Oct. 6

A Cyclone autumn
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Iowa State, Ames Lab scientist wins Nobel Prize in Chemistry
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Oct. 6

First look at FY13
Executive vice president and provost Elizabeth Hoffman lays out funding priorities and summarizes funding requests to the state for next year in her first budget memo to ISU leaders for the FY13 budget cycle.

Oct. 6

Gateway Hotel sold to ISU-friendly investor group
The ISU Foundation has sold the Gateway Hotel and Conference Center to a group of investors that calls itself Friends of Iowa State University Hotel Holdings L.L.C. The $5 million sale, which includes the hotel, hotel contents and 17 acres of surrounding grounds, was finalized Oct. 4.
Five questions for Michael Golemo
He made music with the Temptations, Four Tops, Ray Charles and other legends. Director of bands Michael Golemo talks about his past and present in “Five Questions”.

Oct. 6
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Iowa Staters are encouraged to join the all-Iowa, 1-kilometer “Start Somewhere Walk” at noon Friday, Oct. 7. Walkers can choose from several routes mapped out on campus and in the Ames community.
A Cyclone autumn
There's plenty of cardinal and gold on campus this week, courtesy of Mother Nature. University photographer Bob Elbert captured this shot near the Iowa Farm Bureau Pavilion on Osborn Drive.
Iowa State, Ames Laboratory's Shechtman wins Nobel Prize in Chemistry
by Mike Krapfl, News Service

The Nobel Foundation announced Oct. 5 that the 2011 Nobel Prize in Chemistry was awarded to Dan Shechtman. The Royal Swedish Academy of Sciences picked Shechtman "for the discovery of quasicrystals."

Shechtman is an Iowa State professor of materials science and engineering, a research scientist for the U.S. Department of Energy's Ames Laboratory and the Philip Tobias Professor of Materials Science at the Technion - Israel Institute of Technology. He currently is at Technion in Haifa, Israel. The 70-year-old scientist joined Iowa State and the Ames Lab in 2004 and spends about four months a year in Iowa. He will return to Ames in mid-February.

Shechtman's 1982 discovery of crystalline materials whose atoms didn't line up periodically like every crystal studied during 70 years of modern crystallography is regarded as a revolutionary find that changed ideas about matter and its atomic arrangement.

**Quasicrystal flag bearer**

Shechtman, who goes by "Danny," compared winning the Nobel Prize to carrying a country's flag at the Olympics. In this case, he's carrying the banner for an international team of quasicrystal scientists.

"I am the spearhead of the science of quasicrystals, but without the thousands of enthusiastic scientists around the globe, quasicrystals would not be what they are today," he said. "Quasicrystals are still an enigma in many ways, waiting to unfold, and I admire the researchers who over the years became friends and who for a quarter of a century have elucidated this science."

Pat Thiel, Distinguished Professor of chemistry, professor in materials science and engineering and a faculty scientist for the Ames Lab, also studies quasicrystals. She said Shechtman's discovery meant scientific definitions had to be changed and textbooks rewritten.

"What Danny did was fantastic science," she said. "He instigated a scientific revolution."

"For a long time, it was me against the world. I was a subject of ridicule and lectures about the basics of crystallography."

-- Danny Shechtman
The experiment
That's not what he set out to do during a sabbatical from the Technion and a two-year stint in the United States at what's now known as the National Institute of Standards and Technology.

Shechtman was studying rapidly solidified aluminum alloys with a toolbox that included transmission electron microscopy, X-ray diffraction and neutron diffraction. The transmission electron microscopy revealed a structure that science said was impossible: a pattern that when rotated a full circle repeats itself 10 times.

In his notebook that day, Shechtman wrote "(10 Fold ???)." Later, he found the pattern was really a five-fold rotation, but that didn't show up in the first experiments.

"For 70 years until 1982, all crystals studied, hundreds of thousands of them, were found to be periodic," he said. "Only certain rotational symmetries are allowed in this periodic array and these are 1,2,3,4,6 and nothing else. This is why, when I saw the tenfold rotational symmetry, I was so surprised."

