

The Year. in review

The monthly newspaper for faculty and staff of the University of Nebraska-Lincoln

Special Edition

Sept. 10, 2012



Work continues on the expansion on the east side of Memorial Stadium. When finished, the project will include research space for a new center for brain, biology and behavior. The new research space inside Memorial Stadium will be incorporated into an updated UNL campus master plan (see story below). Since approval of the master plan in 2006, UNL has started or completed 33 construction projects.

Building for the future

Work continues to meet new goals

Chancellor Harvey Perlman opened the 2011-2012 academic year with a call for faculty and staff to start thinking bigger.

In his annual State of the University address Sept. 1, 2011 at the Lied Center for Performing Arts, Perlman described UNL's move into the Big Ten Conference as, "an opportunity to reset the table." To the more than 1,000 in attendance, Perlman outlined four, six-year goals that will help define what it means for UNL to be a member of the new conference. Those proposals each to be reached by 2017 — are:

- Increase enrollment by 20 percent, to 30,000 students. Enrollment in recent years has grown to nearly 25,000.
- Increase to 1,300 tenure track faculty positions. That translates to an added 160

Research Retention Reputation Recruitment

UNL's new goals have been divided into these four priorities. Watch for this graphic identifying Year in Review stories related to these new goals.

positions, with an average growth rate of 2.25 percent each year between now and

- A six-year graduate rate of 70 percent for undergraduates. The current rate is 64
- Total research expenditures of \$300 million.
- Double the number of faculty receiving national recognition and awards for research and creative activity.

Perlman said he looked at recent growth in those four areas and extrapolated the figures to set the 2017 benchmarks. All of UNL's academic units and programs have until spring semester to establish a target to meet each of the proposals.

"I am confident that we can achieve these targets if every academic unit on campus is involved," Perlman said. "We have the opportunity to reset the table — to now start anew to reformulate our ambitions and our aspirations, to set new goals and objectives, to rise to the elevated expectations in which we have been draped, to take advantage of the opportunities to lie ahead, to learn from but also to lead our new peers, to demonstrate that while we are in a new place, there is still no place like Nebraska."

Success leads to new master plan

UNL is updating its master plan and creating a landscape master plan due to construction successes, property shifts, and the new set of goals to grow enrollment, faculty hires and research funding.

The current UNL Master Plan was approved in 2006 and has played a role in the completion or start of 33 construction projects.

The new master plan will include identifying building sites, mapping vehicle circulation (with new data from the nearly complete Antelope Valley Project) and an indepth space study to see how UNL will accommodate more students, faculty and staff.

Campus construction

Since 2006, the UNL master plan has helped guide the completion or start of 33 campus construction projects. Those projects include:

- Jorgensen Hall
- Nanoscience Metrology Facility
- Whittier renovation Schorr Center for Computer
- Science Engineering Gaughan Multicultural Center
- Knoll Residence Hall
- Temple Building addition
- Henricks Training Complex
- Abel-Sandoz welcome center
- Lied Center addition
- Outdoor Adventures Center East Campus Rec Center
- Morrison Virology Center
- International Quilt Study Center

and Museum



UNL awarded a record 2,787 degrees in May http://go.unl.edu/spring2012

Equal coverage domestic partners

Regents approve 'Plus-One' benefit

In November, University of Nebraska employees will be able to sign up domestic partners for health insurance and other

On June 8, the NU Board of Regents on a 5-3 vote — approved the "employee plus one" proposal that extends benefits eligibility to an "adult designee" who shares an employee's household. The employee and adult designee must be financially interdependent. Family coverage would include the adult designee and their dependent children.

All NU benefits are included in the

"We believe this is appropriate for positioning the university competitively," said James B. Milliken, NU president. "I also think it is absolutely the right thing to do for our employees."

UNL was the only Big Ten university that did not offer benefits to domestic partners. http://go.unl.edu/2mg

New method gauges research productivity

UNL officials have started to look at research funding totals from a new a perspective - one used by fellow Big Ten universi-

In his Sept. 1, 2011 State of the University Address, Chancellor Harvey Perlman set a goal to increase UNL's annual research expenditures to \$300 million. In



For more on research at UNL, turn to Page 6.

previous years, UNL has used total grant dollars earned annually to gauge the strength of campus research.

