The Intelligence Advanced Research Project Activity (IARPA), a cutting-edge government research agency, has become the newest tenant to join M Square, the University of Maryland Research Park. As such, the national security-related agency will be working collaboratively with researchers and scholars at the university, exploring new research opportunities of importance to the intelligence community.

“We are delighted that IARPA has chosen to locate near our campus and our intellectual environment,” says Mel Bernstein, vice president for research. “This will make for an exciting working relationship that will not only benefit the university and the government, but society, as well, helping keep our nation safer.” IARPA is expected to be in a newly constructed building by 2009 and is now temporarily located in the Center for Advanced Study of Language (CASL), the nation’s largest language research center and an early M Square tenant.

Modeled after the military’s Defense Advanced Research Projects Agency, IARPA is charged with developing groundbreaking technologies for the U.S. intelligence community. IARPA consolidates the National Security Agency’s Disruptive Technology Office (previously called the Advanced Research and Development Activity); the National Geospatial-Intelligence Agency’s National Technology Alliance; and the Central Intelligence Agency’s Intelligence Technology Innovation Center. “IARPA opens a new chapter in the nation’s capacity to address its security challenges, both those that are known today and those that are sure to come,” says university president, Dan Mote. “The university’s education and research programs will serve IARPA extremely well.”

Adds Ken Gertz, associate vice president for research development, “Our unique strengths here at the university in areas such as computer vision, quantum science and technology, cultural modeling, information assurance and language technology, are well positioned to support the mission of IARPA. Our research efforts are extremely synergistic.”
In the coming months, we will continue to introduce you to new faculty and research scientists who have joined the Maryland research community within the past year.

Lisa Tanyhill is an assistant professor of animal and avian sciences. Her research includes the use of molecular, cellular and biochemical techniques to study neural crest formation in the chicken embryo to better understand overall animal growth and development.

Azar Nazeri is a new research manager facilitating the Energy Education and Research Collaboration between the University of Maryland and the Petroleum Institute at Abu Dhabi. She brings more than 15 years of experience as a research scientist and program manager.

Derek Polley is an assistant professor of aerospace engineering. His research focuses on nonlinear dynamics and controls, cooperative control of autonomous vehicles, autonomous underwater vehicles, and modeling of animal aggregations.

Victoria-Maria MacDonald is a visiting associate professor of minority and urban education in the College of Education’s Department of Curriculum and Instruction. She is an historian of education specializing in the history of Latinos, Southern urban education, and Black-Latino relations in contemporary schools.

Emel Filiz Ozbay is an assistant professor of economics. Her research interests are in theoretical economics, contract theory, decision theory and experimental economics.

Kapetalli Sreenivasan, Distinguished University Professor of physics and former director of the National Academy of Sciences. Sreenivasan, who also holds a joint appointment with mechanical engineering, is one of the world’s premier researchers in fluid dynamics and turbulence.

Steven Garbbiel, associate professor of civil and environmental engineering, received the Gilbert F. White Fellowship from Resources for the Future for 2007-2008. Resources for the Future is an internationally renowned, independent institute in Washington, D.C., dedicated to the analysis of environmental, energy and natural resource issues.

Uzi Vishkin, a professor with the Department of Electrical and Computer Engineering and the University of Maryland Institute for Advanced Computer Studies, was honored last fall by the Maryland Daily Record for his recent advances in parallel computing technology. Vishkin has received international attention for the desktop supercomputing prototype he created, which is capable of speeds 100 times faster than current desktops, representing a paradigm for the next generation of computers.

Smart Growth Center’s Research Influences Public Policy

The National Center for Smart Growth Research and Education, housed in the School of Architecture, Planning and Preservation, is focused on research that addresses smart growth issues such as transportation and public health, land use and the environment, housing and community development and international development. In doing so, the center brings together the expertise of faculty and researchers from four different schools on campus — architecture, public policy, agriculture and natural resources, and engineering.

But, the work of the center does not stop with the research alone. For example, Gerrit-Jan Knaap, the center’s executive director, serves on Gov. Martin O’Malley’s Smart Growth Subcabinet. “Working so closely with the administration you create this tie between policy research and policy-making itself,” says Knaap, who is also a professor of urban studies and planning.

That close tie is all the more evident with the center’s latest project: Working with the State Highway Administration, the center will be home to the first statewide transportation model. The transportation model will incorporate land use information, economic information and natural resource information “in helping the state do a better job of transportation and land use planning,” explains Knaap. The model will provide examples of the different ways the state can grow and the implications of those different growth patterns: “We’re providing a resource for the state as it goes forward in preparing for the future,” says Knaap. Adding, “We have our fingers on the pulse of the issues that state policy-makers are addressing regularly. That keeps us and our research relevant.”

SPOTLIGHT

FACULTY AWARDS & HONORS

Kapetalli Sreenivasan, Distinguished University Professor of physics and former director of the National Academy of Sciences. Sreenivasan, who also holds a joint appointment with mechanical engineering, is one of the world’s premier researchers in fluid dynamics and turbulence.

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RESEARCH SEMINAR SERIES

Overview of ONR Strategic Objectives

Featured speaker is Admiral William E. “Bill” Landay III, chief of naval research

Thursday, Feb. 7, 11 a.m. to noon

Juan Ramey Memorial Room, Stamp Student Union Building

For more information: geronimo@umd.edu

Air Force Research Priorities and Strategic Overview

Featured speaker is Mark J. Lewis, chief scientist of the U.S. Air Force in Washington, D.C.

Wednesday, Feb. 27, 11 a.m. to noon

Peppo Room (Room 1105), Jeong H. Kim Engineering Building

For more information: geronimo@umd.edu

National Science Foundation’s Priorities and Future Directions

Featured speaker is Tom Cooley, chief financial officer and director of the Office of Budget, Finance and Award Management of the National Science Foundation.

Tuesday, March 4, 11 a.m. to noon

Benjamin Barracks Room, Stamp Student Union Building

Please RSVP to jdibrell@umd.edu by Feb. 29. Space is limited.

For more information: geronimo@umd.edu

Join the conversation on Facebook, Twitter, LinkedIn, and Instagram.

UPCOMING EVENTS & CONFERENCES

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