Website: <u>ubcmist.com</u>

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## Position Title: Mechanical Designer & Developer

We are seeking mechanical designers and developers to help us create and test dependable healthcare products for developing countries. You will exercise your creativity and determination as you develop prototypes and place them through rigorous testing. Most important skills are knowledge of principles of mechanics and Design for Manufacturing and Assembly (DFMA). You should also be analytical with strong organizational abilities. If you are experienced and are willing to learn throughout the project, we'd like to meet you.

## Responsibilities

- Understand and shape the team's strategy and mission
- Create and design technical drawings using CAD software with regards to principles of mechanics and Design for Manufacturing and Assembly (DFMA)
- Conduct analysis based on principles of mechanics, thermodynamics, and materials
- Develop system and product through machining and rapid prototyping
- Validate and Verify the system and product by designing feasibility and testing methods
- Prepare technical reports by collecting, analyzing, and summarizing information throughout the project
- Maintain professional and technical knowledge by reviewing professional publications; establishing personal networks; benchmarking state-of-the-art practices

## **Skills and Qualifications:**

- Experienced in or willing to learn:
  - Principles of mechanics, e.g. solid mechanics, materials, dynamics, and Design for Manufacturing and Assembly (DFMA)
  - o CAD software, e.g. SolidWorks
  - o Analysis software, e.g. ANSYS
  - Machining and rapid prototyping tools such as drill, waterjet cutter, and 3d printer
- Demonstrable strategic thinking abilities
- Analytical mind with problem-solving aptitude
- Organizational and leadership skills
- Excellent communication skills