The expenditures approach showcases the productivity of research at UNL rather than just award totals. This new standard is also used by Big Ten partners and the National

Science Foundation. Because of the complex nature of the figures, the totals reported usually lag one year behind. UNL's most recent annual research expenditure figure is \$191.3 million in 2010.

Foundations in place to support momentum

This special Scarlet Year in Review edition has become an annual tradition, a celebration of our successes over the past year as a university. While it's not an unabridged version of all of the accomplishments made by faculty, staff and students, it helps us look at the big picture and is an impres-

sive record of achievement and service to Nebraska.



Harvey Perlman

This past year especially has been one of positioning for further growth. Across campus we are seeing the manifestations of physical growth - the new Voelte-Keegan nanoscience building adjacent

to Jorgensen Hall; new student housing under construction; and the new East Stadium expansion that will house a nationally prominent research initiative known as the Center for Brain, Biology and Behavior. Through this center, UNL is leading an important national initiative to study head injuries in sports.

In addition, we are beginning construction this fall on the core facilities at Nebraska Innovation Campus, the new "launching pad" for marketable innovations. As you may recall, a \$25 million investment by Nebraska's Legislature and the governor has fueled \$80 million from private and public investments in the Phase I development.

If you look across the Lincoln landscape, the 'crane farm' of construction surrounding campus is a strong indicator of Lincoln's momentum, and that can only enhance UNL's opportunities for growth.

The new Pinnacle Bank Arena in the Haymarket, and the nearly completed Antelope Valley project, with new land reclaimed from the flood plain plus more hiker-biker trails and recreational opportunities near campus, add up to a more vibrant city and campus.

"Go Big Red" is much more than an athletic rally cry. It summarizes our academic momentum, our growing role in the Big Ten and its academic arm, the Committee on Institutional Cooperation, and our commitment to reaching our goals as a Big Ten university.

Over the past year, not only have we built some remarkable physical structures, we have also laid the foundation for UNL to be a better, stronger university.

I anticipate the achievement of many notable milestones in the year ahead as we take advantage of our year of building foundations.

Thanks for your commitment to continuing to make this university one of the best public universities in the nation.

Harvey Pulman

Harvey Perlman

BIG IMPACT



Ann Tutwiler, director general of knowledge for the Food and Agriculture Organization of the United Nations, and NU President James B. Milliken sign a memorandum of understanding in July.

Partnership

expands study,

research with

Brazil cohorts

UNL and the University of Sao

Paulo in Brazil are partners in a

new program that will give faculty, staff and undergraduate and grad-

uate students from the schools'

respective agriculture and natural

resources campuses opportunities

to study and do research together.

more than a year in the making.

Administrators and faculty from

the University of Nebraska have

made visits to Sao Paulo to iron

USP's ESALO campus in the city

of Piracicaba, which is roughly

equivalent to UNL's Institute of

Agriculture and Natural Resources.

Both focus on issues in food, fuel

from each university will spend

up to a year at the partner uni-

versity teaching, attending confer-

ences and conducting research.

Undergraduates will take classes,

while graduate students will con-

duct research in programs coordi-

nated by advisers at both universi-

ties. Technical and administrative

staff also will participate in the

NU is lead host for

Brazil-based initiative

Brazil's "Science Without

Borders" group that is at the

University of Nebraska this year is

the largest single delegation any-

majoring in STEM fields - science,

technology, engineering and math-

ematics — and several are studying

tive is part of Brazil's larger goal

to provide 100,000 students with

scholarships to study at the world's

is targeting for close cooperation.

Brazil is one of the countries NU

"Science Without Borders" initia-

Most of the 28 students are

where in the United States.

agriculture.

best universities.

SCIENCE

Under the agreement, faculty

The arrangement is with

out details.

and water.

The agreement has been

The University of Nebraska's Robert B. to tap into these resources will be highly Daugherty Water for Food Institute has gained a partner to assist with research and education efforts in water and food security.

In early July, NU President James B. Milliken signed a memorandum of understanding with the Food and Agriculture Organization of the United Nations. The signing ceremony was in Rome, Italy, where FAO is headquartered.

