#### **FY2011 Defense Appropriations Request**

# Advanced Data Visualization and Numerical Techniques for Automated Gathering and Exploration (ADVANTAGE)

Recipient: Arkansas State University, PO Box 10, State University, AR, 72467

Amount Requested: \$880,000

*Project Description:* There is an increased need to seek tools for ADVANTAGE. The application of these tools would benefit multiple areas, but the main application would be to characterize the explosive effects of ordinance from the perspective of advanced chemical energetic and force protection.

## **Anthropomorphic Test Device Sensors for Kinetic and Impact Networks (ATDSKIN)**

Recipient: Arkansas State University, PO Box 10, State University, AR, 72467

Amount Requested: \$1,800,000

*Project Description:* With the increase in physical threats to America's military and law enforcement personnel, the ATDSKIN technology can replicate actual conditions and provide meaningful data in the event of an explosive energy event. This technology will provide low-cost and effective training systems for police officers and soldiers for explosive breaching operations.

### Arena Testing Utilizing LASER Systems (ALUTS)

Recipient: Arkansas State University, PO Box 10, State University, AR, 72467

Amount Requested: \$1,300,000

*Project Description:* Current methods of Weapons Effect Testing (WET) require a significant level of manual effort in frame-by-frame analysis of events. This project will produce a leading edge sensor platform capable of being deployed for multiple WET missions.

#### Laser Detection of Radionuclides for Nuclear Forensics (LDFNF)

Recipient: Arkansas State University, PO Box 10, State University, AR, 72467

Amount Requested: \$2,400,000

Project Description: Future Department of Defense needs in the Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) sensing arena will require development of sensors capable of near-real-time detection of CBRNE threats present in minute quantities from standoff distances. This program will develop near-real-time detection as well as confirmation of radionuclide molecules in the atmosphere from clandestine testing and will provide the first standoff detection capability for fissile dirty bomb materials.

## **Pride Center for America's Wounded Veterans**

Recipient: Arkansas State University, PO Box 10, State University, AR, 72467

Amount Requested: \$2,000,000

*Project Description:* The Pride Center would assist wounded or disabled veterans in achieving personal and educational goals through rehabilitation, counseling, advocacy,

and increased college access.