Attracting world-class talent: Ohio State welcomes new research scholars

Chris Baker, one of the top radar systems researchers in the world, joined Ohio State in June as the Ohio Research Scholar in Integrated Sensor Systems and Endowed Professor in Electrical and Computer Engineering. Baker’s hire complements the university’s existing strength in radar-related areas and moves Ohio State closer to becoming a premier radar research and education university. Baker’s research interests include coherent radar techniques, radar signal processing, radar signal interpretation, electronically-scanned radar systems, natural echo locating systems, and radar imaging. Prior to joining Ohio State, Baker was the dean and director of the College of Engineering and Computer Science at the Australian National University. David McComb will join the university on October 1, 2011, as the Ohio Research Scholar in Nanoscale Materials Characterization and professor of materials science and engineering. His research portfolio boasts programs in catalysis, ferroelectrics, nanotoxicology, organic and hybrid solar cells, biomaterials, fuel cells, and nanolasers. McComb has already helped spur the establishment of a new high-resolution electron microscopy center in the research park at Ohio State that will be capable of soft and biological materials characterization. McComb will be coming to Ohio State from Imperial College London in the United Kingdom, where he was a professor of nanomaterials and co-director of the London Centre for Nanotechnology. The Ohio Research Scholars Program, funded jointly by the Ohio Department of Development and the Ohio Board of Regents, provides funds to attract eminent researchers in targeted high-tech sectors to Ohio’s universities.

Nisonger Center receives $4.9 million grant to expand training program

The Maternal and Child Health Bureau of the Health Resources and Services Administration in the U.S. Department of Health and Human Services awarded a five-year, $4.9 million grant to the Nisonger Center to expand the Leadership Education in Neurodevelopmental and Related Disabilities (LEND) program. The LEND program is a long-term, graduate-level training program focused on improving the health of infants, children, and adolescents with neurodevelopmental and related disabilities. Trainees from more than a dozen diverse disciplines are provided with opportunities to advance their knowledge and skills, foster community-based partnerships, and promote innovative practices to enhance cultural competency, family-centered care, and interdisciplinary partnerships. LEND also addresses the economic, ethnic, and geographic disparities that persist in quality and availability of health services. Paula Rabidoux, a speech-language pathologist and director of training and community outreach at the Nisonger Center, and Karen L. Ratliff-Schaub, clinical assistant professor of pediatrics in the College of Medicine and director of clinical services for the Nisonger Center, are the LEND co-directors. Currently, there are 39 LEND programs located in 32 states and the District of Columbia. The Nisonger Center provides assistance to people with disabilities, families, service providers, and organizations by promoting inclusion of people with disabilities in education, health, employment, and community settings.

Gaudi receives NSF CAREER Award to map exoplanets

Scott Gaudi, associate professor of astronomy, received a five-year, $774,527 National Science Foundation (NSF) Faculty Early Career Development (CAREER) award to create a new stellar map for exoplanets – the planets that lie beyond our solar system. The CAREER award is NSF’s most prestigious award for junior faculty and emphasizes outstanding research, excellent education, and the integration of education and research. Gaudi will compare the various methods used to find exoplanets on a rigorous statistical basis to gain better global understanding of their demographics. He will engage in a number of outreach and instructional activities geared towards educating gifted students about careers in science as well as provide an academic outlet for disadvantaged minority groups. Gaudi received the Helen B. Warner Prize in 2009 – the highest award given to young astronomers – in recognition of his significant and broad theoretical contributions to the field of exoplanet research. Astronomy Magazine named Gaudi one of the “10 Rising Stars of Astronomy” and Discovery Magazine placed him on the “20 Scientists to Watch in 20 Years” list.
OARDC unveils unique agricultural safety facility in Wooster

