#### IOWA STATE UNIVERSITY





#### Sept. 16

#### Conference table in new research building was a team effort A one-of-a-kind conference table on the first floor of the new Biorenewables Research Laboratory was designed and built on campus. The finished product will be installed in time for the building's Sept. 17 dedication.

#### Sept. 16

#### **Regents approve strategic plan**

The State Board of Regents approved Iowa State's 2010-2015 Strategic Plan during its Sept. 16 meeting. Executive vice president and provost Elizabeth Hoffman presented the plan to the board. See Powerpoint presentation of the plan.

#### Sept. 16

#### Latest green experiment: Morrill Road street lights

Fifteen new street lights along Morrill Road and Union Drive are expected to save some \$1,225 in energy costs annually.

#### Sept. 16

Sept. 16 **Taking shape** 

#### All are welcome at Monday's university convocation

An address by president Gregory Geoffroy and an awards ceremony are highlights of the 2010 university convocation, Monday, Sept. 20, beginning at 3:15 p.m. in the Memorial Union Sun Room. Check out the list of faculty and staff members who are receiving honors this year.

shell should be completed in November so crews can

move their work inside over the winter.



LED lights



State Gym addition

#### SEARCH INSIDE

#### Announcements

- Lied Center will reopen Thursday morning, with limitations
- · MARL joins office of biotechnology's core facilities
- Library announces workshops on bibliography management software
- Fuel up again at Transportation Services
- Planners needed for February 2011 social justice summit
- Research lab installs new microplate reader
- · Hands-on fire extinguisher training Sept. 17
- ISU Dining Days end Friday
- Iowa Energy Center seeks funding proposals

#### **Receptions & open houses**

#### Reception

• Fresh Fotos exhibit, Sept. 16

#### Retirements

- Chris Ahoy, Sept. 17
- Robert Niehoff, Sept. 29

#### Open house

• Biorenewables Research Laboratory, Sept. 17

#### **Arts & events**



Corvidae Corvus

#### Catalysts in art and science

Sustainable art pieces created by ISU Design students will be part of the new Biorenewables Research Laboratory.

#### Honors & awards

#### Sept. 16

#### Regents meet Thursday in Cedar Falls; listen online

The state Board of Regents is expected to approve expedited flood recovery procedures for lowa State, strategic plans for all schools and funding proposals for the lowa State and Northern lowa athletic departments when it meets Sept. 16 in Cedar Falls.

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- Iowa State University
- Julie Weeks

#### **Around campus**

- Mosquito danger peaks in the fall
- Shelley's voice silenced at age 98

#### **Inside tools**

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# **IOWA STATE UNIVERSITY**

# INSIDE IOWA State for faculty and staff

SEARCH INSIDE

Sept. 16, 2010



Carpenter Randy Fiscus stands in the center of the table frame, which rests on sawhorses. Fiscus worked on the project on and off from late January through this week. *Photos by Bob Elbert*.

# Conference table in new research building was a team effort

by Anne Krapfl

It'd be simple to tag this project as a labor of love. You might need to compare it, however, to the love of first-time parents coddling their inconsolable newborn in the middle of the night. There have been a few "What should we try now?"s along the way -- but always a solution, too.

A one-of-a-kind-in-the-world table will grace the first floor conference room in the new Biorenewables Research Laboratory (BRL) being dedicated on Friday. Student-designed and employeecreated, in part with wood salvaged from campus trees, the table is sure to be a conversation starter in a building that's all about sustainability.



"Hopefully, people appreciate the unique qualities of this table,"



Mark Chidister (left) and Randy Fiscus begin the task of laying out the veneer strips.



The color caused by fungi in spalted wood is desired among wood artists

said Mark Chidister, associate professor of art and design and one of several key players who worked on the table. "Each step along the way found us puzzling through how to make it work."

# The design

A senior-level integrated studio arts class Chidister taught last fall took on the design as a class assignment. When BRL project manager Jon Harvey inquired about a collaborative project for the conference room, Chidister said initially he was reluctant because a table that large couldn't be built in the College of Design's wood shop. Eventually he landed on the idea of a student competition and Harvey approached Randy Fiscus in facilities planning and management's carpenter shop about building the winning design. So, early in the semester, about 10 student designs were presented



שטטע וש עכשווכע מוווטווץ שטטע מונושנש

Wood vices helped Randy Fiscus apply burr oak veneer strips to the table base.

to a committee from the new building, and senior Brian Dreesman's proposal was selected.

Dreesman graduated from Iowa State in May and was one of 24 emerging young artists to exhibit at the Des Moines Arts Festival in June. Later this month, he and three colleagues will open Carbon 6 Studio, specializing in wood furniture and metals work, on Kellogg Avenue in Ames.

# The construction

In January, Fiscus received Dreesman's design drawings and went to work. Due to the size of the table and the expansion potential of the wood, thin (about 1/16 inch) veneer strips would be applied to a

stable plywood substrate. From the university's inventory of wood from campus trees, Dreesman selected burr oak for the table base and center oval, and spalted (rotting) maple for the table surface.

