

**The University of Rhode Island**  
**Partnerships in Education and Research (PIRE)**  
**Graduate Research Assistantships Available**

The research partnership described at this site between the University of Rhode Island and the Technische Universität Braunschweig has several graduate assistantships available immediately. Because the project will be carried out in close collaboration with partners in Germany, candidates can expect to spend a portion of their time in laboratories in Germany. **Qualifications for these positions include, therefore, background in the German language and/or a willingness to prepare linguistically and culturally for this experience.** It is a major goal of this NSF supported project that the two universities involved create new models for the preparation of scientists and engineers for careers in today's global workplace.

**RESEARCH ASSISTANTSHIPS**  
**On**  
**Microfluidics Lab-on-a-chip**  
**University of Rhode Island**

Four graduate Research Assistantship positions are available immediately at both M.S and Ph.D. levels. The research focus is on microfluidics and lab-on-chip (LOC) technologies. Specifically, research will be conducted on the development of a streaming-based microfluidic platform with integrated temperature and pressure sensors, micro- heaters, valves, and pumps for on-chip infectious disease monitoring and detection. The project will involve extensive research collaboration with the Technical University of Braunschweig (TU-BS) in Germany to create a model global research team whose complementary expertise will promote new discoveries. The prospective students will spend a few months per year at TU-BS. The project tasks will include, but are not limited to design, fabrication and testing of various microfluidic devices, exploring various new LOC techniques and conducting computer simulations and theoretical analysis. The tasks will be assigned individually based on the applicants' qualifications. Information on the graduate admissions at the University of Rhode Island can be found at <http://www.mce.uri.edu/grad>.

Please contact Professor Mohammad Faghri (401-874-5180), Professor Donna Meyer (401-874-9292), or Professor Zongqin Zhang (401-874-2517) for further information. You may forward a copy of your resume, a recent transcript, your availability, and references to the Mechanical Engineering web site at [mce@egr.uri.edu](mailto:mce@egr.uri.edu).

We would like to thank the applicants in advance and regret that only those selected for an interview will be contacted for additional information.

**RESEARCH ASSISTANTSHIPS**  
**On**  
**Differential Gene Expression and**  
**Early Infection Biomarker Identification**  
  
**@ The University of Rhode Island**

One or two graduate Research Assistantship positions are available immediately at either the M.S. or Ph.D. level. The research focus is on developing novel biomarkers of early infection at the microbial class level, for detection by microfluidics and lab-on-chip (LOC) technologies. Specifically, research will focus on differential gene expression in a tick salivary gland model of infection. The project will involve extensive research collaboration with bioengineers at the University of Rhode Island and the Technical University of Braunschweig (TU-BS) in Germany to create a model global research team whose complementary expertise will promote new discoveries. The prospective students will spend a portion of their classroom and/or research training at TU-BS. The project tasks will include, but are not limited to **microarray development and analysis, cDNA library construction and normalization, cellular imaging with fluorescent probes, protein purification and computational analysis**. Information on graduate admissions at the University of Rhode Island can be found at <http://www.uri.edu/gsadmis/>.

Please contact Professor Thomas Mather (401-874-5616) for further information on this specific program. You may forward a copy of your resume, a recent transcript, your availability, and references to Dr. Mather at [tmather@uri.edu](mailto:tmather@uri.edu).

We would like to thank the applicants in advance and regret that only those selected for an interview will be contacted for additional information.

Ph.D. students wanted in the Departments of Ocean/Civil and Environmental Engineering, University of Rhode Island.

The Department of Ocean Engineering, University of Rhode Island, is seeking Ph.D. graduate research assistants for an NSF sponsored project on the role of fluid pressures in the triggering of tsunamogenic landslides. The position annual salary is \$21,000, and the successful candidate(s) will work under the supervision of Professors' Stephan Grilli and Christopher Baxter.

Qualifications: Background in one or more of the following topics: numerical modeling including boundary integral equation and finite difference methods, constitutive relationships of soils, experimental geomechanics, and physical modeling. The candidate must have excellent computer skills in high-level scientific program and data analysis. Knowledge of MATLAB is highly desirable. The candidate should have excellent written and verbal communication skills and a demonstrated ability to work as part of the team.

This project is part of a \$2.4 million NSF PIRE (Partnership for International Research and Education) grant on microfluidic technology. A key element of the project is international collaboration with faculty and students at Braunschweig University in Germany. The successful candidates will spend up to one year at Braunschweig University as part of this project, and may receive a dual Ph.D. from both institutions.

Application Procedure: The position will stay open until filled. Applicants should send : (1) a signed letter of application describing how their background and experience meet the requirements of the position, (2) transcripts of university course work ('official' copies not necessary), (3) resume, and (4) names and contact information of three references to:

PIRE Graduate Research Assistantship  
c/o Stephan Grilli  
Department of Ocean Engineering  
University of Rhode Island  
Narragansett, Rhode Island, 02882  
USA

A simultaneous electronic mailing of the same material is acceptable but a paper copy should follow in the mail.

For questions, please contact Stephan Grilli at (401) 874-6636; email: [grilli@oce.uri.edu](mailto:grilli@oce.uri.edu). Visit <http://www.oce.uri.edu/~grilli> for more information on S. Grilli's research and the Ocean Engineering Department and the University. Visit [http://www.oce.uri.edu/faculty\\_pages/baxter/Baxter.htm](http://www.oce.uri.edu/faculty_pages/baxter/Baxter.htm) for more information on C. Baxter's research interests.

The University of Rhode Island is an Equal Opportunity/Affirmative Action Employer.