Postdoc Openings for Cardiovascular Fluid Mechanics
Worcester Polytechnic Institute

Job Title	Postdoc Openings for Cardiovascular Fluid Mechanics
Department	Department of Biomedical Engineering
Institution	Worcester Polytechnic Institute Worcester, Massachusetts
Date Posted	Oct. 18, 2024
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Post-Doc
Academic Field(s)	Ocean Engineering Mechanical Engineering Engineering Physics Engineering Mechanics Computer Engineering Bioengineering (all Bio-related fields) Aerospace/Aeronautical/Astronautics Engineering - Other
Apply By Email	zwei1@wpi.edu

Job Description

The Artificial Intelligence and Modeling Lab for Cardiovascular Diseases (AIMCardio Lab) at the Worcester Polytechnic Institute currently offers two Postdoc positions.

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We seek candidates who are self-motivated, reliable, energetic, and passionate about fluid-structure interaction (both computational and experimental) and its applications for cardiovascular diseases and medical devices.

AIMCardio Lab has long-standing collaborations with several U.S. hospitals (Geisinger Medical Center, Children's Hospital of Philadelphia, Boston Children's Hospital, Children's Hospital of Atlanta, etc.), and medical device companies (Abbott, Medtronic, Boston Scientific, Phillips, etc).

Please refer to the latest research at AIMCardioLab.wpi.edu

Required Qualifications

* A PhD or equivalent degree in engineering (Mechanical, Biomedical, Electrical, and Aerospace), applied mathematics, or related fields.

** Experience with experimental flow visualization techniques, such as Particle Image Velocimetry (PIV), OR
** Experience with fluid-structure interaction simulations or finite element modeling in biological systems, OR
** Experience with data-driven flow modeling techniques, including physics-informed neural networks or reduced-order modeling

Preferred Qualifications

* Conduct various team-oriented and independent investigations in planning, developing, and implementing original experimental procedures within the overall scope of the research project.

* Collect, analyze, and report on experimental data; create and maintain accurate and timely records of test results and protocol design; publish research findings in conference proceedings and high-impact research journals.

* Exercise independent responsibility for project outcomes and design research for others to conduct.

* Actively participate in soliciting funds through various federally funded research grant mechanisms (NIH, NSF etc.), and translational research funds.

* Participate in industry projects.

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* Work on innovation-oriented technological projects with potential for commercialization.

* Mentor graduate students, undergraduate students, and technicians.

Applications will be reviewed immediately. Please send **a single PDF** containing the following items to zwei1@wpi.edu with **"Postdoc Application" in the subject line**.

* Curriculum Vitae

* Transcripts from Bachelor, Master (if applicable), and PhD degrees.

* Three representative journal articles

Contact Information

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