

**Assistantship Type:** Graduate Research Assistant  
**Department:** Translational Informatics  
**Pay Rate:** \$2500.00  
**Tuition Award:** \$4200.00  
**Benefit Eligibility:** Graduate students who hold an assistantship appointment of 0.25 FTE or greater for at least half of a semester (8 weeks) are eligible for 100% coverage of the health insurance premium by the University under the graduate student health care plan on a semester-by-semester basis.

**Anticipated Term:** Spring 2024

**Appointment Percent:** 50%

**Application Deadline:** 02/19/2024

**Position Summary:** **Project Overview:**

The Malec Lab/Division of Translational Informatics at the University of New Mexico Health Sciences Center seeks a highly motivated Graduate Research Assistant to join our dynamic team dedicated to groundbreaking Alzheimer's Disease research. This position is part of an innovative project funded by the K99/R00 award, focusing on developing and applying methodologies to identify risk factors and preventive strategies for Alzheimer's Disease and related dementias. The successful candidate will have the unique opportunity to contribute to a project that aims to transform Alzheimer's Disease research by improving causal feature selection methods, applying causal inference techniques, and optimizing knowledge integration for observational studies with the aim of reducing structural biases, i.e., confounding and selection bias.

**Key Responsibilities:**

- Assist in developing and testing causal feature selection methodologies to establish causal links in Alzheimer's Disease research.
- Participate in evaluating the effectiveness of Knowledge-Based Discovery (KBD) strategies in identifying and elucidating Alzheimer's Disease risk factors, focusing on primary prevention.
- Support the exploration of preventive effects of treatments targeting modifiable risk factors of AD through data analysis and literature review.
- Contribute to maintaining and enhancing a database of confounders for risk factors of dementia, facilitating the standardization of causal models, and benchmarking of causal feature selection methods for research on risk factors for Alzheimer's Disease.
- Engage in analyzing large datasets, including longitudinal data from sources like the UK Biobank and NIH All of Us Initiative participant data, employing advanced statistical and machine learning-based causal inference techniques.

- Collaborate with a multidisciplinary team, including researchers in neurology and related fields, to advance the project's aims and prepare for future grant submissions.

**Benefits:**

- Opportunity to work on a high-impact research project to transform Alzheimer's Disease research and prevention strategies.
- Exposure to cutting-edge methodologies in causal inference and observational study design.
- Collaborative environment with leading experts in the field. Access to a wealth of resources and data for conducting meaningful research.
- Potential for authorship on publications and participation in national and international conferences.

**Qualifications:**

**Preferred Qualifications:**

- Enrollment in a graduate program in Epidemiology, Biostatistics, Public Health, Neuroscience, Bioinformatics, or a related field.
- Strong interest in Alzheimer's Disease research and primary prevention strategies.
- Proficiency in statistical software (e.g., R, Python, SAS) and familiarity with database management.
- Knowledge of causal inference techniques and experience with observational data analysis is highly desirable.
- Excellent analytical, organizational, and communication skills. Ability to work both independently and as part of a collaborative research team.

To be employed as a graduate assistant; the selected candidate must meet the following criteria:

- Formally admitted to a graduate program at the University of New Mexico.
- A graduate student in good standing as determined in the sole discretion of UNM administration.
- For Fall and Spring semester, maintain enrollment at the University of New Mexico for a minimum of 6 hours of course work, thesis, or dissertation hours that count toward the graduate degree.
- A 3.0 grade point average in graduate coursework each semester.
- Within the time limit, as specified in the UNM Graduate Catalog, for completion of the degree sought.

**Application Instructions:** *Interested candidates should submit the following documents to Assistant Professor Scott A. Malec, PhD at [[smalec@salud.unm.edu](mailto:smalec@salud.unm.edu)] / (412) 330-7082 ]:*

- A cover letter expressing interest in the position and outlining relevant experience.
- A current CV including academic background, research experience, and publications (if any).
- Contact information for two academic or professional references.

Assistantship holders are represented by United Electrical, Radio and Machine Workers of America (UE).