Dreesman's wood selections were delivered to a Marshalltown kiln for drying. The anticipated month-long process stretched into twoplus, and it was early July before the wood was back on campus and Dreesman and Chidister could cut it into veneer strips at the College of Design. Fiscus, the patient carpenter, had completed the plywood table frame and was waiting to resume work on the project.

# The humidity!

With practically no maple veneer to spare, Chidister and Fiscus painstakingly laid out the veneer strips to more vividly display the whites and grays of the spalting. Viewed from above, the array



However, he noticed the summer humidity in his nonclimate-controlled shop was causing visible changes to the lengths and widths of the veneer strips. So, in early August, the tabletop, now in quadrants, was moved back across campus to the College of Design's small -- but climate-controlled -- wood shop. To maximize the adhesion of veneer strips to the wood base and thus the flatness of the tabletop, each quadrant was placed in a vacuum pressurized bag for about two hours of drying.



Mark Chidister (left) and Randy Fiscus slide a tabletop quadrant into the vacuum bag before boosting the pressure inside it during gluing.



Humidity was an issue -- but less so -- for the burr oak veneer going on the table base and center oval, and Fiscus was able to complete that task in his shop.

# Shining it up

Last week, painter Mark Mather waded into the task of sealing the wood. There is no stain in the table, just a couple of environmentally friendly tung oil products that he sprayed, brushed or hand-rubbed in. At last count, Mather had applied eight coats to the tabletop sections -- and he wasn't done yet.

Fiscus is scheduled to spend a good chunk of Sept. 16 in the BRL conference room, assembling the table pieces for the final fitting. Electrician Jeff Lamb and information technology services' Matt Darbyshire will work together to run electricity to the table's center oval and install LED light strips and the media package purchased for the conference room.

After the last four or five months, Fiscus readily admits he's become a little possessive of the big oval. The projects that test you the most often turn into favorites, he said.

Did he fine-tune some of his woodworking skills? Yes. Was it stressful work at times? Yes. Would he accept another one-of-a-kind-in-the-world project? Absolutely.

# INSIDE IOWA State for faculty and staff

SEARCH INSIDE

Sept. 16, 2010

# Latest green experiment: Morrill Road street lights

by Diana Pounds

Fifteen new street lights along Morrill Road and Union Drive are expected to save some \$1,225 in energy costs annually.

The lighting represents Iowa State's foray into LED (lightemitting diode) street lights, which have several advantages over the traditional high-pressure sodium street lights, said Randy Larabee, chief electrical engineer in facilities planning and management.

If the LED lights live up to manufacturer claims, they will use about one third less electricity than the old lights and last five times longer.

The lights cost about three times more than traditional street lights, but the increased costs are expected to be paid for with



Photo by Bob Elbert.

energy and maintenance savings in a little more than three years, Larabee said.

## Spreading the light

LED street lights spread more uniform light across a wider area than traditional lights, said FPM electrical engineer Marc McKee. The older street lights cast a small, bright light with increasingly darker shadows on the edges.

While LEDs have been around a while, they're relatively new in street lights, Larabee said.

"We started looking at the lights about three years ago," he said. "At that time, the lights were more expensive and not nearly as efficient as they are now.

"The technology has gotten better and prices came down enough that we were comfortable doing some testing," he added.

McKee said FPM will conduct a second test of LED street lights soon. Lights from a different manufacturer will be installed along Beach Avenue, from the north entrance of the Lied Recreation Center to Lincoln Way.

If the lights hold up like manufacturers claim they will and deliver the energy and maintenance savings, expect to see them popping up on campus in a couple of years, Larabee added.

# INSIDE IOWA State for faculty and staff

Sept. 16, 2010

# You're invited to Monday's university convocation and awards ceremony

by Paula Van Brocklin

All are invited to Iowa State's annual fall convocation Monday, Sept. 20, in the Memorial Union Sun Room. The academic procession, featuring recipients of university honors and awards, will begin at 3:15 p.m. A musical prelude, featuring a student string quartet, will precede the ceremony.

President Gregory Geoffroy will share his priorities for the upcoming academic year, followed by a presentation of university and state Board of Regents awards to faculty and professional staff.

A reception will begin at 5 p.m. in the South Ballroom, MU.

The following members of the university community will be honored during the program portion of the convocation.

# **Distinguished Professor**

The title of Distinguished Professor is awarded for exemplary performance in research and/or creative activities as reflected by a national or international reputation in the nominee's discipline. A \$6,000 increment in base salary is granted, and the awardee retains the title the rest of his or her career at the university.

## Distinguished Professor in Liberal Arts and Sciences Alicia Carriquiry

## Professor of statistics

Carriquiry is internationally recognized for her research on nutrition science and nutrition monitoring policy, and for her statistical contributions in forensic science, transportation safety and animal breeding. She is a member of several U.S. and international scientific academies, and has been active in the development of statistical science in Latin America. She also serves as a faculty member for graduate programs in statistics at universities in Chile and Uruguay.

## Distinguished Professor in Liberal Arts and Sciences Carol Chapelle

## Professor of English

Chappell's computer technology and applied linguistics research has significant international impact. She is the author, coauthor or editor of 11 books on language learning and assessment. Her expertise led to her selection as one of the main developers of the world's major language test, TOEFL 2000, which later was developed into an internet-based TOEFL program.

