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Office of Vice President for Research

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DISCOVERY

OFFICE OF VICE PRESIDENT FOR RESEARCH

Electronic versions available at wmich.edu/research/news.html

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OVPR VISION AND MISSION

VISION: TO BE A LEADER AND CATALYST FOR SCHOLARSHIP EXCELLENCE

MISSION: THE OFFICE OF THE VICE PRESIDENT FOR RESEARCH ADVANCES THE OVERALL SCHOLARSHIP AGENDA OF THE UNIVERSITY; SUPPORTS THE SCHOLARSHIP INITIATIVES OF WMU FACULTY, STUDENTS AND STAFF; AND ASSURES COMPLIANCE WITH ALL APPROPRIATE FEDERAL AND STATE REGULATIONS.

WWW.WMICH.EDU/RESEARCH

DISCOVERY PLANNING UPDATE: DISCOVERY COMMUNITIES

Discovery is broad and deep at Western Michigan University. Our hundreds of faculty and staff have created a rich diversity of Discovery in research and creative activities.

These are reflected in our department and unit Discovery Plans where over 250 discovery areas of current and future efforts were identified. Some activities stand alone, but many are collaborative at different levels.

Our Centers and Institutes coordinate some of these efforts, and other focus areas have also been identified.

The Office of the Vice President for Research (OVPR) wants to help facilitate and support inter-disciplinary and inter-organizational Discovery collaboratives both internally and externally. OVPR has hosted and facilitated several initiatives over the past year to build collaboration across the university and usually around identified themes.

The Discovery Plans and our WMU Discovery Experts System provide resources to help

identify and create such collaborative actions. Analysis and synthesis to date point to several university-wide overarching themes that build upon current strengths, can integrate several efforts and areas of expertise, and hold promise for the future.

These include: Evaluation & Assessment, Health, Education, Sustainability, STEM and STE(A)M, and Entrepreneurship. We plan to build models for Discovery Communities in such areas and provide targeted support for sustainable collaboration in these and others that are yet to be identified.

These Discovery Communities composed of individual efforts, research programs, and existing collaboratives of different types can help serve as vehicles to carry us to greater cooperation, visibility, and accomplishment. We hope to work with many across WMU to grow them.

It is a great time to be a Bronco!

~Dan Litynski, VP for Research

DEADLINE TO ADD INFORMATION TO RESEARCH PROFILE EXTENDED TO JULY 31

The WMU Discovery Experts database is designed to leverage the expertise of individual faculty and staff by empowering you to expand your reach and reputation in your disciplines.

Phase 3, which is currently underway through July 31 (deadline extended), involves faculty and staff submitting additional content such as course/teaching information, publications, performances, exhibits and other discovery works.

Go to wmich.edu/research to log directly into the site to edit your profile, or go to <http://staging.experts.scival.com/wmich/> to begin the process of updating your profile.

Note the deadline to add your information has been extended to July 31.

If you have questions or need assistance, call or e-mail Jay Hoinville at 269-387-8265 or jay.hoinville@wmich.edu.

WMU WINS 2014 CLIMATE LEADERSHIP AWARD FROM SECOND NATURE

Western Michigan University has been selected to receive a 2014 Climate Leadership Award, recognizing the campus for its innovation and leadership in sustainability.

The award is from Second Nature, a national nonprofit organization that works to transform higher education to create a healthy, just and sustainable society. The awards are presented annually to signatory institutions that are part of the American College and University Presidents' Climate Commitment. The awards recognize institutions that "demonstrate innovative and advanced leadership in education for sustainability and climate mitigation and adaptation."

"The United States National Climate Assessment demonstrates that human-driven climate change is no longer a problem for the future—it has moved firmly into the present as campuses and communities across the country increasingly feel its impacts," says David Hale, president of Second Nature. "There is much more work to be done as we prepare to live in the climate of the future. More than ever, higher education has a critical role to play as this year's Climate Leadership Award winners demonstrate with their leadership and exemplary actions."

This year, the award program's fifth, drew the most competitive pool of nominations to date, according to Second Nature officials. The six winners were among 20 finalists chosen by Second Nature's board and representing the diversity of higher education institutions across the United States. Earlier this spring, all 20 finalists participated in an online video competition featuring each campus' respective sustainability accomplishments. The WMU video was the top vote-getter in the video competition, garnering nearly 9,000 votes.

"This process has been extraordinarily gratifying," says WMU President John M. Dunn. "The competition allowed us an opportunity to reflect upon our many accomplishments, as well as have some fun and celebrate those achievements. Now, winning the award raises the bar and challenges us to tackle the next level of work."