"The University of Nebraska and the Food and Agriculture Organization have worked together many times in the past and I could not be more pleased that we are taking our partnership to the next level," Milliken said. "FAO's network and influence at the international level is unrivaled and the opportunity

beneficial for the university and Nebraska." Areas of focus in the partner-Sustainably increasing crop

yields and water productivity Fourth Water for Food using mapping, modeling and conference ends with information systems such as the call to "think big." Global Yield Gap Atlas, NU's inihttp://go.unl.edu/wff4 tiative to provide estimates of the gap between current average farm yields

crops; and AQUASTAT, FAO's global information system on water and agriculture. · Improving drought management and climate adaptation through drought monitor-

and the potential yield ceiling for major food

ing programs, development of risk-based drought preparedness strategies and policies, and stronger drought warning systems to better cope with water Water for Food scarcity in a changing climate.

· Improving sustainable production under drought, stress and water-limited conditions through plant breeding, agronomic practices, crop physiology, biotechnology and molecular biology.

Initial activities will include regular information exchanges, joint research projects and joint workshops, conferences and symposia. http://go.unl.edu/oig

4-H Lego

Research Retention Reputation Recruitment



Carl Nelson, professor of mechanical engineering, sits by the Intelligently Controlled Assistive Rehabilitation Elliptical machine he helped develop in collaboration with Madonna Rehabilitation Hospital. The ICARE device was a finalist for the international da Vinci Awards.

Collaboration helps patients regain, improve walking ability

of human motion led him to a local collaboration that could have world-reaching

With Madonna Rehabilitation Hospital, Nelson's work on developing a new Intelligently Controlled Assistive Rehabilitation Elliptical system is helping rehabilitation patients regain or improve their ability to walk. The elliptical assistive device was a finalist for an international da

The UNL/Madonna collaboration began in 2006 when Nelson met Judith Burnfield, director of Madonna's Institute for Rehabilitation Science and Engineering, and the rehabilitation institute's Movement and Neurosciences Center. He had been drawn to visit the rehabilitative institute's movement center because of his growing interest in rehabilitative engineering.

Burnfield's problem at the center was the automated treadmill and robotic gait rehabilitation

echanical engineering professor Carl devices — they weren't affordable, and at some Nelson's fascination with the mechanics \$300,000 apiece, smaller treatment centers, clinics and home users were lacking access. Her concept was to make the ICARE device at a fraction of the cost — \$10,000 or less — and with the help of Nelson and a grant from the U.S. Department of Education's National Institute on Disability and Rehabilitation Research, they developed the ICARE system. ICARE uses customized propulsion so clients

can maintain exercise in a walking-like movement pattern on the elliptical machine. The motorized control has a sensor that adjusts the level of support depending on the individual's needs during

In July, Madonna Rehabilitation Hospital partnered with SportsArt Fitness Inc., to launch international distribution of the ICARE device.

The ICARE will be sold throughout the U.S. and 80 countries internationally. It includes parts manufactured by SourceOne, a custom manufacturing company in Lincoln

http://go.unl.edu/icare

The celebration, co-hosted by

UNL Chancellor Harvey Perlman

of Nebraska Medical Center stu-

the professorship further strength-

As a part of the appointment

University of Nebraska strengthens ties with China Website focused on refugee population

The College of Journalism and Mass Communications has created "Nebraska Mosaic," a community news website that focuses on Lincoln's refugee population. The website, http://cojmc/unl edu/mosaic, launched Nov. 3. Tim Anderson, associate profes-

sor of journalism, said the project is designed to give a voice to Lincoln's growing refugee communities.

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Troy Fedderson, Editor Kelly Bartling, News Director Meg Lauerman, Director, **University Communications**

The University of Nebraska-Lincoln is an equal opportunity educator and employer with a comprehensive plan for diversity.



NU, Xi'an celebrate opening of exchange center

The University of Nebraska and China's Xi'an Jiaotong University celebrated April 21 the opening of the American Exchange Center. The center is an NU-wide initiative that aims to expose Chinese students and faculty to United States history, law, medicine, art, culture and government. It is also designed to strengthen Nebraska's collabora-

The exchange center is one component of NU's overall global engagement strategy to build relationships with key nations that will benefit Nebraska and the world. Only 10 such centers won seed funding from the U.S. government after a competitive application pro-

Chancellor Harvey Perlman

returned from China in September

and dance troupe. The center will operate much like the Confucius Institute, which, through a partnership with Xi'an Jiaotong University, promotes Chinese language, culture and his-

with a new title, Honorary University ens the strong relationship between

Professor at Xi'an Jiaotong Xi'an Jiaotong University and UNL.