# Anson Marston Distinguished Professor in Engineering

**Rodney Fox** 

Professor of chemical and biological engineering Herbert Stiles Professorship in Chemical Engineering Fox is a world leader in the fluid mechanics of chemically reacting systems. His world renown has resulted in numerous invited professorships and lectureships in the United States and abroad. Fox has served on many doctoral committees from Iowa State and other U.S. universities, to institutions in France, the Netherlands, Denmark, Sweden and Australia.

# **University Professor**

The title of University Professor is bestowed on a faculty member whose professional work has focused on effecting positive, significant institutional change at Iowa State. The awardee receives a base salary addition of \$4,850 and retains the title for the remainder of his or her career at the university.

## **Suzanne Hendrich**

## Professor of food science and human nutrition

## Charlotte E. Roderuck Faculty Fellow in Food Science and Human Nutrition

Hendrich has led the development of outcomes assessment, founded the first residential learning community and played a key role in starting the Academy for Leadership and Learning at Iowa State. She created and led new interdisciplinary and multi-institutional graduate programs while building a strong research program of her own. She also has been a leader in national programs to define nutrition requirements that impact all U.S. citizens. An advocate for diversity, Hendrich has taught and mentored multicultural students in all colleges.

## **Max Porter**

## Professor of civil, construction and environmental engineering

Porter is a world-renowned researcher in structural engineering and has been the principal investigator on more than 100 funded research projects. He was national president for the Structural Engineering Institute during the 9/11 tragedy, and was active in appointing investigative teams for the World Trade Center and Pentagon studies. He has chaired committees that establish national codes and standards for structural design, and coordinated several international structural engineering research efforts.

## **Richard Schultz**

## Professor of natural resource ecology and management

Schultz is internationally known for his research on riparian buffers to reduce erosion and nitrate runoff, and to improve wildlife habitat and aesthetics. The Bear Creek Watershed project in northern Story County, which he helped create in 1990, is recognized as a model effort. He led numerous efforts to expand the global education of students. In the past 10 years, he developed successful study abroad programs in South Korea and China, and participated in a new Uganda-based center for sustainable rural development.

# **Stephen Willson**

## Professor of mathematics

# Janson Professorship in Mathematics

Willson has played a lead role in developing Iowa State's bioinformatics and computational biology research and educational areas into nationally recognized programs. He has conducted groundbreaking research in phylogenetics and holds leadership positions in national mathematical organizations. A strong motivator, Willson's student teams are outstanding performers in state and national mathematical contests.

# **Regents Award for Faculty Excellence**

This award recognizes a faculty member who is an outstanding university citizen and who has rendered significant service to Iowa State and/or the state of Iowa. A \$1,000 award is granted.

#### **Robert Mazur**

## Professor of sociology

Mazur's research examines globalization and rural development in developing countries, particularly in Africa. He secured more than \$2.5 million in external grants, and served on many college and university international studies committees. He is the founding director of the Center for Sustainable Rural Livelihoods, which facilitates rural development and multidisciplinary research in Uganda. Mazur also leads an interdisciplinary team of 15 researchers from three countries working to improve conditions in Uganda and Rwanda.

## Sarah Nusser

#### Professor of statistics

A national leader in survey sampling, Nusser directs Iowa State's Center for Survey Statistics and Methodology. She also is a senior research fellow of the Bureau of Labor Statistics, a fellow of the American Statistical Association, and a recipient of the ASA's Distinguished Achievement Award. She also works with the USDA Natural Resources Conservation Service to develop and implement statistical and survey methods for the National Resources Inventory (NRI).

## **Roger Smith**

#### Professor of educational leadership and policy studies

Smith, who served as his department's associate dean and chair, is an award-winning teacher and adviser who excels at inspiring students, both graduate and undergraduate. His research in vocational education and technology has resulted in more than \$2 million in grant funding and nearly 100 publications and presentations.

## **Gregory** Tylka

## Professor of plant pathology

As the leader of the Soybean Cyst Nematode Coalition in the 1990s and the ISU corn and soybean initiative since 2004, Tylka pioneered the use of professional market research and built partnerships with agribusiness enterprises to better serve farmers' needs. He also made key research discoveries that help soybean farmers control the soybean cyst nematode.

#### **Robert Weber**

#### Professor of electrical and computer engineering

## David C. Nicholas Professorship in Electrical and Computer Engineering

Weber's research on microwave circuit and system design resulted in numerous grant-funded projects and publications, and many U.S. and foreign patents. He is a fellow of the Institute for Electrical and Electronics Engineers (IEEE), author of a widely acclaimed textbook and an award-winning teacher.

# **Regents Award for Staff Excellence**

This award recognizes a member of the professional and scientific staff or the supervisory and confidential staff who is an outstanding university citizen and who has rendered significant service to Iowa State and/or the state of Iowa. A \$1,000 award is granted.