WMU's sustainability efforts, which are part of its strategic plan, date back to 1971 when the University established Michigan's first environmental studies program. In 1980, the University launched a quasi-green revolving fund—the first in the nation—that is used to fund energy-saving projects. Energy savings from those efforts have been captured and reinvested in additional energy-saving initiatives over the years. A number of other higher education institutions have since adopted similar funding mechanisms. Additional work at WMU has focused on solar power, electric vehicles, food and gardening, stormwater management, and interdisciplinary efforts to build sustainability into curricula and research. In 2010, WMU students became the first student body in Michigan to initiate and approve a fee that supports campus sustainability initiatives and provides funding for student research.

Second Nature is the support organization of the American College and University Presidents' Climate Commitment. The ACUPCC is an active partnership among 684 colleges and universities to accelerate the education, research and community engagement needed to slow and stop human-induced climate change while setting an example by eliminating net greenhouse gas emissions from their own operations. Learn more at secondnature.org and presidentsclimatecommitment.org.

Source: University News

RFP: DIVERSITY CHANGE INITIATIVE GRANT

Campus Climate for Diversity, Equity, and Inclusion Tactical Action Community (CCDEI TAC) invites proposals from faculty, staff, and administrators interested in implementing transformational diversity change initiatives derived from internal division/college/unit assessments and recommendations.

Applications are encouraged from all areas of the University for projects involving collaboration among faculty, staff, students and administrators. The project lead must be an employee. Proposals that involve multiple units and constituent groups will be given priority consideration. Requests for implementation funds must build on diversity, equity, and inclusion assessment from one of the following:

- Diversity, equity, and inclusion focused assessment results and recommendations from a recently awarded

Diversity, Equity, and Inclusion Assessment Grant project.

- A previous assessment, self-study, etc. If applying under this criterion, the application must include a final report from the assessment or self-study.
- An assessment may be included as the first step in the proposed Diversity Change Initiative project. If applying under this criterion, the application must include both an assessment and implementation plan. Project budget line items should be separate for assessment plan and implementation plan.

Funding from the W. K. Kellogg Foundation's Racial Healing Grant is available to award nine implementation grants up to \$15,000 each.

\$4 MILLION FOR WMU AUTISM INITIATIVES COMES FROM THE STATE

Western Michigan University is slated to receive **\$4 million to boost its autism research and professional training initiatives**, State Rep. Margaret O'Brien announced.

The University, which has a national reputation for its work in behavior analysis as a treatment for autism, will use the funding to tackle the growing national incidence of the brain development disorder by:

- Increasing the number of new professionals in the field each year and developing a training model that can be disseminated and replicated at other colleges and universities.
- Developing innovative on-campus support networks for college students on the autism spectrum.
- Directing and overseeing a community daycare and treatment center for young children.

Directing, developing and maintaining community consultation resources, using such technology as podcasts and tele-consultation.

An 'internationally known program'

"Today we're here to really focus on our children ... It's about what research shows works and about investing in our young people so that we can not only improve quality of lives, but we can actually maximize the resources that the taxpayers send to the state," O'Brien said. "... We're announcing today that we have been able to secure \$4 million of state funding directed toward Western Michigan University so we can increase the capacity to train professionals, and so that, hopefully throughout this state, we will no longer have families waiting up to two years to get services."

The new funding is part of the Michigan budget finalized in a conference committee in Lansing earlier this month.

O'Brien, who has a background in social work and business, noted that she and her two colleagues — State Sen. Tonya Schuitmaker and State Rep. Aric Nesbitt — were among Michigan legislators who worked earlier to secure insurance coverage for autism services in Michigan. Once that was accomplished in 2012, she said, they began to hear too many stories about the shortage of service providers and long waits for families to get assistance. Allowing the situation to evolve over time and waiting for the supply of trained professionals to grow to match the need was not an option.

"By the time we built that capacity, it was going to be too late for too many children," O'Brien said. "We know that the earlier

we reach them the better it is for families and kids."

The solution, she noted was "in my own backyard," where Western Michigan University already has an internationally known program in training people in behavioral health—especially those who serve those families that are dealing with autism.

WMU President John M. Dunn praised O'Brien for her advocacy and for connecting the University's resources with a growing and urgent need in the broader community.

"Rep. O'Brien has been steadfast in her support for what we do here," Dunn said. "She is an advocate for putting the best resources of a research university to work to address very real community needs. This is a population that demands and deserves our commitment to ensure a well-trained force of professionals is available to help realize the full potential of those with autism."

