UDC Homeland Security – STEM
Summer Research Assistantships

Summer 2010 Application


Application Deadline: April 30, 2010

Stipend: $2,400

Students will work in the interdisciplinary research teams with a faculty mentor in a homeland security science and technology project in the social and behavioral sciences priority research areas (See listing of Department of Homeland Security science and technology priority research area at the end of this information package).

Minimum Qualifications:

1. U.S. Citizenship
2. 2.5 GPA
3. Currently majoring in an undergraduate STEM (Science, Technology, Engineering, & Math) program.
   - Aeronautics
   - Agriculture
   - Anthropology
   - Biology
   - Bio Chemistry
   - Chemistry
   - Computer Science
   - Criminal Justice
   - Demography
   - Economics
   - Engineering
   - Environmental Studies
   - Epidemiology
   - Geography
   - Health Sciences
   - Hydrology
   - Linguistics
   - Mathematics
   - Marine Sciences
   - Maritime Meteorology
   - Oceanography
   - Physics
   - Planetary Science
   - Political Science
   - Psychology
   - Sociology
   - Social Science
   - Veterinary Services
4. Returning to school fall 2010.

This opportunity is open to all currently enrolled college students who will continue their college enrollment in the fall of 2010.

Applicants do not have to be UDC students,
But you must be enrolled in an accredited college or university.

Important note: Student Summer Research Assistants are responsible for their own housing.
Application packets consist of the following required documents:

1. A cover page including the following information:
   - Name
   - Local Address
   - City/State/Zip
   - Phone
   - Email
   - Major
   - Number of Credits completed by Spring 2010
   - University currently attending
   - How did you learn about the program?
     - University ad
     - UDC Faculty
     - Faculty Fellow Student
     - Blog
     - Facebook
     - Email

2. An unofficial university transcript

3. A resume

4. A one page personal statement indicating why you are interested in the summer research assistantship.

Application process includes:

1. An interview with the Committee
2. An interview with the Research Team Leader.
3. A commitment to refrain from working at other sites during the summer research timeframe if selected.

ALL APPLICATIONS MUST BE SUBMITTED BY THE APRIL 30, 2010 DEADLINE. NO LATE APPLICATIONS WILL BE ACCEPTED.

Submission Information

1. Application materials should be sent electronically via email to Ms. Charnita Wilson at cwilson@udc.edu. In the subject line enter: HS-SSRA.
2. If you do not receive a confirmation response within 48 hours, contact Ms. Wilson to assure receipt of your materials.

For additional information: Ms. Charnita Wilson

 cwilson@udc.edu
 202-274-5494
### Department of Homeland Security, science and technology priority research areas

<table>
<thead>
<tr>
<th>Priority Research Areas</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Advanced Data Analysis and Visualization</td>
<td>Information extraction, knowledge management, and visualization of large quantities of data to enhance data fusion, situational awareness, and threat detection.</td>
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<tr>
<td>Biological Threats &amp; Countermeasures</td>
<td>Assessment, characterization and prioritization of chemical-biological threats; detection and warning systems; agro-defense and food security; biological countermeasures; and decontamination, restoration and medical response to biological threat events.</td>
</tr>
<tr>
<td>Border Security</td>
<td>Technologies to monitor and inspect cargo that cross our land, maritime borders and ports of entry; tools to monitor people who cross our land, maritime borders and ports of entry; evaluation of the policies and procedures designed to secure the border while welcoming legitimate visitors and trade.</td>
</tr>
<tr>
<td>Chemical Threats and Countermeasures</td>
<td>Assessment, characterization and prioritization of chemical-biological threats; detection and warning systems; agro-defense and food security; chemical countermeasures; and decontamination, restoration and response to chemical threat events.</td>
</tr>
<tr>
<td>Communications and Interoperability</td>
<td>Interoperable communication for emergency responders; cyber security.</td>
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<tr>
<td>Community, Commerce and Infrastructure Resilience</td>
<td>Multidisciplinary research to develop approaches to improve community resilience across the United States, improving community resilience and determining ways where public investments can foster resilient communities.</td>
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<tr>
<td>Emergency Preparedness and Response</td>
<td>Decision support tools to aid in the preparation or response to catastrophic events; studies of public risk communication; medicine and public health; business technology for first-responders.</td>
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<tr>
<td>Explosives Detection, Mitigation and Response</td>
<td>The detection, mitigation, and response to explosives in a wide variety of contexts.</td>
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<tr>
<td>Food and Agriculture Security</td>
<td>Assessment, characterization and prioritization of chemical-biological threats; detection and warning systems; agro-defense and food security; biological or chemical countermeasures; and decontamination, restoration and response to biological or chemical threat events.</td>
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<tr>
<td>Human Factors</td>
<td>Integration of human factors concerns into homeland security technologies to improve utility and operator safety; assessments of public acceptance of homeland security technologies; use of technology to discern critical aspects of human behavior.</td>
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<tr>
<td>Immigration Studies</td>
<td>Studies of the integration of new immigrants into U.S. society and the consequences of successful/failed assimilation.</td>
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<tr>
<td>Infrastructure Protection</td>
<td>Assessment of relative threats and vulnerabilities of critical infrastructure; estimation of consequences of natural disasters or terrorist attacks to critical infrastructure; application of engineering technologies or tools to enhance DHS’ ability to prepare, predict, and minimize or prevent damage to critical infrastructure from natural hazards.</td>
</tr>
<tr>
<td>Maritime and Port Security</td>
<td>Technologies and tools to secure national maritime borders and U.S. maritime interests, support global maritime awareness, defend maritime commerce and global supply chains, minimize damage and expedite recovery from attacks or catastrophic events impacting maritime interests, and protect coastal population centers.</td>
</tr>
<tr>
<td>Natural Disasters and Related Geophysical Studies</td>
<td>Assessment of relative threats and vulnerabilities of critical infrastructure; estimation of consequences of natural disasters or terrorist attacks to critical infrastructure; application of engineering technologies or tools to enhance DHS’ ability to prepare, predict, and minimize or prevent damage to critical infrastructure from natural hazards.</td>
</tr>
<tr>
<td>Risk, Economics, and Decision Sciences</td>
<td>Applications of advanced methods and techniques to support decision making: quantitative analysis.</td>
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<tr>
<td>Social and Behavioral Sciences</td>
<td>Social and behavioral analyses of terrorist threats; community preparedness, response and recovery from catastrophic events; economic assessments of terrorism and catastrophic events; and economic and mathematical decision models of terrorist behavior.</td>
</tr>
<tr>
<td>Transportation Security</td>
<td>Applications of advanced methods and techniques to support decision making; quantitative analysis; improving the Nation’s preparedness in the event of a high consequence natural or man-made disaster, and developing best practices to alleviate the event’s effects.</td>
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*rev. 3/5/2010*