, pull and move objects.
   Involves walking or standing for periods of time.

8. **Environmental Conditions**

   Scientific laboratory / engineering / manufacturing setting.