Shechtman did follow-up experiments to confirm his findings and published his discovery in 1984. His work was widely questioned.

The second guessing
"For a long time, it was me against the world," he said. "I was a subject of ridicule and lectures about the basics of crystallography.

"The leader of the opposition to my findings was the two-time Nobel Laureate Linus Pauling, the idol of the American Chemical Society and one of the most famous scientists in the world. For years, till his last day, he fought against quasi-periodicity in crystals. He was wrong, and after a while, I enjoyed every moment of this scientific battle, knowing that he was wrong."

Shechtman continues to study magnesium alloys and other materials that are strong but can also be stretched or shaped without breaking. And although the applications of quasicrystals are limited, Shechtman said they are important for changing a long-held scientific paradigm.

"People should be interested in scientific advances because the body of knowledge generated by the scientific community improves our lives," he said. "Go back 100 years and see the difference, including life expectancy and life quality."
Hoffman memo lays out funding priorities for next year

by Anne Krapfl

Growth in the university's research enterprise, stronger links between university-level and college-level student recruitment and retention efforts, and compensation packages that attract, retain and reward high-performing employees are among six funding priorities identified by executive vice president and provost Elizabeth Hoffman in her first memo to senior leaders on developing the FY13 budget. Fiscal year 2013 begins on July 1, 2012.

In addition to summarizing Iowa State's appropriation requests to the state Board of Regents, Hoffman outlined priorities for funding, selected because they support the goals of the university strategic plan. Other priorities in the FY13 budget development process are:

- Academic programs and student support services that enhance the student experience
- Extension and outreach areas seen as most beneficial to Iowans and which broaden the university's involvement with Iowa communities
- Administrative process improvements that provide high-quality, efficient support of education, research and outreach efforts

"Academic excellence, interdisciplinary collaboration, partnerships with internal and external constituents, the overall student experience and a strong sense of community are the qualities that define Iowa State," Hoffman wrote. "It is essential that we continue to focus resources in areas that support these qualities."

State funding requests

By law, the state Board of Regents submits funding requests for the coming year to the state by Oct. 1. The governor and Legislature use the requests in building their proposed state budgets. As approved by the board Sept. 20, the regents' appropriation requests for Iowa State for the year that begins July 1, 2012, include:

- A general education incremental funding increase of 4 percent ($6.6 million) to return to FY11 funding levels
- Incremental funding of 4 percent in several direct appropriations to address ISU strategic plan initiatives: Agriculture Experiment Station ($1.2 million), Cooperative Extension ($767,296), Leopold Center ($17,001) and livestock disease research ($7,394)
- Incremental funding of 4 percent ($96,972) for existing economic development units (ISU Research Park, Institute for Physical Research and Technology, Small Business Development Centers) and an additional $1 million to expand economic development efforts
- Strategic funding for the Veterinary Diagnostic Lab ($762,364) to reach the $4 million annual goal established previously by the Legislature
- Strategic funding of $2.3 million (for the three regent universities) to restore STEM initiative funding to the FY09 level of $4 million
- New funding ($7.5 million for the three universities) for a renewable energy and value-added agriculture initiative for which Iowa State would take the lead

Hoffman's second FY13 budget memo is due out around Dec. 16, following October and December meetings of the state Revenue Estimating Conference and an anticipated decision by the regents in early December on tuition rates for 2012-13.
Foundation sells hotel to ISU-friendly investor group
by Anne Krapfl

The ISU Foundation has sold the Gateway Hotel and Conference Center south of campus to a group of investors that calls itself Friends of Iowa State University Hotel Holdings L.L.C. The $5 million sale, which includes the hotel, hotel contents and 17 acres of surrounding grounds, was finalized Oct. 4. The sale also includes the on-site restaurant and bar, which has operated as the Iowa Stater since August 2010.

