



News Release

Defense Advanced Research Projects Agency

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IMMEDIATE RELEASE

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DARPA PRESENTS AWARDS FOR EXCELLENCE IN PERFORMANCE

Dr. Anthony J. Tether, director of the Defense Advanced Research Projects Agency (DARPA), presented the 2007 DARPA Awards for Excellence at DARPATech 2007 in Anaheim, Calif., last night.

BAE Systems Advanced Technologies, Washington, D.C., received the award for Significant Technical Achievement for outstanding leadership and engineering innovation in the design, construction, and activation of the High-Frequency Active Auroral Research Program (HAARP) instrument in Gakona, Alaska. The HAARP instrument is critical to the understanding and prediction of space weather for satellite operations at low earth orbit and is invaluable as a ground-based test bed for applications requiring a flexible source of high frequency, extremely low frequency, and very low frequency radiation.

Phiar Corp., Boulder, Colo., received the Award for Small Business Innovation Research for their innovation excellence in creating a new electronic device technology that enables affordable, low-power sensor and communication operations. Using new nanotechnology-based quantum tunneling principles, Phiar's technology offers a potential solution to the speed and power limitations of semiconductor-based devices. It also offers higher performance generated from existing mainstream manufacturing technologies.

Fiberstars, Solon, Ohio, received the Award for Small Business Innovation Research for developing innovative arc source multi-layer coatings that more than double lighting systems lifetime without affecting performance. Fiberstars developed the innovative technology as part of DARPA's High Efficiency Distributed Lighting program, which is aimed at improving survival, deployment, and maintenance levels of lighting systems for Navy ships. Fiberstars' technology lowers life cycle costs of lighting systems by extending the interval between lighting replacements. The savings realized is substantial and will improve productivity and efficiency in a variety of military efforts.

Dr. Miguel Nicolelis, Duke University, Durham, N.C., received the award for Sustained Excellence by a Performer for his work advancing the understanding of the relationship between the brain and motor control leading to innovative possibilities for thought-controlled prosthetic devices. His accomplishments provided scientists with techniques to decode the brain's motor signals with such fidelity that movements of a robotic arm can be achieved entirely by direct brain control. As a result of Dr. Nicolelis' efforts, DARPA initiated a program to create a fully

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functional prosthetic arm that will dramatically improve the quality of life for the men and women in uniform who were injured while serving our nation.

SRI International, Menlo Park, Calif., received the Award for Sustained Excellence by a Performer for leading a team that pioneered cognitive systems technologies in machine learning, machine reasoning, perception, man-machine dialogue, and cognitive system architectures. In support of this effort, SRI International developed the Personalized Assistant that Learns (PAL), the world's first integrated cognitive assistant that learns on the job and adapts on its own. The PAL Team's work provides a template for further development of robust, adaptive intelligent systems in a wide range of military and commercial settings.

The Award for Significant Technical Achievement was presented to Dr. Mark Roth, of the Fred Hutchinson Cancer Research Center, Seattle, Wash., for the leadership and scientific expertise he and his team provided under the DARPA Surviving Blood Loss program. Dr. Roth and his team successfully demonstrated a hydrogen sulfide therapy involving the reversible reduction of a mammal's metabolic activity without long-term side effects. The results of this effort have led to technology that will dramatically improve the survival rate of wounded warfighters and provide revolutionary improvements in the prevention and control of other medical complications on the battlefield.

The Award for Sustained Excellence by a Government Agent was presented to selected Air Force Research Laboratory, Wright Patterson, Ohio, personnel for their support of DARPA's Tactical Targeting Network Technology (TTNT) and Quint Networking Technology (QNT) programs. Recognized AFRL staff were Dawn Ross, Capt. John Tate, John Woods, Mark Minges, and Lt. Michael Clark. TTNT is an Internet protocol-based, high-speed, dynamic, ad hoc data link network designed to enable tactical aircraft to quickly target moving and time-critical targets. QNT is a modular network data link program focused on providing a multiband modular capability. These dedicated Air Force personnel helped develop advanced technologies that dramatically improved airborne networking among tactical aircraft, ground control nodes, and the Global Information Grid. As a result of the team's efforts, the Joint Forces will have enhanced network-centric capabilities for combat situational awareness and engagement of fleeting targets with minimal risk of collateral damage.

The Award for Sustained Excellence by a Government Agent was also presented to selected members of the U.S. Marine Corps Wasp Micro Air Vehicle Flyaway Cell team of the Marine Corps Warfighting Laboratory, Quantico, Va. Recognized team members included Sgt. Aaron W. Smith, Gunnery Sgt. Tyrone Butler, Maj. Jeffrey M. Dunn and Maj. Tiley R. Nunnink. This team conceived, developed, and implemented the training and logistical support for a Marine Corps battalion to conduct a comprehensive evaluation of Wasp in actual combat operations. Wasp is a DARPA experimental prototype air vehicle weighing less than one pound and equipped with global positioning system navigation and a color camera. It is designed for front-line reconnaissance and surveillance over land and sea.

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