## Cynthia Hadaway

## Office coordinator, residence department After joining ISU 34 years ago in a part-time position, Hadaway now is a key member of the

residence staff, having twice earned her professional association's outstanding Support Service Staff Award.

## **Thelma Harding**

Program coordinator, Graduate College and Graduate Minority Assistance Program Harding has been instrumental in the success of the McNair Post-Baccalaureate Achievement Program, the Graduate Minority Assistantship Program and the GMAP research symposium. She also advises the Black Student Government.

## Letitia Kenemer

## Program coordinator, Memorial Union

As the Memorial Union's fine arts coordinator, Kenemer has been instrumental in developing student artists. She also has been key to the success of the FOCUS art exhibits, the Empty Bowl project, ISU Project Runway and the Workspace.

## Judith Strand

Previously a program coordinator with the economics department, Strand now is an administrative specialist with the Graduate College. This award recognizes her work with the economics department.

Each year, Strand tracked more than 300 graduate student applications and more than 100 accepted graduate students in the economics department. She developed innovative ways to improve these systems and processes, and also coordinated activities for student recruitment and professional development.

## Karen Zunkel

## Director, Program for Women in Science and Engineering

Zunkel helped create a better environment for ISU's undergraduate students, especially women and under-represented groups in the STEM disciplines. She provided leadership in developing and implementing the Regents Admission Index, articulation website initiatives and campus activities to improve the undergraduate experience.

# Louis Thompson Distinguished Undergraduate Teaching Award

This award recognizes an outstanding teacher who is dedicated to helping undergraduate students. Dr. Louis Thompson, emeritus associate dean of Agriculture, established the award to support his belief that a strong undergraduate teaching program should be one of the primary goals of the university. A \$1,500 award is granted.

## C. Lee Burras

## Professor of agronomy

## Professor of geological and atmospheric sciences

A dedicated teacher, Burras received numerous teaching and advising recognitions, including the 2009 Soil Science Society of America Resident Education Award, the 2008 ASA Agronomic Resident Teaching Award, the 2007 ISU Student Advising Impact Award and a Miller Faculty Fellowship. He also is involved with curriculum development, learning community activities and study abroad program development.

# **Brian Steward**

Associate professor of agricultural and biosystems engineering Steward provides outstanding direction for the fluid power engineering curriculum in the College of Engineering, especially his ability to supervise independent and student design projects, producing top results. He led the procurement of \$350,000 to equip the fluid power laboratory, and was instrumental in securing \$450,000 to equip the CAT Mechatronics Laboratory.

# James Huntington Ellis Award for Excellence in Undergraduate Introductory Teaching

This award recognizes a faculty member who, in teaching introductory courses, demonstrates creativity in improving its quality, excites interest and involvement without compromising scholarship, and enhances student performance in future courses. Ellis ('28 industrial science) established this award to honor professors like his "who made their courses interesting." A \$1,500 award is granted.

## **Charles Kerton**

## Associate professor of physics and astronomy

Kerton has impacted undergraduate astrophysics courses by spearheading the renovation of the ISU Planetarium, using funds he received as a Miller Faculty Fellow. He provided creative opportunities for students in recitation, and participated in a National Science Foundation-funded project to develop a series of historical science stories to improve student understanding of the nature of science.

# Margaret Ellen White Graduate Faculty Award

This award recognizes superior performance by a member of the graduate faculty who serves as a mentor and enriches the student-professor relationship through support and attention to detail, enabling students to finish their work in a timely and scholarly manner. White established this award in 1985 to show her appreciation to graduate faculty for their guidance and encouragement of graduate students. A graduate of the former College of Home Economics, White served as an administrative assistant in the Graduate College for 37 years. A \$1,500 award is granted.

# William Graves

# Professor of horticulture Associate dean, Graduate College

Graves has mentored numerous graduate students, who describe him as a brilliant educator and effective classroom teacher. His research focuses on the biology of rare woody plants, for which he has numerous awards, including the American Nursery and Landscape Association's Norman Jay Colman Research Award.

# **International Service Award**

This award recognizes a faculty member for outstanding international service in teaching, research or administration within the United States or abroad. A \$2,500 grant for carrying out an internationally related activity is awarded.

# **James McCormick**

## Professor and chair of political science

McCormick is known worldwide for his research on human rights, Canadian foreign policy and the role of Congress in foreign policy. He also is the author of one of the most highly regarded textbooks on U.S. foreign policy. He received numerous grants for international scholarship, including three Fulbright awards, was editor of *International Studies Quarterly* and has presented lectures around the world. He helped create the Manatt-Phelps Lecture, which brings top international figures in business and politics to Iowa State.

#### Manju Reddy

#### Associate professor of food science and human nutrition

Reddy is respected internationally for her work on iron bioavailability and combating iron deficiency, especially in developing nations. As senior adviser to the International Life Sciences Institute, she oversaw efforts to improve iron nutrition in China, Vietnam and the Philippines. She collaborated with plant geneticists to develop a breed of corn with increased iron bioavailability, and worked with faculty at the University of Ghana to improve children's health by increasing access to and consumption of animal food sources.