The "Friends" investment group is led by Al Jennings, a 1956 Iowa State graduate and chairman and CEO of EFCO Corp., a concrete form company based in Des Moines. The group includes about 10 confirmed investors. Another 50 alumni or ISU supporters with a previous connection to the hotel have been invited to become investors as well. The membership of the investor group should be firmed up by March.

Doug Drees, a lawyer for EFCO and spokesman for the new owners, said FLIK Conference Center Management, based in Rye Brook, N.Y., will continue to oversee the Gateway's day-to-day operations. He said the hotel's name will not change.

In a statement, the investing group said it is purchasing the hotel because it is "committed to providing a first-class hotel and conference facility owned by people who are supporters of Iowa State University and its mission."

"It's a great hotel and the foundation did a good job of keeping it in condition," Drees said. "We think the Friends of Iowa State University group is only going to do an even better job. It's important that this facility be a showcase for Iowa State."

In addition to 187 guest rooms and the Iowa Stater restaurant, the Gateway complex includes 16,000 square feet of conference space.

Leaving the hotel business
The Gateway hotel was built in 1978 by the foundation and 35 individual partners in the Ames community who, over the years, turned over their ownership to the foundation. Jennings was one of these original partners. The hotel had a Holiday Inn franchise from 1978 to 2001.

The foundation's board of directors announced in July that it would sell the hotel, restaurant and
"Running a hotel is not our core business, and as the hotel business has become more complicated and more competitive, that fact has become more obvious to us," said Lisa Eslinger, senior vice president of finance and operations for the foundation. "Our core business is to raise money to support Iowa State University."
Michael Golemo conducts the ISU Wind Ensemble in May (2011) in the Innsbruck, Austria, town square. Contributed photo.

From Motown to Campustown: Five questions for Golemo

by Mike Ferlazzo

Around campus, he's a professor, department chair, director of bands and conductor of the Wind Ensemble. Dig deeper and you'll find that Michael Golemo has written hundreds of instrumental arrangements and compositions for recording artists, and played sax with Motown legends.

**What's your best known song and what was your inspiration for it?**

I'm not sure anything I've composed or arranged is really well known, although I've had music performed in Carnegie Hall, in Russia and on football fields across the country. Perhaps my most memorable recent arrangement was for Simon Estes, who used it at a concert at the FIFA World Cup Soccer event last summer in Johannesburg, South Africa. I wrote the musical arrangement and hired the musicians -- all ISU students and faculty -- who recorded the soundtrack for Simon.

Composing and arranging music is rarely the product of inspiration. That's more of a 19th-century "romantic" idea. Writing music is demanding and continuous work that involves more perspiration than inspiration.

**What's your favorite memory of working with an artist on a composition?**

The basics
Name: Mike Golemo
Years ago, I was asked to write an arrangement for a jazz band that was going to feature trumpeter Wynton Marsalis. I was in communication with Wynton. We discussed the basic style of the piece, key signature, tempo, form, areas for improvisation.

The performance was tremendous. It is always gratifying to hear your work performed by a superstar musician. He enjoyed the work so much that he used it with big bands for several years.

**Any memorable moments while playing sax?**

I've played for a wide variety of shows and performers, including the Rockettes, the Ringling Brothers Circus, the Chicago Bears Jazz Band, Ray Charles, Natalie Cole, Red Skelton, Robert Goulet and numerous music theater productions that featured some pretty big names. I also played with a lot of the Motown acts, including the Four Tops, Spinners, and probably about 50 shows with my personal favorite, the Temptations.

I'd come home late at night from a Temptations performance and show my wife Mary Beth (Frederiksen Court community manager), some of their dance moves. That's pretty funny, if you know anything about my total lack of dancing skills.

**How do you find time to fit composing and performing into your academic duties?**

I've found a balance between my academic/administrative duties and my music composing and arranging. The trick is finding time on a continual basis to write. I cannot write for several days, put it away, and then return to writing. I work best when I can work on a project straight through from beginning to end. I prefer to write late at night when there are fewer distractions.

