The New Partnership for Africa’s Development (NEPAD) and Michigan State University will use a five-year, $10.4 million grant from the Bill & Melinda Gates Foundation to connect African biosafety regulators with advances in technology – an initiative aimed at reducing poverty through improved agricultural practices.

The foundation announced the grant in conjunction with Bill Gates’ keynote address at the World Food Prize Symposium in Des Moines, Iowa, in October. It is part of a package of nine agricultural development projects totaling $120 million to address long-term food security.

Four members of the African Biosafety Network of Expertise (ABNE) staff are taking classes and working with MSU faculty to learn about biotechnology issues affecting small-holder farmers, such as costs to farmers, environmental safety and human health safety. They will also learn how to address and understand ethical concerns related to the use of biotechnology.

MSU and NEPAD – a socioeconomic development program of the African Union – will use grant money to convene workshops and provide regulators with the most current science-based information to regulate biotechnology while protecting farmers, consumers and the environment.

An African-based and African-led initiative, ABNE will draw upon existing expertise and resources, while forming connections with both African and global institutions to create a network of expertise. In 2008, MSU and NEPAD received a previous Gates Foundation grant to establish the ABNE, a continent-wide, science-based biosafety resource for African regulators.

“Michigan State University has a long standing tradition of working with countries in Africa. This initiative fits very well with MSU’s mission in terms of building two-way partnerships for creating an enabling environment for science and technology to flourish,” said MSU President Lou Anna K. Simon. “MSU is privileged to partner with NEPAD to bring global biosafety and biotechnology resources to Africa.”

The first ABNE center will be based in Burkina Faso, in West Africa, and will be managed by an African staff that specializes in the environmental, health, legal and socioeconomic impacts of biotechnology.

“NEPAD recognizes the immense potential of life sciences and biotechnology in contributing to Africa’s development. This initiative reflects NEPAD’s commitment to the recommendation of the High-Level African Panel on Modern Biotechnology that Africa should adopt a ‘co-evolutionary’ approach by promoting innovation while safeguarding human health and the environment,” said Ibrahim Assane Mayaki, chief executive officer of NEPAD.
“The partnership with MSU will build the necessary capacity in biosafety and biotechnology in Africa.”

The grant to NEPAD and MSU is part of the Bill & Melinda Gates Foundation’s Agricultural Development initiative, which is working with a wide range of partners to provide millions of small farmers in the developing world with tools and opportunities to boost their yields, increase their incomes and build better lives for themselves and their families. The foundation is working to strengthen the entire agricultural value chain—from seeds and soil to farm management and market access—so that progress against hunger and poverty is sustainable over the long term.

“Melinda and I believe that helping the poorest smallholder farmers grow more and get it to market is the world’s single most powerful lever for reducing hunger and poverty,” Gates said.

PROJECT AIMS TO IMPROVE RESEARCH CAPABILITIES OF AFRICA’S RESEARCH INSTITUTIONS

FOUNDATION GRANT SUPPORTS OPEN EDUCATION COLLABORATION IN AFRICA

Graduates of African Master’s of Science (MSc) programs in agriculture are potentially major change agents for African agriculture. They can become the brightest future leaders in industry, government, and academia and be positioned to implement impactful change that will directly and positively affect small farmers and rural communities. Enabling them to fulfill this potential with the appropriate graduate education and training in Africa requires, among other things, providing faculty with upgraded curriculum.

Open educational resources (OER) can be instrumental in addressing these requirements through products and processes that support curriculum innovation. OER are produced to be shared, modified, and made freely available through learning networks. When Internet access is routine throughout Africa, OER will be able to reach their full potential and demand for easily accessible materials will grow dramatically. In the meantime, OER can be distributed off-line in print and DVD formats.

The Bill & Melinda Gates Foundation has granted $950,579 to MSU to create a sustainable collaboration that will be able to localize and share teaching and learning materials in order to fill gaps in agricultural sciences curriculum in Africa. Dr. Christine Geith of MSUglobal, Dr. John Kaneene, university distinguished professor and director, Large Animal Clinical Sciences in the College of Veterinary Medicine, and Dr. Cliff Lampe, assistant professor in the College of Communication Arts and Sciences, will be working over the next 18 months with anchor partners in Africa toward establishing a new AgShare Open Educational Resources collaboration. The goal is to strengthen postgraduate education in agriculture through a core of strong partnerships and reliable, current teaching and learning resources.