China rising and Xi'an Jiaotong University UNL recruitment efforts are President Zheng Nanning, capped drawing more students from an "American Culture Week" in China. In the last seven years Xi'an. Activities during the week en<mark>rol</mark>lment of Chinese under included a lecture from University gr<mark>ad</mark>uates has increased about 188 percent. Totals are from dents, photography exhibits and fall of each year. lectures from UNL faculty, and performances by the University of Chinese undergrads Nebraska at Omaha Jazz Quintet 21 and a Xi'an Jiaotong student music 2006 24 2008 100 2009 171 335 415 Data provided by Institutional Research and Planning

Chancellor named honorary professor at Xi'an Jiaotong In addition to being a rare honor, Perlman will travel occasionally to

China to give lectures on intellectual

http://go.unl.edu/s6i

IANR's China office to foster collaborations

A new UNL office in Beijing will open up new possibilities for joint research and faculty and student exchanges between the United States and China.

UNL's Institute of Agriculture and Natural Resources opened the office June 11 at China's State Administration of Grain.

A Nebraska delegation that included representatives from UNL and the Nebraska Department of Agriculture visited Beijing twice in the past year to negotiate the opening of the office.

The new office will provide access to a network of leading Chinese university and state partners for student and faculty exchanges and as well as for joint research efforts.

Research Retention Reputation Recruitment

Students work to preserve history of North Omaha



UNL student Ali Bousquet examines a photograph as part of the UNL History Department's "History Harvest." The project is designed to preserve the history of North Omaha.

Programs rank among 'Best Graduate Schools'

Report released its 2013 "Best Graduate Schools

rankings March 13. The College of Education and Human Sciences at number 93 of 198. The UNL was ranked among Best Education College of Law was placed at 89th Schools at 34th, up from 50th last among law schools. year. CBA's Part-Time MBA rose from 50th last year to 28th this

Among of Engineering, UNL was listed http://go.unl.edu/3zk



their lives. The research is part of the Civil War Washington digital research project and marks the 150th anniversary of the Compensated Emancipation Act. UNL scholars leading Civil War Washington are (left to right) Susan Lawrence, Kenneth Winkle, Katherine Walter, Kenneth Price, and Elizabeth Lorang. For more information, go to http://civilwardc.org.

UNL Extension creates drought info website

UNL Extension has created home and garden. It features the a website that offers resources latest weather forecasts from state from the Institute of Agriculture and Natural Resources and others for dealing with drought in the region.

The site includes links to information on crops, livestock, university economics, water, families, and

3 profs earn top honors

engagement

recognize faculty whose work has made a strong impact on students, the university and the state. Award recipients are selected by committees of outstanding peers.

Calkins, a UNL meat scientist, er community.

Watch videos stories featuring these three universitywide award winners online:

Chris Calkins – http://go.unl.edu/94a

as well as links to pro-

graming, UNL Extension

publications, UNL news

releases; and links to

resources outside the

Tiffany Heng-Moss – http://go.unl.edu/dox Carolyn Pope Edwards – http://go.unl.edu/bkk Department of Entomology, is

the winner of the University of Nebraska systemwide OTICA, given to honor excellence in teaching. OTICA stands for Outstanding Teaching and Instructional

Professor, teaching in the departments of Child, Youth and Family Studies and Psychology, received the University of Nebraska's highest honor for research — the Outstanding Research and Creative Activity Award.

homesteading papers, a cup used by a slave, and several photographs depicting the jazz scene. They brought their treasures and their stories related to African-American history to learn more about them from UNL historians and contribute to an innovative effort to preserve North Omaha's past. It was all part of "History Harvest," held Oct. 22 at

Love's Jazz and Art Center in North Omaha. The event was organized by UNL's History Department in partnership with the Great Plains Black History Museum and the Malcolm X Memorial Foundation. Ordinary Nebraskans were invited to share their

artifacts and stories with UNL historians and advanced students, who helped explain the items' meaning and how they connect to a broader national narrative of Previous "History Harvest" events were held in

Nebraska City and Lincoln, with the latter focusing on

The idea for the event grew out of a desire to give students more hands-on experience, said Patrick Jones, associate professor of history and ethnic studies. Students get the chance to handle artifacts, conduct interviews and photograph or scan items for a webbased digital archive that will be made public and could

someday be the basis for educational lessons. "This has been a hidden history. Sharing it is crucial for many reasons," Jones said. "This will create a different story about North Omaha and about the black experience there."

