

## Medical Social Sciences

### Northwestern University Feinberg School of Medicine

Chicago, Illinois

#### Postdoctoral Position: **Applied Psychometrician**

##### **Overview**

The [Department of Medical Social Sciences](#) (MSS), Feinberg School of Medicine, Northwestern University invites applications for post-doctoral candidates with strong skills in psychometric analysis. The Department provides a unique scientific home for applied researchers who integrate biomedical and social science approaches to improvement of health and health care delivery across the lifespan ([www.mss.northwestern.edu](http://www.mss.northwestern.edu)). MSS provides rich resources for conducting research including a broad scientific portfolio with multiple, large scale datasets across the lifespan, biostatistical and health informatics cores, expertise in assessment methods and collaborative relationships across Northwestern's biomedical and life sciences campuses. In particular, MSS and its [Center on Patient-Centered Outcomes](#) within the Institute for Public Health & Medicine has an extensive array of funded research focused on patient-centered outcomes research including outcomes measurement, psychometrics, quality of life, symptom management, and comparative effectiveness research.

We are seeking post-doctoral candidates whose research focuses on applications of psychometric methods or who are interested in applying a range of psychometric techniques to neuropsychological measurement and other health outcomes. The ideal candidate will have expertise in item response theory (IRT) and the development of computer adaptive tests (CAT). Research projects will emphasize measurement and evaluation of performance measures and patient reported outcomes (PROs), the use of IRT and CAT for the assessment of health and functioning, as well as a wide range of traditional analytic methods.

##### **Supervision**

This position will receive a minimum of two hours per week of individual supervision by a psychometric scientist or co-investigator on the faculty. Collaboration in multiple research projects will be arranged. Post-docs also have the opportunity to interact with medical researchers within the MSS and across the Northwestern University medical community.

##### **Project Role**

The post-doc position will support instrument development activities by conducting and writing about quantitative analyses, including exploratory and confirmatory factor analyses, IRT calibration, and linking (scale alignment), among others. The post-doctoral candidate will focus the majority of his/her time on analysis and writing assignments that will both benefit the sponsoring projects as well as to serve as an excellent platform for promotion (potentially at Northwestern and certainly at other institutions as well). We have created a large series of datasets based upon our development, validation and norming of both the National Institutes of Health (NIH) Toolbox for Assessment of Neurological and Behavioral Function (NIH Toolbox) and the Patient Reported Outcomes Measurement Information System (PROMIS) across myriad populations, age bands and diseases. These data files are the results of the efforts of literally hundreds of researchers backed by more than \$100 million in NIH sponsored funding. And while more than one hundred papers have been produced from these datasets, many primary analyses are left un-conducted and therefore unpublished. The post-doc position will be responsible for effecting the production of as many as 10 articles per year, at least half of which will be first-authored by the post-doc. The post doc will actively participate in the selection of research topics.

The position will also participate in grant writing activities, likely leading to participation in current instrument development and validation efforts.

### **Qualifications**

This position is open to individuals who have completed a Ph.D. program in psychology, sociology, education, or health science. Candidates should have extensive experience with quantitative analysis and a strong record of scholarly publication, appropriate given experience. Experience with IRT analysis, CAT, and health outcomes research is preferred, but not required. Candidates with experience in educational testing are encouraged to apply. All requirements including the dissertation must be completed before entry into the fellowship.

Interested applicants should contact:

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Department of Medical Social Sciences  
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gershon@northwestern.edu  
cc: magdalena.kupczyk@northwestern.edu

Applications will be reviewed on a rolling basis until the position is filled.

Send by e-mail the following: 1) a letter of interest including professional goals and areas of research interest; 2) a curriculum vita; 3) names and contact information for 4 references, and 4) representative reprints of publications or submitted manuscripts.

In the subject line of the e-mail please include “**Applied Psychometrician - Postdoc**”

Final candidates will be interviewed by phone or in person. The fellowship contract will be contingent upon receiving a letter from the Ph.D. program’s director stating that all requirements for the Ph.D. have been successfully completed.

*Northwestern University is an Equal Opportunity, Affirmative Action Employer of all protected classes, including veterans and individuals with disabilities. Women and minorities are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.*