Autism spectrum disorder and autism are general terms for a group of complex disorders of brain development. These disorders are characterized—in varying degrees—by difficulties in social interaction, verbal and nonverbal communication and repetitive behaviors. Earlier this year, the Centers for Disease Control and Prevention indicated the prevalence of autism is rising and now affects one in 68 American children. Breaking this number down, the CDC estimates one in 42 boys have autism compared with one in 189 girls.

Behavior analysis at WMU

Behavior analysis specialists in WMU's Department of Psychology have a 30-plus year history of work with community partners to offer supervised field experience in the areas of developmental disabilities, autism and education. The University has awarded nearly 400 doctoral degrees and more than a thousand master's degrees to professionals working in developmental disabilities, autism, clinical psychology and industrial organizations psychology—all with a behavior analysis orientation.

The efforts funded by the new state money will move forward under the direction of **Dr. Stephanie Peterson**, chair of the WMU Department of Psychology, and **Dr. Wayne Fuqua**, professor of psychology, whose longtime focus has been on the use of behavior analysis for the treatment of autism.

Source: University News

\$1.4 MILLION GRANT FROM HOWARD HUGHES MEDICAL INSTITUTE

A **\$1.4 million grant** from the Howard Hughes Medical Institute to Western Michigan University will be used to enhance undergraduate introduction to science, with the goal of attracting and retaining more students in the STEM disciplines—science, technology, engineering and mathematics.

The five-year research and development effort will be centered on WMU's introductory courses in biological sciences. The grant is one of just 37 awards made by HHMI this year to American research universities invited to compete in the institute's 2014 funding round. A total of 203 universities were invited to apply, and the eventual winners were selected after three rounds of peer review.

"Developing Scientists as Teachers; Developing Students as Scientists: A Dual Approach to Transforming the Culture of Undergraduate Biology Education" is the title of the WMU effort. The extensive work will focus on both reforming the curriculum and enhancing the professional development of the faculty members and teaching assistants who introduce undergraduates to the scientific experience.

The aim of the work is to combat the dramatic loss of prospective scientists that occurs in the first months of American students' college careers, says Dr. Renee Schwartz, associate professor of biological sciences, who will direct

the research along with her colleagues Dr. John R. Geiser, also an associate professor of biological sciences; and Dr. Susan R. Stapleton, dean of the Graduate College, a longtime science and science education researcher, and a previous HHMI grant recipient.

According to Hughes Medical Institute, nearly 40 percent—about 1.2 million—of the 3 million students who annually enter college do so with the intent to major in a STEM discipline. Only 40 percent of those prospective science students go on to earn a bachelor's degree in that STEM discipline, with most switching majors during their first two years on campus. Among minority students, 80 percent of those who begin in the STEM disciplines turn away from science during their freshman year.

The planned curricular changes at WMU will include making sure that students have an authentic scientific experience in their first science classes on campus. A typical introductory course, she says, will see students spend about half of the semester actively engaged in a science project that requires them to work as a team to develop a research question, design a research effort to seek answers, and collect and analyze data to answer their research questions.

Source: University News

FACILITIES & ADMINISTRATIVE COST RATES (F&A)

The work of WMU faculty, staff, and students on externally-funded projects includes direct and indirect costs. Direct project costs are usually straightforward and easily attributed to a specific project. Indirect costs, termed Facilities and Administrative Costs (F&A), are also real costs that are essential for a project's implementation, but would take much time by faculty and staff to attribute and track in relation to specific projects.

F&A costs include such expenses as utilities, custodial services, security, payroll, purchasing, fiscal management and tracking, and department administration. To relieve the burden on researchers, F&A costs are agreed upon through formal negotiations every four years with our cognizant agency, the U.S. Department of Health and Human Services. They are based upon data presented by the University via a cost analysis and are expressed as a percentage of total direct costs minus exclusions.

Having such a rate helps the university reduce the costs of having to determine how much of these resources each individual project uses or consumes. WMU recently concluded this process and new rates for research- and instruction-related projects funded externally for both the University and WMed have been established as follows:

- July 1, 2013 – June 30, 2015 = 50% of modified direct costs
- July 1, 2015 – June 30, 2017 = 51% of modified direct costs

Project budgets are required to include full recovery of F&A costs at the appropriate negotiated rate. More information about specific rates and F&A policies are available on the OVPR website (www.wmich.edu/research/policies/proposalsubmit).

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