

## Job Description

### Research & Development Summer Internship with ACell, Inc.

**Location:** Columbia, MD

**Time frame:** At least nine weeks

**Compensation:** Hourly pay

#### Summary

The R&D internship is intended for current undergraduate or graduate students studying relevant fields of study and interested in a career involving Tissue Engineering, Regenerative Medicine, and/or Biomaterials.

Prior laboratory experience is required, though specific experience with the expected duties is not required. The R&D Intern will keep an updated laboratory notebook detailing experimental work and may be asked to assist with additional documentation activities.

As a member of the research group, the R&D Intern will be trained in standard and experimental processing methods used at ACell. These methods may involve the use of biological and chemical materials as well as manual and powered cutting tools. Laboratory techniques will also often involve the use of hazardous materials. In these duties and others, attention to safety will be required.

The R&D Intern will have a primary project or task area developed in partnership with a Principal Scientist with the aims of both fulfilling an R&D technical objective while also providing the intern with growth opportunities. Examples of such projects:

- Development and optimization of research procedures to expand R&D capabilities
- Planning and carrying out research studies in biomaterial characterization
- Production and evaluation of new product prototypes

Completion of the primary project will involve literature review, development of a project timeline, and execution leading to a written report. In addition, the intern is expected to contribute and gain experience by assisting with other R&D projects.

The R&D Intern will also contribute to the laboratory housekeeping. Cleaning of laboratory spaces and classified (clean room) spaces may be assigned, as may duties related to the upkeep and cleaning of laboratory equipment and instruments.

The R&D Intern will be expected to regularly perform 40 hours of work per week. The internship's start and end dates are flexible, with a minimum duration of nine weeks.

## Job Description

### Principal Responsibilities

- Develop and execute an experimental plan
- Document experimental work, including the preparation of a completion report and presentation of results
- Assist in maintaining a functional, safe, and effective laboratory
- Complete training in ACell laboratory techniques and laboratory safety

### Required Education

- Four semesters of college-level coursework towards a degree in a related science or engineering field

### Required Skills and Experience

- Prior experience in a chemical or biological laboratory
- Experience maintaining a laboratory notebook

### Preferred Skills and Experience

- Experience with tissue-based technologies or experience developing or refining biological implantable materials
- Experience with one or more of the following:
  - Cell and Molecular Biology (e.g., Culturing and Passaging Cells, *In Vitro* assays)
  - Physical Testing (e.g., Tension/Compression, Rheology, Particle Size Analysis)
  - Thermal Analysis (e.g., DSC, TGA, TMA)
  - Biochemical Assays (e.g., ELISA, SDS-PAGE, Western Blot, Picogreen)
- Experience in implementing scientific procedures, methods, and tools for the manufacture and/or testing of medical products