**What musical projects are you working on now?**

I'm working on a concert band piece that is a commission from West Marshall High School, State Center. The work will be about six to seven minutes long, and will be based on a three-note theme (think of the three pitches used in "Dancing Queen" by ABBA). I'm really looking forward to creating that work. I have a general idea of what I want to do, but the discovery process and anticipation is always exciting.

Pablo Picasso once asked fellow painter Norman Rockwell, "Out of all of your paintings, which one is your most favorite?" Rockwell replied, "The next one." As artists, I think we are always looking forward to our next composition, performance or painting.
Oct. 6, 2011

Disability Awareness Summit debuts at ISU Oct. 14
by Paula Van Brocklin

The 2011 Iowa Regent Institutions Disability Awareness Summit will be held at Iowa State for the first time Friday, Oct. 14, from 9 a.m. to 3:30 p.m. at the Scheman Building. This is the fourth disability summit sponsored by the state Board of Regents.

The event is intended to raise awareness, stimulate discussion and collaboration, and promote positive changes for everyone who works and studies at an Iowa regents institution.

All are welcome to attend this free event, though registration is required by Friday, Oct. 7. Once registered, you are welcome to come and go as your schedule permits. To register, email disabilityresources@iastate.edu.

Mark Leddy, program director for research in disabilities with the National Science Foundation, will present the 9 a.m. keynote address, "Postsecondary Students with Disabilities in STEM: Engagement, Persistence and Graduation." Additional topics throughout the day include universal design (related to both facilities and instruction), emerging technologies, and services for the deaf and hard-of-hearing. Lunch is available for those who register in advance. A complete schedule of the day's events is available online.

Help is available
October is National Disability Employment Awareness Month, and human resource services wants to remind ISU faculty and staff that it has a process (PDF) in place to assist employees who suffer from disabilities or other conditions that impair their ability to perform their work tasks. Problems that fall under this category may be temporary, like a broken leg that requires crutches. Or, the condition could be long-term, such as eye impairments from diabetes. Whatever the situation, HRS can help you and your
department address it. More information about how HRS can accommodate employees' disabilities is online.
Oct. 6, 2011

Take a walk ... Friday
by Diana Pounds

Iowa Staters are encouraged to join the all-Iowa "Start Somewhere Walk" at noon Friday, Oct. 7. The walk launches the state of Iowa's five-year Healthiest State Initiative.

Organizers, including Human Sciences dean Pam White who serves on the state advisory board, hope that 250,000 people across the state will take a 1-kilometer walk over the noon hour.

Those on campus have a variety of routes from which to choose. Six campus loops, set up by staff in the Nutrition and Wellness Research Center, and five Ames community loops are designated for participants. Walkers can start anywhere along one of the routes and make a complete loop.

Volunteers on the routes will pass out "I Walked for IOWA" stickers and count the walkers.

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Series offers closer look at Museums
by Erin Rosacker

Last spring, University Museum staff members began "Object Lessons," a monthly series of lectures with topics based on frequently asked questions and their behind-the-scenes work.

"Object Lessons are designed to help people look more deeply at works of art using visual literacy skills, alternate points of view and historical context," said Museums communications coordinator Allison Sheridan. "They allow program-goers -- ranging from collectors to students -- the chance to access objects and museums spaces on a more intimate level."

Exhibit installations, handling techniques and the bronzing process are some of the topics already covered in the series. Hands-on activities and special viewings of objects that are not currently on exhibition also have been included.

"When planning the Object Lessons, our educators look within the Museums staff to determine whose position or expertise best matches the program topic," Sheridan said.

The latest in the series will take place at the Farm House Museum (Oct. 6, 7-8 p.m.), where Museums staff will talk about the responsibilities of maintaining and preserving the National Historic Landmark.

The planned lectures to close out the year include:

- "Hole-y Cow! Conserving John Bloom's Post Office Murals," Nov. 3, 7-8 p.m., Brunnier Art Museum, Scheman Building
- "Exhibition Design and Installation," Dec. 8, 7 p.m., Christian Petersen Art Museum, Morrill Hall

The lectures are free and open to the public. More information on the Object Lessons series and other Museums events is online.