**NMEDW Data Analytics Summer Fellowship**

**About the Northwestern Medicine Enterprise Data Warehouse**

A central component of the data science infrastructure of the Center for Data Science and Informatics at the Feinberg School of Medicine is the Northwestern Medicine Enterprise Data Warehouse (NMEDW). Created in 2007, as part of the original NUCATS formulation, the NMEDW serves as the primary vehicle for data integration and transfer for both research and clinical operations. The NMEDW was created with a roughly $10 million, 3-year investment shared among the Feinberg School of Medicine (FSM), the Northwestern Medical Faculty Foundation and Northwestern Memorial Hospital. The latter two members have since merged, creating NMHC. From the beginning, the NMEDW was designed to serve both research and clinical needs from a single, unified warehouse. This dual-use model is one of the critical strengths of the NMEDW, and one that enables it to function as a unique bridge, integrating healthcare and research, as well as ensuring support from both the research and clinical partners. The NMEDW currently stores over 67 billion observations on 2.9 million patients. Each night it loads 44 million new data elements from 76 separate sources including electronic health records (EHR), pathology data from the hospital and research laboratories, biomarker data from research databases, and research transactional data from our eIRB and other institutional systems. It then transforms source data into integrated versions providing access to biological data along with patient demographics and clinical observations, outcomes, and clinical trials protocols. The NMEDW uses the clinical-grade network, computational, and security infrastructure of NMHC to guarantee data security, and is security-audited every year. Use of the NMEDW continues to grow rapidly, showing 258% growth since 2011.

**About the Fellowship**

The fellowship provides students or postdoctoral trainees the opportunity to work as part of the NMEDW team, gaining insight about practical challenges of clinical big data. The fellowship is open to doctoral and post-doctoral trainees an NU. Fellows will work with NMEDW staff on a variety of clinical and research data analytics projects.

The standard fellowship period is 12 weeks.

We anticipate two awards in 2015.

Fellows will be required to complete and pass an online course in Human Subjects Research before interacting with identifiable data.

**Special Instructions**

For the Biosketch upload, you can use either NIH format or standard CV format

For Title of Project, put “Summer Fellowship”