# Iowa State University Award for Departmental Leadership

This award recognizes outstanding departmental leadership that helps faculty members meet their complex obligations to undergraduate teaching, graduate mentoring, research and service. A \$1,500 award is granted.

## **Ruth MacDonald**

## Professor and chair of food science and human nutrition

Under MacDonald's leadership, the food science and human nutrition department advanced its staffing and academic programs despite financial challenges. She also enhanced the department's international standing in its four areas of strength -- nutrition, food science, culinary science and dietetics.

# Iowa State University Award for Early Achievement in Teaching

This award recognizes a tenured or tenure-track faculty member who has demonstrated outstanding teaching performance unusually early in his or her career. A \$1,500 award is granted.

## Julia Dominguez-Castellano

## Assistant professor of world languages and cultures

Dominguez-Castellano helped transform the Spanish curriculum, establishing an outstanding record as a classroom teacher and mentor to majors and minors in the program. She creates a positive environment for students to improve their language proficiency, gain self-confidence and become more aware of the cultures they study and how these skills are applicable to their career goals. She also has been a leader in creating summer study abroad learning programs.

## **Brent Holland**

## Assistant professor of art and design

Holland strives to create an intense studio experience for students that centers on technical precision, historical relevancy and creative independence. As a result, his students consistently receive high recognition for their work, both regionally and nationally. Holland is a dedicated artist himself, exhibiting internationally and receiving numerous awards.

#### **Stacey Weber-Feve**

## Assistant professor of world languages and cultures

Weber-Feve authored extensive ancillary materials to support her teaching objectives, and made innovative use of technology in the classroom. She took a lead role in reorganizing and streamlining the French curriculum and the new language and cultures for the profession initiative in French. She also is the coauthor of two textbooks.

# Iowa State University Award for Academic Advising Impact

This award recognizes outstanding performance by an academic adviser over an extended period of

time. A \$1,500 award is granted.

#### **Russell Mullen**

#### Professor of agronomy

Mullen has advised more than 800 undergraduate students, many graduate students and led more than 125 students on international agriculture travel courses. He has received many awards for his outstanding teaching and advising from both his professional associations and from student groups at Iowa State, including the Outstanding Student Advising Award from the Student Alumni Association and the Kathleen MacKay Adviser Hall of Fame Award.

#### Barbara Osborn

#### Program coordinator and lecturer, horticulture department

Osborn has advised more than 1,000 students in her 11 years as resource and career center coordinator for the horticulture department. Her open-door policy, advising skills, multiple networks and genuine interest in the success of every horticulture undergraduate make her a valuable resource to the department's students and faculty. She provides mentoring, job placement, club advising and overall support for students to ensure that they get the most from their educational experience.

# Iowa State University Award for Early Achievement in Academic Advising

*This award recognizes outstanding performance by an academic adviser early in his or her career.* A *\$1,500 award is granted.* 

#### Autumn Cartagena

#### Academic adviser, sociology department

Cartagena focuses on building relationships and providing opportunities for the sociology and anthropology students she advises. She also is involved in the university academic advising community, the learning communities advisory council, Project LEA/RN and the Iowa academic advising network. Last fall, Cartagena played a lead role in launching a new learning community in anthropology that focuses on professional and research development.

# Iowa State University Award for Outstanding Achievement in Research

This award recognizes a faculty member who has a national or international reputation for contributions in research, and who has influenced the research activities of students. A \$1,500 award is granted.

#### **Alan Myers**

#### Professor of biochemistry, biophysics and molecular biology

Since joining ISU 24 years ago, Myers has established himself as an international authority in the molecular biosciences. He has made significant contributions to the understanding of molecular mechanisms of biological function in cell division control and in metabolic controls in plant seeds that determine grain quality. His research has been funded by highly competitive grants from four federal agencies, NIH, USDA, NSF and DOE.

#### Hongwei Xin

# Professor of agricultural and biosystems engineering

Professor of animal science

Xin is internationally recognized for his research in the areas of animal-environment interactions, environmental control and air quality. He has obtained more than \$11 million in external support for

his research, and he has produced more than 550 publications and 110 refereed journal articles. Xin also has directed more than 25 graduate students.

# Iowa State University Award for Mid-Career Achievement in Research

This award recognizes a faculty member who has demonstrated exemplary research performance or scholarship accomplishments as documented by peers and experts in the field. A \$1,500 award is granted.

# Frank Krennrich

# Professor of physics and astronomy

Krennrich is a world leader in TeV gamma ray astrophysics. By observing astrophysical sources at the very highest energies of the electromagnetic spectrum, he examines phenomena related to gigantic black holes in the centers of active galaxies, uses these galaxies to explore background radiation in the universe and searches for primordial black holes. He impacted the development of TeV gamma ray astronomy through his leadership in the VERITAS (Very Energetic Radiation Imaging Telescope Array System) collaboration.

# Elisabeth Huff-Lonergan

# Professor of animal science

Huff-Lonergan earned recognition in the meat science discipline and the meat industry through her research on biological mechanisms in muscle that affect growth and meat quality. She was the first (and still the only) woman to receive the American Society of Animal Science Meat Research Award in its 102-year history; the first woman to receive the American Meat Science Association Distinguished Research Award and the first woman to be named associate editor of *Meat Science*, the leading journal in the discipline. Huff-Lonergan has been principal investigator or co-principal investigator on nearly 50 grant proposals, which received more than \$3 million in funding.

