

**Job Title:** Biomedical Engineer, Level II/III

Hesperos, Inc. is accelerating drug discovery by providing safety and efficacy testing of chemicals and novel therapeutics for the pharmaceutical, cosmetic, and food industries using its patented, Human-on-a-Chip platform. Bringing together biologists, surface chemists, and engineers, our team is producing some of the world's most advanced organs-on-a-chip platforms. From gene expression to electrophysiology, we recreate key components of organs in an interconnected, functional system. Chemically patterned microchips enable real-time, non-invasive monitoring of organ activity where we use sophisticated measurement techniques to detect minute changes. This breakthrough technology enables unprecedented visibility into specific disease states and how the human body will respond to treatment - something that previously required costly animal testing and human trials to determine. As a functional, interconnected, human surrogate, Hesperos' Human-on-a-Chip provides preclinical insight into the efficacy and toxicity of novel therapeutics.

**About You**

- You are experienced in software development for neuronal and/or cardiac signal analysis and developing algorithms, software, and interfaces.
- You are conscientious and pay almost obsessive attention to detail, as organized documentation is second nature.
- You are curious, love learning and are eager to take on hard problems. No task is too big or too small.
- You thrive in a fast-paced environment and enjoy pushing the edge of what is possible.
- You are resourceful, flexible, and adaptable to changing challenges and opportunities.
- You like to work independently, but enjoy team interaction, sharing expertise and experience.
- You find large challenges exciting and enjoy discovering and solving problems.
- You are a cross-disciplinary team member, who is excited to work with and learn from other engineers, biologists, chemists, modelers and experimentalists. You are comfortable communicating across teams.
- You deliver. You know that what matters is delivering a solution that works every time.

**What You'll Do**

- Contribute to software/hardware development for biological interfaces, from real-time high content small signal instrumentation and custom image/video systems.
- Identify, support, and/or lead implementation of engineering based improvements or upgrades to the equipment or facility systems.
- Take ownership and maintain software and hardware during experiments.
- Work closely with experimentalists in the laboratory to establish needs and develop new techniques.
- Work with scientists to collect and interpret data from proprietary Hesperos' developed software and hardware for multiple drug discovery efforts.
- Ensure that all safety guidelines are followed strictly and maintain a clean and orderly environment.
- Keep detailed and organized records of experimental protocols and results.
- Present findings and data analysis in research meetings.
- Provide troubleshooting, including leading and/or supporting technical root cause analysis to reduce production downtime.
- Support new product/technology introductions by performing engineering assessments, implementing equipment modifications, and supporting engineering evaluations.
- Ensure systems are installed and operating safely and comply with pertinent environmental health/safety practice, rules and regulations
- Develop and maintain SOPs



- Ensure that all safety guidelines are followed strictly at all times and maintain a clean and orderly environment

### **Position Requirements:**

- Doctorate degree in engineering OR Master's degree and 3 years of engineering experience
- Formal education and direct experience in analytical/scientific interface development.
- Proficiency in Python 3, C++, and/or other programming languages
- Experience with time-series and image analysis algorithm development, including application of machine learning and computer vision methods.
- Experience applying engineering principles to the design and implementation of system modifications, introduction of new processes, and execution of capital projects.
- Experience with cell culture, microphysiological systems, neuronal analysis, or brain machine interfaces is a plus.
- Independent, self-motivated, organized, able to multi-task in project environments, and skilled in communication, facilitation, and collaboration.
- Team player prepared to work in and embrace a team based culture that relies on collaboration for effective decision-making.
- Work schedule flexibility to support 24/7 operations, requiring occasional after-hours engineering coverage as required from time to time.
- Strong communication, relationship building, leadership and mentoring skills.

We are an Equal Opportunity Employer with a commitment to diversity. All individuals, regardless of personal characteristics, are encouraged to apply. All qualified applicants will receive consideration for employment without regard to race, color, religion, gender, sexual orientation, gender identity, disability, or veteran status.

### **How to Apply:**

Send your CV and any relevant documents to [Careers@hesperosinc.com](mailto:Careers@hesperosinc.com)

Visit our website ([hesperosinc.com](http://hesperosinc.com)) to learn more about the company and leadership team.