

## **MONTREAL, Experimental Design Engineer, full-time, in-person**

Puzzle Medical is developing a percutaneous heart pump for patients with advanced heart failure. The device's modular design allows for safe percutaneous implantation to support both renal and cardiac function through 4mm-pumps anchored in parallel in the descending aorta, allowing stability for patient mobility. To date, Puzzle Medical has successfully: completed a Series A financing round (2023); completed its first-in-human study with all patients experiencing improvements in cardiac and kidney function (2022); received U.S. Food and Drug Administration (FDA) Breakthrough Device Designation (2021).

### **POSITION SUMMARY**

Puzzle Medical Devices is currently seeking a Fabrication Technician to join our production team. The ideal candidate will have a strong background in hand tools, precision assemblies and micro tools. At Puzzle Medical Devices, we value candidates with excellent technical skills, a sharp eye for detail, and the ability to collaborate in a fast-paced, dynamic environment.

### **ROLE AND RESPONSIBILITIES**

- Experimental Design & Setup
  - Design and develop customized experimental setups to test various parameters and validate performance criteria.
  - Work with biological liquids and create mixtures tailored to specific experimental needs.
  - Ensure precision and reliability in experimental configurations.
- Mechanical Design
  - Utilize SolidWorks to design mechanical components and assemblies for experimental setups.
  - Collaborate with the engineering team to ensure compatibility and functionality of designs with broader device requirements.
- Execution & Analysis
  - Conduct experiments with biological and synthetic fluids, carefully documenting processes and results.
  - Analyze experimental data to assess performance, identify trends, and validate design hypotheses.
  - Prepare comprehensive reports and communicate findings to cross-functional teams.
- Collaboration & Problem-Solving
  - Work closely with the engineering, R&D, and wet lab teams to refine experiments and troubleshoot issues.
  - Propose innovative solutions to improve experimental efficiency and effectiveness.
- Continuous Improvement
  - Stay up-to-date on advancements in experimental techniques, tools, and methodologies relevant to biofluid dynamics.
  - Identify opportunities for process optimization and contribute to the development of best practices.

### **QUALIFICATIONS**

- Bachelor's in Mechanical Engineering or a related field.
- Proven experience in experimental design and setup, including work with precise and complex systems.
- Proficiency in SolidWorks or similar CAD tools, with a focus on mechanical design for experimental setups.
- Strong manual dexterity and attention to detail, with the ability to handle delicate and intricate tasks.
- Analytical mindset with experience interpreting experimental data and troubleshooting setups.

Note: This job description is intended to provide a general overview of the position. It is not an exhaustive list of responsibilities, qualifications, or requirements. The employer reserves the right to modify the duties or requirements of the position as needed.