The project team will initially partner with three to six existing organizations to become AgShare collaborators. These anchor collaborators will include African faculty, field researchers, and publishers During the next year and a half, the partners will conduct pilot testing to ensure long-term sustainability for OER creation, incentives, knowledge loops, and alignment with faculty and curriculum demand. Results will be documented and goals for continuation and expansion will be identified during the course of the project.
Health Games Research is supported by an $8.25 million grant from RWJF’s Pioneer Portfolio, which funds innovative projects that may lead to breakthrough improvements in the future of health and health care. The national program, which conducts, supports, and disseminates research to improve the quality and impact of health games, is headquartered at the University of California, Santa Barbara. It is directed by Debra Lieberman, Ph.D., communication researcher in the university’s Institute for Social, Behavioral, and Economic Research and a leading expert in the research and design of interactive media for learning and health behavior change. The grants were awarded under the program’s second funding round to strengthen the evidence base in this emerging field.

“Digital games are interactive and experiential, and so they can engage people in powerful ways to enhance learning and health behavior change, especially when they are designed on the basis of well-researched strategies,” said Lieberman. “The studies funded by Health Games Research will provide cutting-edge, evidence-based strategies that designers will be able to use in the future to make their health games more effective.”

Wei Peng (PI) and Deborah Feltz (PI) of the MSU Department of Kinesiology received two out of the nine grants during this second round of funding from Health Games Research in 2009 – the only university to receive two awards during this round of funding. Peng’s research team received a grant of $284,000; Feltz’s group was awarded $150,000.

Assistant Professor Wei Peng and Associate Professor Brian Winn in of the MSU Department of Telecommunication, Information Studies and Media will investigate effects of the Mount Olympus game, a 3D fantasy role-playing game that requires players to move their upper and lower body in order to control a character’s movements. Overweight and inactive college students participate in the study, which randomly assigns them either to play Mount Olympus or to use a motivational Web site designed to promote and support physical activity. The study examines the extent to which each media activity meets individuals’ needs for competence, autonomy and social relatedness, and how meeting these needs may motivate engagement in the activity. More engagement is expected to lead to more physical activity in daily life and therefore to more weight loss and better health outcomes.

“Our Mount Olympus game will be designed with strong theoretical foundation and play testing. We expect that the game can engage the players in a fun way and the stealth exercise can become part of their routines,” Peng says.

Based on evidence people work harder with a partner than when working alone, a team of Michigan State University researchers are pairing college-age students with a virtual workout partner to study the impact on exercise trends. Deborah Feltz, chairperson of MSU’s Department of Kinesiology, is leading a team that will use the Eye Toy camera and PlayStation 2 to measure what characteristics in a virtual partner motivate people to exercise harder, longer or more frequently.

“Physical inactivity in the United States is a big problem, and a key hurdle deals with problems of motivation,” Feltz said. “If people’s motivation can be improved to increase the

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intensity, duration and frequency of exercise by participating with a partner, they will realize better health outcomes.”

Unfortunately, researchers have found live exercise partners are not always the most helpful.

“Individuals can become discouraged if they believe they can never keep up with their partner, or on the other hand, become bored if their partner is always slower,” Feltz said. “With a virtual partner, this can be addressed.”

To accomplish this, more than 900 participants will take part in a study that matches an experimental group with virtual partners using the Eye Toy camera and a modified PlayStation 2 game. Participants, who can view themselves on a large screen with the Eye Toy technology, will work out while their virtual partners perform the same exercises next to them. Feltz and her team will analyze and adapt the characteristics of the virtual partner – including body composition, gender and age – to see which are most effective at improving endurance and exercise time.

“We want to find the optimal motivating principles to help people improve physical fitness, and then build into digital games the best workout buddy possible,” Feltz said. “Our research could open up a powerful set of new tools in health game design.”

Health Games Research, a national program office of the Robert Wood Johnson Foundation (RWJF) Pioneer Portfolio, shares and supports quality, evidence-based research that explores and documents how digitally-delivered games are improving health and health care. Its grantees offer bold thinking and innovative approaches to improve the design of future health games, health behaviors and outcomes. For more information, visit www.healthgamesresearch.org.

The Robert Wood Johnson Foundation focuses on the pressing health and health care issues facing our country. As the nation’s largest philanthropy devoted exclusively to improving the health and health care of all Americans, the foundation works with a diverse group of organizations and individuals to identify solutions and achieve comprehensive, meaningful and timely change. The Foundation’s Pioneer Portfolio supports innovative ideas and projects that may trigger important breakthroughs in health and health care. Projects in the Pioneer Portfolio are future-oriented and look beyond conventional thinking to explore solutions at the cutting edge of health and health care. For more information, visit www.rwjf.org/pioneer.
The Talbert and Leota Abrams Foundation has created two new scholarships to be awarded to first-year Doctor of Veterinary Medicine students. Each scholarship will continue to support the same student (who must remain in good standing) until the completion of his or her DVM education. The Abrams Scholarship is equivalent to tuition for a full-time, in-state DVM student. The foundation’s purpose in creating the scholarships is to encourage students who have demonstrated the capacity to achieve educational and professional goals, the motivation to achieve their goals, and the initiative to seek opportunities to further their progress.

