



**2017-2018 Academic Year
Office Science and Technology
Placement ID: RTSTBodyArmor**

Research/Topic Area: *Research, Testing, and Standards for Body Armor Designed for Women Law Enforcement Officers*

Program Overview: The role of women in law enforcement has evolved over the past few decades, going from police auxiliaries to police chiefs. In 1968, the Indianapolis Police Department was reportedly the first department to assign the first two female officers to patrol duties (Schulz, 1995). By 2007, women accounted for about 15 percent of the total sworn law enforcement officers in large local police departments (Langton, 2010). In 2013, about 58,000 (12 percent) of the full-time sworn personnel in local police departments in the United States were female (Reaves, 2015). As the number of women in law enforcement has increased over the years, so has the use of body armor. Modern police body armor was first introduced into service 40 years ago as the result of research funded by the National Institute of Justice (NIJ). Body armor designed specifically for female physiques has been introduced over the past two decades and includes construction elements that are typically not found in armor designed for male physiques. While test methods have been developed for that armor (National Institute of Justice, 2000), questions regarding the efficacy of those methods remain.

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

- Compiling, summarizing, revising, or making use of complex, technical, or specialized literature.
- Participating in data collection activities at ballistic labs testing female body armor.
- Extracting and compiling a range of data from written sources, from individuals (questionnaires and interviews), and from one or several given databases.
- Assisting in research design strategies (e.g., developing intramural research questions, proposals, procedures, and tools/instruments) including assisting in preparing materials (e.g., study proposal/design, protocols, and human subjects' and privacy certificates) for Institutional Review Board review for intramural studies.
- Assisting research staff with data collection and analyses efforts related to female body armor.
- Processing and summarizing data using scientific or statistical techniques.
- Assisting in data interpretation and analyses to generate reports/papers.
- Conceptualizing and drafting publications on test methods findings and recommendations (such as technical, scientific reports, peer reviewed journal articles, NIJ publications, and trade magazine articles).
- Drafting and presenting presentations at conferences.
- Recording, compiling, and reporting information related to the research program and activities with a focus on relevance for the policy or practitioner fields and prepare policy briefs and assist with assembly of responses to Congressional inquiries, as needed.



- Assisting with coordination of research activities and participating at intra- and interagency working groups (e.g., presenting updates on select research efforts, taking meeting notes, or drafting meeting summaries).

Candidate Eligibility Criteria

- Demonstrated knowledge of intermediate to advanced research and evaluation methods and analysis *required*.
- Demonstrated knowledge of the U.S. criminal justice system *preferred*.
- Demonstrated experience related to material science and data collection *preferred*.
- Demonstrated knowledge of material design, technical, and mechanical testing techniques, ballistics, standards and test method development, equipment performance, and knowledge of lab testing protocols *preferred*.

General Required Qualifications

- **Education and/or Experience:** Doctoral students working toward a terminal degree (e.g., Ph.D., Sc.D., D.Eng., D.Eng.Sc./Eng.Sc.D.).
- **Mathematical Skills:** Very good to advanced understanding of statistical principles and research methods (quantitative and qualitative).
- **Computer Skills:** Working knowledge of computers and standard software such as Adobe Professional, Excel, Internet Explorer, Outlook, Windows operating systems, Word, and PowerPoint required. Proficiency using R, SPSS, SAS, or Stata. Knowledge of Access and other statistical or geospatial software a plus.
- **Reasoning Ability:** Ability to work independently, accurately, and in a timely manner.
- **Communication Skills:** Ability to communicate orally and in writing to prepare comprehensive research reports, proposals, and presentations and make recommendations to accomplish and enhance project objectives.
- **Certifications, Licenses, Registrations:** Human Subjects (HS) Protection training is required. NIJ research assistants must take annual HS training onsite at the Office of Justice Programs. RAs also must successfully complete [CITI training](#).
- **Background Check:** Candidates must complete all required U.S. Department of Justice profile and pre-screening paperwork with all security reviews and background investigations (such as credit and criminal investigations) resulting in a favorable adjudication.
- **Citizenship:** Candidates must be U.S. citizens.

Work Location: Primary work location will be at [NIJ's offices in Washington, D.C., Baltimore area ballistic labs](#). Local travel in the [National Capital Region](#) may be needed to attend meetings and visit offsite research facilities. For this assistantship, extensive travel in the DC – Baltimore area is anticipated to conduct research.