# Iowa State University Award for Early Achievement in Research

This award recognizes a faculty member who has demonstrated outstanding accomplishments unusually early in his or her professional career. A \$1,500 award is granted.

# Zhiqun Lin

# Associate professor of materials science and engineering, chemical and biological engineering and electrical and computer engineering

Lin's research focuses on polymeric materials and composites with an emphasis on nano-scale features. In his six years at Iowa State, he has compiled an impressive research and teaching record, with 45 publications in high-impact journals, including five that have been featured as cover articles for leading journals. He has edited a book, written three book chapters, obtained nearly \$4.5 million in grant funding and earned the department's teaching excellence award.

# Iowa State University Professional and Scientific Research Award

This award recognizes a professional and scientific staff member who has been at Iowa State for at least five years for excellence in research. A \$1,500 award is granted.

# **Ruth Shinar**

# Scientist, Microelectronics Research Center

Shinar has conducted independent research on hydrogen and microstructure dynamics in hydrogenated amorphous silicon and related materials, which is related to their performance as solar energy conversion materials. She also led pioneering independent research and development on organic light-emitting diode-based chemical and biological sensors for detecting toxic and medically important organic agents.

# Iowa State University Award for Achievement in Economic Development in Iowa

This award recognizes the outstanding work of faculty/staff members in support of Iowa's economy. A \$1,500 award is granted.

## Thomas Barton

Distinguished Professor in Liberal Arts and Sciences Professor of chemistry

Professor of chemistry

As former director of both the U.S. Department of Energy's Ames Laboratory and the Institute for Physical Research and Technology, Barton was a leader in transferring the technology and knowledge gained through these federally funded organizations into valuable economic and commercial uses. He led efforts to establish key technology transfer centers at Iowa State, including the Midwest Forensic Resource Center, the Biorenewable Resources Consortium and the Green Chemistry Catalysis Lab. Barton also holds 13 patents.

# **Robert Coacher**

# Account manager, Center for Industrial Research and Service (CIRAS)

In his past three years with CIRAS, Coacher has worked with Iowa companies to invest more than \$33 million to help them expand, improve processes, reduce operating costs by \$4 million, increase or retain sales totaling \$25 million and add or save hundreds of jobs.

# Iowa State University Award for Achievement in Intellectual Property

*This award recognizes the outstanding work of faculty members in the development of intellectual property.* A \$1,500 award is granted.

# **Iver Anderson**

Senior scientist, U.S. Department of Energy's Ames Laboratory Adjunct professor of materials science and engineering

Anderson's patent for a lead-free solder is revolutionizing the international electronics industry because it replaces lead-based solder, considered an environmental hazard. This patent has earned more than \$20 million in royalties to date, and is licensed to 50 companies worldwide. He also is making significant contributions to magnetic alloys for electric drive motor technology and high-pressure gas atomization technology, which earned him an R&D 100 Award.

# **Professional and Scientific Excellence Award**

This award recognizes contributions made by a professional and scientific staff member within and beyond the university, and career progress demonstrated by accomplishments at Iowa State. A \$1,500 award is granted.

# Matthew Besser

# Assistant scientist, U.S. Department of Energy's Ames Laboratory

Besser designed, built and completed experiments encompassing such diverse fields as rapid solidification, thermal spray processing, mechanical and tribological properties testing, and highenergy X-ray diffraction here and at the Argonne National Laboratory's Advanced Photon Source. He has nearly 50 journal articles and publications, and four patents.

#### **Mary Meier**

#### Athletic training program director

#### Assistant director of athletic training experience, kinesiology department

Meier supports student-athletes through her work as an athletic trainer, an adviser and a director of the athletic training education program. She is active in the Iowa Special Olympics, which twice named her Volunteer of the Year. She also supports her professional association as a leader, committee member and conference presenter.

#### Kathryn Wieland

#### Director, College of Business career services

When Wieland joined the combined Business/Liberal Arts and Sciences career services office in 1997, there were 235 intern/co-op placements. Four years later, thanks to her leadership, that number grew to more than 700, with student earnings of nearly \$3.8 million. As director of the Business career services office, she maintains a high level of internship opportunities and a consistently high full-time employment rate for graduates.

# **Carroll Ringgenberg Award**

This award recognizes a professional and scientific staff member who has been employed by the university for at least 10 years and has demonstrated constant and contagious dedication and good will for Iowa State. The award was established in 1995 by colleagues of the late Ringgenberg to honor his 40 years of service in Iowa State's purchasing and facilities divisions. A \$1,500 award is granted.

#### **Douglas Wood**

Associate scientist, civil, construction and environmental engineering department Wood has exhibited the characteristics associated with the Ringgenberg Award since becoming a student-athlete in 1974 (he was an All-American gymnast in 1976-77) and for the past 33 years as a member of the university's staff. His contributions to the bridge engineering research program have helped establish a unique component to the College of Engineering.