Barbara Brown, president of the Abrams Foundation, and Nancy Little, legal counsel for the foundation, visited the College of Veterinary Medicine in November, 2009. They were given a personal tour by Associate Dean David Sprechter, followed by a lunch meeting where they were joined by Assistant Dean Norma Baptista and the two Abrams Scholars, Naomi Mendelsohn and Chelsea Render.

The Abrams Foundation was created in 1962 by Lansing residents Talbert and Leota Abrams. In the same year, Talbert and Leota Abrams made a gift to Michigan State University to fund construction of the planetarium that bears their name. Talbert Abrams was a pioneer of aerial photography and mapping. One of his aircraft designs, the Abrams Model P-1 Explorer, was the first aircraft created for the sole purpose of aerial photography; the Explorer is being restored at the Smithsonian Institution in Washington, D.C. and is expected to be on display in 2010. The Abrams Foundation annually funds grants that reflect the passions of the board members, including nursing scholarships and other interests.

Michigan State University has a long history of successful partnerships with the business community and a hard-earned reputation for creatively applying knowledge to real-world problems. However, MSU is a city-sized learning community of more than 60,000 people, seemingly driven in all directions by relentless curiosity, initiative, and commitment to progress. The sheer size and complexity of its endeavors can sometimes be daunting to companies and individuals who want to do work with the university.

MSU Business-CONNECT was established to help companies leverage MSU’s wealth of resources more efficiently. The Business-CONNECT team works with companies to align business goals with MSU’s intellectual capacity and ability to deliver, drawing on MSU’s extensive base of human knowledge and source materials, high-end scientific equipment and facilities, and invaluable international connections and educational services.

According to Charles A. Hasemann, executive director of MSU Business-CONNECT, his office will be a front door to the university. “Regardless of what a business is seeking, whether it’s a research partnership, gaining access to academic expertise, or recruiting and hiring highly qualified employees – our goal is to provide quick access to the right resources and to create productive relationships between MSU and business partners,” he said. “We also want to create a win-win for the greater community in terms of supporting entrepreneurial activity and economic development.”

Hasemann comes to his new position with a background in executive research management, most recently with Pfizer, Inc., where he had global leadership responsibilities for Pfizer’s overall drug discovery technologies. He has a PhD in Molecular Immunology. Business-CONNECT is currently expanding its team of corporate relations professionals, aiming to build a group with legal, scientific, and information management expertise.

Contact us at bconnect@msu.edu or visit the web site at www.businessconnect.msu.edu.
In November 2009, the New Economy Initiative (NEI) announced more than $3 million in grants to support collaborative efforts that will support southeast Michigan’s economic shift to a knowledge-based economy, including a grant of $202,500 to Michigan State University.

“The metro-Detroit region has unique assets upon which to build a strong innovative economy -- our international border crossing, major research universities, manufacturing capacity, a creative class and our historic innovative spirit. Such assets are the essential building blocks for creating and attracting new business opportunities and will lead to a well-trained, well-employed workforce in a vibrant, growing economy in the long term,” said David Egner, executive director of NEI.

The NEI grant to Michigan State University funds a project to assess southeast Michigan’s supply chain assets. The results of this assessment will ultimately be utilized to help stimulate development of the region as a global transportation and logistics hub.

The assessment is being led by MSU supply chain management faculty, along with faculty from Wayne State University and senior leaders from the Detroit Regional Chamber. The six-month Opportunity Assessment examines whether innovations to the global supply chain could promote lasting economic development and job growth for southeast Michigan.

Michigan State University’s Department of Supply Chain Management is widely acknowledged by academia and industry as the global leader in creating, integrating and disseminating supply chain, procurement, manufacturing and logistics knowledge. For the NEI project, a team of senior MSU supply chain management faculty, faculty from other universities, and senior leaders from the Detroit Regional Chamber and industry are working together to help Southeast Michigan regain a leadership position in the new global economy by taking advantage of Detroit’s unique cross-border positioning within the supply chain of global firms. The project will assess the opportunity for creating a lasting supply chain management, information technology innovation, and processing capability that can be offered to global businesses.

The Detroit region’s location is optimal for a Global Supply Chain Hub. Using polar routes to and from Detroit for air shipments dramatically reduces transport time to many places around the globe. Southeast Michigan also has existing infrastructure and an ideal location to support rail, sea and truck transport – all located at North America’s busiest international trade border.

