Equicare

UW Medicine
UW SCHOOL OF MEDICINE
DEPARTMENT OF PEDIATRICS

In search of undergraduate and graduate students interested in medical device product development.

Research Objective: IV's are a popular access device to provide medicines and nutritional support for over 90% of hospital patients. 250 million IVs are inserted each year in US hospitals with over 50% of these IVs resulting in failures. IV failures can cause severe and irreversible damage when undetected and untreated. There is a need for an affordable and accessible detection method for IV infiltration. IV-Safe is an adhesive patch with two mechanisms that provide timely detection for the symptoms of IV infiltration.

Recruitment Objective: Our team is looking to recruit engineering students interested in research and product development positions to work with our current engineering and clinical team. Our vision is to build solutions in global health care in low- to middle- income countries with a target population of premature infants and newborns. The team's focus is on developing an inexpensive detection device which monitors for IV infiltration in patients. This would involve working with graduate and undergraduate student engineers, clinical partners in neonatology and pediatrics at UW Medicine and Seattle Children's Hospital, engineering faculty within mechanical and electrical engineering, and product development experts.

Current Work: The team is furthering product design, manufacturability, and developing an active alarm system. The primary responsibilities for this role are working on prototype advancement, validating bench test models, and completing grant milestones to support the existing team's work. This will entail a deep involvement throughout the entire product development process, from design to implementation. Opportunities in joining the team may include future grant funding for graduate students, filing for patents, collaborating with product development films, clinical trial testing, and potential licensure with external companies.

The following are required for the role of a research assistant:

- ➔ The applicant should be pursuing a B.S. or M.S. in mechanical, electrical, material science, or bio- engineering, or related discipline at the University of Washington - Seattle.
- ➔ The applicant should plan to commit 5-12 hours of work per week towards their duties.
- ➔ The applicant should possess strong technical writing and organizational skills and abilities to work with fellow engineers, clinical partners, and business experts.
- ➔ Start in May 2024 and continue into the 2024-2025 school year.

The following are NOT required to apply to the role but are preferred:

- ➔ Experience in early prototype development, CAD, design iteration, regulatory, and thin film manufacturing
- ➔ Understanding of peripheral intravenous systems and strain and pressure measurement techniques
- ➔ Interest in affordable and accessible solutions to provide necessary care on a global scale

This position is hourly ($19.97/hr). Applications are due April 19, 2024 at 11:59pm.

If you are interested in the position, please submit a resume and interest inquiry to equicaresol@gmail.com with the subject *IV-Safe interest*.

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Non-discrimination statement: The University of Washington is an affirmative action and equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, protected veteran or disabled status, or genetic information.