# Professional and Scientific Outstanding New Professional Award

This award recognizes a professional and scientific staff member who has demonstrated outstanding accomplishments unusually early in his or her professional career at Iowa State. A \$1,500 award is granted.

## Sara Harris

Administrative specialist, electrical and computer engineering department Harris contributed to the department by streamlining and improving operations, promoting professional development of students, and working diligently to create a collegial atmosphere for all faculty, staff, students, alumni and partners.

## Meghan O'Brien

## Extension program specialist, economics department

O'Brien excels at disseminating economic information to communities, businesses and citizens, which helps them make better decisions about their futures. Her work focuses on the retail trade analysis program, which she expanded to include services to some of Iowa's largest employers. In her short tenure at Iowa State, O'Brien has established tremendous visibility and name recognition for herself, the program and ISU.

# Iowa State University Award for Outstanding Achievement in Extension or Professional Practice

This award recognizes a faculty or staff member who demonstrated outstanding performance in statewide leadership in Extension or professional practice and achieved national recognition for outreach activities. A \$1,500 award is granted.

## **Charles Schwab**

Professor of agricultural and biosystems engineering Extension safety specialist

Schwab created one of the leading agricultural safety and health programs in the nation. His Extension programming, "Safe Farm," won several national awards for its quality and innovation. He has been a leader in developing the first land-grant university national research and extension agenda for agricultural safety and health. He also was instrumental in developing and guiding the Progressive Agriculture Safety Day program, which reached more than 827,000 people.

# Iowa State University Award for Early Achievement in Extension or Professional Practice

This award recognizes a faculty or staff member who demonstrated outstanding accomplishments in extension or professional practice unusually early in his or her career. A \$1,500 grant is awarded.

# J. Gordon Arbuckle

Assistant professor of sociology Extension rural sociologist

Arbuckle established an extraordinary record of achievement in the three years since joining the sociology Extension faculty, including more than 20 publications and refereed journal articles, six national conference presentations, five major grant awards and dozens of invited presentations, interviews and broadcasts in Iowa.

# Iowa State University R.K. Bliss Extension Award

This award recognizes outstanding achievement of an Iowa State Extension staff member for developing an overall or continuing extension education program. This award was established in 1971 by donations from the family and friends of Bliss, director of extension from 1912 to 1946. A \$500 award is granted.

# Kapil Arora

# Agricultural engineering program specialist

Arora provided outstanding leadership and educational programming to improve water quality in Iowa. His programs have impacted more than 3 million acres of Iowa farmland through improved drainage and nutrient management, and expanded vegetative filters. His Midwest Composting School helped urban leaders from five states reduce their composting costs significantly and expand individual composting efforts in urban areas. In addition, more than 300 people have attended the Central Iowa Wind Energy Conferences he developed. He wrote award-winning journal articles, and serves on several committees working to improve Iowa's water quality.

# **Named Professorships and Chairs**

Chairs, professorships and other faculty positions created through the generosity of philanthropists enable the university to recruit, retain and recognize outstanding faculty members. The perpetual earnings from endowed positions also provide support for scholarly endeavors. These appointments were made during the 2009-10 academic year:

- Michael Cho, Lloyd Chair in Biomedical Sciences
- David Jiles, Palmer Departmental Chair in Electrical and Computer Engineering
- **M. Douglas Kenealy**, Eldred and Donna Harman Professorship for Excellence in Teaching and Learning
- James McElroy, Raisbeck Professorship in Business
- Balaji Narasimhan, Vlasta Klima Balloun Professorship in Engineering
- Richard Poist , Walker Professorship in Logistics and Supply Chain Management
- Brent Shanks, Mike and Jean Steffenson Professorship in Chemical Engineering
- Michael Spurlock, Virginia M. Gladney Professorship in Food Science and Human Nutrition
- Janette Thompson, Harmon Family Professorship in Forestry
- John Thomson, Stephen G. Juelsgaard Dean's Chair in Veterinary Medicine
- Judy Vance, Joseph C. and Elizabeth A. Anderlik Professorship in the College of Engineering
- Gary Wells, Wendy and Mark Stavish Chair in Social Sciences
- Arthur Winter, Carlyle G. Caldwell Endowed Chair in Chemistry
- Richard Wlezien, Vance and Arlene Coffman Endowed Departmental Chair in Aerospace Engineering

# IOWA STATE UNIVERSITY

# INSIDE IOWA State for faculty and staff

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# **Taking shape**

Steel framing and concrete work are moving along within State Gym (pictured at middle right) and on the facility's west addition. Recreation services director Michael Giles said the shell should be completed in November, which will allow crews to move their work inside during the winter. Despite the rainy summer months, he said the State Gym renovation and addition remains on schedule to be ready for students' return to campus next fall. *Photo by Bob Elbert*.

# INSIDE IOWA State for faculty and staff

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# **Regents meet Thursday in Cedar Falls**

by Anne Krapfl

The state Board of Regents meets Thursday, Sept. 16, at the University of Northern Iowa. A live audio stream of the meeting is available at the regents website.