After the assessment led by MSU’s John H. McConnell Chair of Business Administration Dr. David J. Closs and Senior Director of the Detroit Regional Chamber Ms. Melissa Roy, the project team will then prepare for the next phases of the project to help establish Detroit as a major global supply chain hub.

The New Economy Initiative for Southeast Michigan is one of the country’s largest philanthropic initiatives focused on regional economic development, helping to restore southeast Michigan to a position of leadership in the new global economy. Eleven national, regional and local foundations have committed $100 million to this unprecedented eight-year initiative, including the Community Foundation for Southeast Michigan (Detroit), the Max M. and Marjorie S. Fisher Foundation (Southfield, Michigan), the Ford Foundation (New York), the Hudson-Webber Foundation (Detroit), the Ewing Marion Kauffman Foundation (Kansas City, Missouri), the W.K. Kellogg Foundation (Battle Creek, Michigan), the John S. and James L. Knight Foundation (Miami), The Kresge Foundation (Troy, Michigan), the McGregor Fund (Detroit), the Charles Stewart Mott Foundation (Flint, Michigan), and the Skillman Foundation (Detroit). The participating foundations are leading the implementation and governance of the Initiative. The Community Foundation for Southeast Michigan, which initiated the collaborative, is serving as its administrative home. See also www.neweconomyinitiative.org

The Community Foundation for Southeast Michigan is a permanent community endowment built by gifts from thousands of individuals and organizations committed to the future of southeast Michigan. The Foundation works to improve the region’s quality of life by connecting those who care with causes that matter. The Foundation supports a wide variety of activities benefiting education, arts and culture, health, human services, community development and civic affairs. Since its inception, the Foundation has distributed more than $380 million through more than 33,500 grants to nonprofit organizations throughout Wayne, Oakland, Macomb, Monroe, Washtenaw, St. Clair and Livingston counties. For more information, visit www.cfsem.org.
An appreciation luncheon was held at the Kellogg Center on October 20 for the Grand Rapids group, Hunt for a Cure. The group is dedicated to supporting research that may lead to a cure for cystic fibrosis. At the luncheon a $50,000 check was presented to continue the group’s support for two MSU research projects: Physiology Professor Bruce Uhal’s studies of the effects of hypertension medication on the progression of the disease; and the work of Dr. Martha Mulks, professor of microbiology and molecular genetics, who is investigating strategies to block the formation of biofilms that can clog the airways of CF patients. During the luncheon professors Uhal and Mulks provided updates on their research. Pictured (l to r) are Professor Uhal and Professor Mulks receiving a check from Hunt for a Cure’s Shane Moerdyk and Deb Kailunas. The $50,000 gift brings Hunt for a Cure’s support for the two research projects to a total of $105,000 for 2009.

Detroit will help assure continuation of Detroit’s legacy as a course of world-class musical talent.”

While directing the Civic Jazz Ensemble for youth at DSO, MSU Jazz Studies Director and Professor Rodney Whitaker conceived the idea for MSU Jazz@CMS Detroit. “Detroit youth often lack the tools to prepare for the Civic Jazz Ensemble audition,” Whitaker said. He designed a program, not only to improve the music skills of Detroit youth, but also to mentor them and reinforce the benefits of music education.

Jazz education offerings will occur outside normal school hours and will be available on a sliding fee scale, with some classes subsidized by scholarships. CMS is the outreach arm of the MSU College of Music. CMS Detroit was initiated in response to the community’s thirst for enhanced music education and performance opportunities, explained Rhonda Buckley, associate dean for outreach and engagement and executive director of CMS. “The programs are built on the knowledge that exposure to music dramatically enhances learning, life skills, cognitive development, social awareness and problem solving – all skills that are transferable and necessary in these changing economic times,” said Buckley.

Erb Lumber, founded by Fred Erb, grew to 45 midwest locations and endowed the Erb Family Foundation with a mission to nurture environmentally healthy and culturally vibrant communities in metropolitan Detroit and to support initiatives to restore the Great Lakes Basin.

To give to CMS Detroit, contact Director of Development Rebecca Surian at surian@msu.edu.
FORD MOTOR COMPANY SCHOLARS

On October 22, 2009, Ford Motor Company hosted a recognition breakfast at the Kellogg Center for MSU student scholarship recipients from the College of Engineering and The Eli Broad College of Business. Michael Seneski, assistant treasurer, Ford Motor Company and MSU key executive, congratulated the students on their accomplishments and reinforced Ford’s commitment to higher education. Also attending the event was Tomas Hult, acting associate dean for Global Initiatives and director of the Center for International Business Education and Research, which was recently granted $50,000 through the Ford Motor Company Fund’s College Community Challenge program to support the Michigan Export Growth Program which engages Broad student consultants to work with Michigan small and medium sized businesses seeking to grow globally.