

## Biomedical Informatics Scientist Specializing in Healthcare Informatics Evaluation

### ***THE INSTITUTION***

The Marshfield Clinic provides a unique living laboratory for the evaluation of the impact of informatics interventions. Marshfield Clinic is one of the largest multi-specialty group practices in the country. The Clinic also has an impressive track record in applied Clinical Informatics. The internally-developed EHR is one of the oldest and most comprehensive in the country. The data warehouse contains coded diagnoses data back to 1960, with other coded data and digital documents back to the mid-1980's. It also contains over 50 million textual documents.

High-resolution audit logging systems track over 100 million events per day related to EHR use by over 7000 users. Collectively, these data repositories provide a unique environment for the development and application of novel approaches to the mining and management of biomedical data. Marshfield Clinic provides a unique environment for informatics research.

In addition, Marshfield Clinic's affiliated insurance company, Security Health Plan, provide a source of rich health care financial data for research. The Marshfield Epidemiological Study Area (MESA) tracks over 90% of the health care activities for a geographically-defined region of central Wisconsin.

The Marshfield Clinic Research Foundation employs 175 researchers and staff. The Research Foundation is divided into five centers. The newest of these is the Biomedical Informatics Research Center (BIRC), which was founded in 2005. Currently the center employs about 25 scientists and staff. Research at BIRC focuses on informatics applied to practical clinical and research problems. Current areas of focus include: Human Computer Interaction, Translational Informatics, Dental Informatics and Genome/Phenome studies.

### ***THE CULTURE***

The organizational culture is highly collaborative, emphasizing multidisciplinary approaches rather than silos. The institutional commitment to informatics is unparalleled. Marshfield Clinic is committed to involving informatics in the day-to-day operations and to using clinic operations as a living informatics laboratory. The Marshfield EHR was the first internal EHR to achieve CCHIT certification. BIRC and the Personalized Medicine Research Project (PMRP) were recently funded to study to use of EHR data in genotype/phenotype studies. Another example of the institutional commitment is the new Laird Center for Medical Research, opened in Fall 2008 containing over 8,000 sq. ft. of new research space for BIRC.

Marshfield Clinic is committed to personalized medicine. Not only is the genetic biobank used to identify new genetic associations, Marshfield Clinic is also committed to translating these discoveries into improved treatments. The Clinic is committed to leveraging the data warehouse to change clinical research and practice. Utilizing warehouse-driven quality metrics and workflow tools, Marshfield Clinic demonstrated significant improvements in both quality and cost, as part of the CMS Professional Group Practice demonstration project. Through a Clinical and Translational Science Award with University of Wisconsin-Madison, we will be extending that work by developing a virtual data warehouse architecture, to facilitate cross-institutional research.

### ***THE POSITION***

The position would be a tenure-track associate research scientist located in BIRC. Joint appointments in other research centers or with Information System are also possible. Initial salary support and start-up funding is available. This position is at the academic rank of Associate Research Scientist (Assistant Professor equivalent), but it may be revised to Research Scientist (Associate Professor equivalent) for a scientist who has a record of accomplishment sufficient to be awarded tenure upon appointment.

### ***THE RESPONSIBILITIES***

It is anticipated that this scientist would conduct both grant-funded research evaluating the impact of various informatics interventions as well as provide internal evaluations of the cost effectiveness of ongoing and proposed clinical informatics projects. In addition, the scientist may utilize the informatics resources in BIRC to conduct comparative effectiveness research (CER) on non-informatics interventions. The Biomedical Informatics Scientist in this tenure track position will conduct high quality, independent and original research. This position is expected to: publish research results in leading peer-reviewed journals and books; compete successfully for extramural funding; collaborate and consult with other Foundation scientists and Marshfield clinician investigators; contribute expertise in the design, conduct and analysis of a wide range of research; participate in Center, Foundation and national scientific duties, such as committee membership, presentations at professional conferences and peer review of research proposals and publications.

### ***THE REQUIREMENTS***

We are seeking highly motivated individuals who want to have a real impact on the future of health care and to see their discoveries translated into operational systems. An ability to work in both multidisciplinary teams as well as independently is essential. Successful candidates will have an MD, PhD or equivalent, with training in informatics, econometrics or health services research. An ability to plan and carry out research experiments and projects is required, as demonstrated by an appropriate record of peer-reviewed publications. A strong potential to become independently funded is expected of junior candidates. A record of extramural funding and peer review experience is expected for senior candidates.

### ***THE CHALLENGES***

BIRC is a young and growing informatics research team. This provides a high level of freedom and autonomy, but also requires that candidates be self-starters who are able to develop collaborative networks.

### ***THE LEGAL STUFF***

Employee may not at any time have been or be excluded from participation in any federally funded program, including Medicare and Medicaid.

Marshfield Clinic is an Affirmative Action/Equal Opportunity employer that values diversity. Minorities, females, individuals with disabilities and veterans are encouraged to apply.

### ***THE PROCESS***

More information about Marshfield Clinic's Biomedical Informatics Research Center is available at [www.marshfieldclinic.org/birc](http://www.marshfieldclinic.org/birc). The Director of BIRC can be reached at [starren.justin@mcrf.mfldclin.edu](mailto:starren.justin@mcrf.mfldclin.edu). Candidates should submit: a curriculum vitae; a cover letter discussing research interests and career goals; up to five relevant publications; and the names of at least three references to the Director of BIRC at: [starren.justin@mcrf.mfldclin.edu](mailto:starren.justin@mcrf.mfldclin.edu) or hard copy to:

Justin Starren, MD, PhD  
Director, Biomedical Informatics Research Center  
Marshfield Clinic Research Foundation  
1000 North Oak Avenue  
Marshfield, WI 54449-5790