The Ohio Agricultural Research and Development Center (OARDC) unveiled a unique, highly secure bio-containment building aimed at enhancing its research programs on infectious diseases of plants and animals and safeguarding Ohio’s $90 billion agricultural industry. The $22.2 million Plant and Animal Agrosecurity Research (PAAR) Facility will enable scientists on the Wooster campus to work with infectious agents classified at the biosafety level 3 (BSL-3) and BSL-3 Agriculture safety levels. PAAR is the first facility in Ohio, and one of only two nationally, with the capacity for both plant and animal research at BSL-3 levels. With the opening of this facility, research on a number of disease organisms and pests capable of causing billions of dollars in losses to crops, trees, and livestock should increase significantly. Studies on animal-borne diseases that affect humans will increase, contributing to advancements in public health. Highly-competitive faculty and grants will be attracted to Ohio, and public-private business partnerships as well as job creation will be spurred as PAAR adds to the BioHio Research Park infrastructure.

Steinmetz elected president-elect of the APS

Joseph Steinmetz, executive dean and vice provost, College of Arts and Sciences, and professor of psychology and neuroscience, has been elected president-elect of the Association for Psychological Science (APS). He will serve as president of the organization for one year beginning in May, 2012 and as a member of the APS board of directors until 2014.

Preventing Ohio for the deployment of electric vehicles

Ohio State’s Center for Automotive Research (CAR) has been awarded $907,026 from the U.S. Department of Energy (DOE) to promote the development of a skilled workforce of engineering professionals to overcome existing technical barriers and help commercialize the next generation of advanced automotive technologies. The award is part of DOE’s Graduate Automotive Technology Education (GATE) initiative which funds curriculum development and expansion as well as laboratory work, and allows higher education institutions to develop multidisciplinary training. The GATE initiative supports seven Centers of Excellence at U.S. universities and university-affiliated research institutions. Clean Fuels Ohio, a nonprofit group dedicated to promoting the use of cleaner, non-petroleum fuels and efficient vehicles to the transportation industry, community leaders, and Ohio citizens received a $500,000 award from DOE. This award is part of DOE’s Clean Cities initiative to facilitate local public-private partnerships to develop electric vehicle deployment strategies. CAR is a partner on this project along with the University of Akron, the Great Lakes Energy Development Task Force, several regional planning commissions, and the governments of Columbus, Cincinnati, Cleveland, and other Ohio cities.

TechColumbus seeds three start-ups with Ohio State ties

TechColumbus, tasked with accelerating Central Ohio’s technology sector, awarded $1.2 million in FY 2011 to 12 start-up companies in the seed and early stages of development. Three of the companies have Ohio State connections. The inventors of the “Level Belt” and Antho-Scyantific, LLC, received $50,000 TechGenesis grants to further validate their concepts, investigate and secure intellectual property rights, build prototypes, and conduct other proof-of-concept activities. The “Level Belt” device, based on technology invented at Ohio State’s Sports Medicine Center, was created to help individuals develop core strength after injuries affecting the trunk and upper and lower extremities. It is the only available self-contained, hands-free device providing consistent external feedback to patients while performing strengthening exercises. Antho-Scyantific, LLC, an early-stage company, leveraged IP developed by Maria Monica Guisti, assistant professor of food science and technology. The company extracts and produces highly purified anthocyanins – naturally-occurring compounds extracted from vegetables, fruits, flora, leaves, and seeds. They are potent antioxidants used in the prevention and treatment of cancer, diabetes, cardiovascular disease, infection, and other types of inflammatory conditions. IR Diagnostyx, Inc., received TechColumbus Pre-Seed Funds which are directed toward companies with the potential to reach $30 million in revenue in three to seven years. The company specializes in providing rapid, accurate, and painless diagnosis for diseases like irritable bowel syndrome, fibromyalgia, and chronic fatigue syndrome. The company’s founders, who placed third in the 2008 Fisher business plan competition, based their technology on research conducted by Tony Buffington, professor of veterinary clinical sciences, and Luis Rodriguez-Saona, associate professor of food science and technology.