

Office of Science and Technology (OS&T)
2014-2015 Academic Year
Research Assistantship Program (RAP) Placement Listings
(Masters or Doctoral Students)

PROJECT AREAS

NIJ's Mapping and Analysis for Public Safety

The Institute established the Crime Mapping Research Center (CMRC) in 1997, using funds from the Omnibus Appropriations Act of 1996. The center surveyed police departments to determine how they used analytic mapping in policing and began developing training programs to enhance departments' ability to use spatial maps and data sets. In 2002, CMRC evolved into NIJ's MAPS program. The MAPS program funds research that uses Geographic Information Systems (GIS), statistical analysis, and analysis of spatial data that will lead to: more effective deployment of law enforcement; better use of public safety resources; stronger crime policies; and greater understanding of crime.

NIJ's Standards Development Program (STP)

The NIJ STP develops and publishes equipment standards that specifically address the needs of law enforcement, corrections, and other criminal justice agencies. The goal is to ensure to the degree possible that equipment is safe, reliable, and performs according to established minimum requirements. Two of the most recognized standards developed by NIJ are for ballistic- and stab-resistant body armor used by law enforcement and corrections practitioners. Other standards for equipment such as walk-through and hand-held metal detectors, in-car video systems, interview room video systems, handcuffs and restraints, and retention holsters for law enforcement use are currently in various stages of development or revision.

NIJ's Voluntary Compliance Testing Programs (CTP)

Through NIJ's National Law Enforcement and Corrections Technology Center (NLECTC), NIJ administers voluntary CTP for criminal justice protective equipment, in accordance with the requirements of published NIJ Standards. The two primary CTP's operated by NLECTC are for ballistic- and stab-resistant body armor used by law enforcement and corrections practitioners.

Research assistant project task responsibilities include but are not limited to:

- Compiling, reviewing, and summarizing literature on research topics using annotated bibliographies. Specifically assisting in conducting literature reviews on assessment research methods.
- Maintaining and updating OS&T literature review matrix/spreadsheets on research topics.
- Maintaining and updating databases on research topics.

- Assisting NIJ staff in developing research questions and designs for intramural studies.
- Assisting with development of standards and testing methods. This may require travel to participating assessment sites for interviews of stakeholders. All travel will be in the [National Capital Region](#) (NCR).
- Assisting in preparing Institutional Review Board (IRB) materials for intramural studies.
- Assisting in conducting data analyses and report writing for intramural research projects.
- Assisting with publications and presentations (specific outlets to be determined).
- Regularly revising and updating NIJ web topical pages on assigned research topics.
- Coordinating and collaborating with federal partners on assigned research topics.
- Developing and maintaining a research compendium of OS&T research.

Specific Qualifications

- Education and/or Experience: Masters or Doctoral students in science, technology, engineering, mathematics, or criminal justice. Material science or biomedical research experience is highly desired for standards and compliance testing projects.
- Mathematical Skills: Very good understanding of statistical principles and research methods (both quantitative and qualitative).
- Computer Skills:
 - Proficiency in computers and standard software such as analytics software such as , ATLAS.ti, SAS, SPSS, or Stata.
 - Working knowledge of ESRI ArcMap (9.3 or later).
 - Working knowledge of ESRI ArcCatalog.
 - Computer-aided design software such as AutoCAD.
 - Cartography a plus.
- Other Skills and Knowledge:
 - Knowledge of spatial statistics.
 - Strong understanding of criminological theory a plus.
 - Knowledge of laboratory procedures and methods including standard operating procedures with regards to safety, security, and documentation.

Work Location: Primary work location will be at NIJ's offices in Washington, D.C. Standards and compliance testing positions will require local travel in the NCR to attend meetings and use test laboratories and research facilities.

Level of security clearance: Public trust.

Four Position(s) Available: Two for OS&T's mapping and analyses projects, one for OS&T's standards portfolio, and one for OS&T's compliance testing portfolio.