Agenda items from Iowa State include:

- A flood update by vice president for business and finance Warren Madden and request to use emergency procedures (spelled out in the *Iowa Code*) for construction projects and purchases necessary for flood recovery.
- A presentation by executive vice president and provost Elizabeth Hoffman and request to approve the university's 2010-15 strategic plan.

# Listen live

A live audio stream of the board's discussion is available at the regents website.

- A proposal by president Gregory Geoffroy (requested in March by the board) to phase out state funding for the athletics department.
- Requests to proceed with two renovation projects on the ground floor of Curtiss Hall that will centralize an array of student services in the College of Agriculture and Life Sciences.

Discussion of these items is expected to begin sometime after 10 a.m. The board begins its work at 8:30 a.m., but will first meet in a closed session and then as the committee of the University of Iowa Hospitals and Clinics.

# **IOWA STATE UNIVERSITY**

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A friendship between Jill Euken (left) and Ingrid Lilligren helped provide sustainable art for the new Biorenewables Research Laboratory. Behind the two is senior Katie Palmer's reduction woodcut, "Corvidae Corvus," which captured best in show at the inaugural sustainable art juried competition. *Photo by Bob Elbert.* 

# Catalysts in art and science

by Teddi Barron, News Service

In 1996, when Ingrid Lilligren was a junior faculty member in the art and design department and Jill Euken worked as an Extension field specialist at the university's Armstrong Research Farm in Lewis, they collaborated on a project to create artwork for the farm's new Wallace Foundation Learning and Outreach Center. This "beginning of a beautiful friendship" led to another partnership, between the Bioeconomy Institute and the College of Design, nearly 15 years later.

## **Open house**

Biorenewables Research Laboratory Friday, Sept. 17 3-5:30 p.m. (program at 3 p.m.)

Thanks to their friendship, the institute's new Biorenewables Research Laboratory (BRL) -- set for dedication on Friday, Sept. 17 -- not only will be home to some of the university's most innovative research, but also some of its most inventive artwork.

Euken is now deputy director of the Bioeconomy Institute, and Lilligren is professor and director of integrated studio arts. The two bonded when Lilligren was commissioned to create and install a ceramic mural for the Wallace learning center. Over the years, the friends exchanged phone calls and emails. In 2008, they reconnected at a university awards luncheon.

# The science of building a collection

Euken wanted to discuss artwork for the new biorenewables building, which would be built in two phases. The decision had been made to purchase the public-building-funded artwork upon completion of the second phase. Until then, the walls of the BRL would be bare.

"And a building without art really isn't a building," Euken laughed.

So the two discussed having design students and faculty create art on an ongoing basis. They formed a committee that included Barbara Walton, associate professor of art and design; Tonia McCarley, Center for Biorenewable Chemicals assistant director; and the Bioeconomy Institute's Maryann Sherman, communications and marketing coordinator, Diane Meyer, grants manager, and Diane Love, administrative assistant.

"I've always been most comfortable having one leg in two different cultures and bridging them," Euken said. "And it just makes sense that when you find someone in a different department who also likes to mix it up, that you work together."

The committee decided to hold a juried competition for students and place their art in the building. Last spring, 22 integrated studio arts students produced work for the inaugural sustainable art juried competition. Students were asked to create art from, or with images of, natural materials. They also had to write statements about the lifecycle of the materials used or the lifecycle of the subject matter depicted.

Cash awards, ranging from \$750 to \$75, were provided for the top four place winners, by the institute's non-state funding. Winners were selected on Earth Day in April; senior Katie Palmer's reduction woodcut, "Corvidae Corvus," took best in show.

The work of all 22 students has been installed in the BRL lobby, and Palmer's will become part of the building's permanent collection. Each year, the Bioeconomy Institute will sponsor the competition, exhibit 20-25 juried pieces for a year and add the winning art to its collection.

# The art of being good neighbors

Meanwhile, Sherman and Euken asked Lilligren and Walton if they could make something with biochar, the charcoal co-product of bio-oil made from cellulosic biomass. When applied to the soil, it can restore nutrients and sequester carbon.

Lilligren set in motion the "Charcoal Challenge" for studio arts faculty. The institute provided each artist with about a pint of red oak charcoal powder. Some rubbed the charcoal into paper, and then erased areas to create light and dark values. Walton added linseed oil to the gritty powder before drawing with it. And Lilligren fired some biochar onto a tile to make a glaze. The seven faculty pieces will be on temporary display in the Bioeconomy Institute's office suite.

Also on temporary display are soywax-based encaustic paintings by Walton. In encaustic painting, colored pigments are added to heated wax and applied to wood or canvas. An ancient technique, it traditionally uses beeswax or petroleum-based wax. However, Walton has worked with Toni Wang, professor of food science and human nutrition, to develop a safer, more affordable and environmentally friendly soy-based wax. The "green" wax is creating quite a lot of excitement in the encaustic painting world, Lilligren said.

Other plans are being fleshed out to "solidify the good neighbor relationship" between the scientific institute and the designers and artists next door. Faculty who teach drawing or biological and premedical illustration will be encouraged to use the visual BRL laboratories and the ISU BioCentury Research Farm as settings for student drawing assignments.