Jones also recognizes how the experience has affected his students. For every one of them, it has altered their perspective, profoundly affected their thinking and their understanding of the world and their rela-"For me as a teacher, as a person, it has been won-

derful to see them grow," he said.

6 deans selected

During the 2011-2012 academic

Charles "Chuck" O'Connor is the

Charles "Chuck" Hibberd is

Lance Pérez is the new dean

vear. UNL hired three new deans

and selected three others to serve

new dean of the Hixson-Lied College

of Fine and Performing Arts. Read

the new dean and director of UNL

Extension. Read more at http://

of Graduate Studies. Pérez is also

an associate vice chancellor for

academic affairs and a professor

of electrical engineering. Learn

more about Pérez at http://go.unl.

scape architecture, was appointed

to a three-year interim dean positi-

ton at the College of Architecture.

Read more at http://go.unl.edu/6ks.

named interim dean of the

College of Journalism and Mass

Communications. Read more at

interim dean of the University

Libraries. Busch replaces Joan

Giesecke who stepped down to

accept a new administrative assign-

ment. Read more at http://go.unl.

Parents group

honors 180+

faculty, staff

The UNL leaching Council and

UNL Parents Association honored

more than 180 faculty and staff at

an annual recognition ceremony on

Certificates of recognition for

contributions to students were given

during the ceremony. This was the

first year 20-year awards were pre-

sented. Faculty receiving the 20-year

honor are Ronald Hanson, profes-

sor of agricultural economics, and

Donald Lee, professor of agronomy

ed by parents of UNL students. See

the complete list of award winners

at http://go.unl.edu/hq2.

All award winners were nominat-

Gerald Shapiro, 61, of Lincoln, died

Known nationally as a compiler of

Oct. 15. He was Cather professor of

Jewish fiction and an author of several

books including "Bad Jews and Other

Stories" and "Little Men," Shapiro's

writing and anthologies earned numer-

ous awards including the Ohio State

University Short Fiction Prize and the

Edward Lewis Wallant Award. He was

also a finalist for the National Jewish

These obituaries were featured in the

Harvey Loy Hinshaw Sr

Frederick Link

Terry Rae Nygren

Scarlet during the 2011-2012 academic

vear. All obituaries are available online

Book Award for Fiction

at www.unl.edu/scarlet.

Rodney Dillon

Judy Driskell

Robert Fuller

and horticulture.

In memorium

Gerald Shapiro

And Nancy Busch was named

http://go.unl.edu/79i.

James O'Hanlon was

Kim Wilson, professor of land-

more at http://go.unl.edu/zdv.

interim dean roles.

go.unl.edu/5pu.

edu/403.

http://go.unl.edu/history_harvest



Larry Witzer waves to the crowd during the Nov. 5 Husker football game. Sotzing and Witzer are with the John W. Carson Founda-

Carson Foundation gives \$1M for scholarships

The John W. Carson port of Johnny Carson to his Foundation announced in November a \$1 million gift to the University of Nebraska Foundation to create the Johnny Carson Opportunity Scholarship Fund.

The permanently endowed scholarship fund will annually benefit students in the Hixson-Lied College of Fine and Performing Arts to help our students with who are graduates of high schools in Nebraska, with preference for students in the Johnny Carson School of Theatre and Film.

Perlman said the gift demonstrates the continued sup

home state of Nebraska.

"Once again, Johnny Carson's legacy lives on at the University of Nebraska," Perlman said. "He has demonstrated time and time again his love for his home state, and we are grateful to the Carson Foundation Board for this generous gift much-needed scholarship support."

The gift was announced Nov. 4 following the Carson Lecture presented by "Mr. Chancellor Harvey Baseball" Bob Uecker.

http://go.unl.edu/carson

Nastasi is director of Center for Energy Sciences Research

Materials scientist Mike Nastasi is the new director of UNL's Nebraska Center for Energy Sciences Research.

Nastasi also is a professor of mechanical and materials engineering and holds the Elmer Koch Professorship. He comes to UNL from Los Alamos National Laboratory.

In July, Nastasi received a \$980,000 grant to develop new composites that could lead to safer, more efficient energy production in nuclear reactors. Read more at http://go.unl.



Larkins leads life sciences research

en UNL's life sciences research. The internationally recognized leader in

the development of plant molecular biology and plant agricultural biotechnology became associate vice chancellor for life sciences at UNL on July 1. He's excited about the leadership and

Brian Larkins is leading efforts to strength-

vision at Nebraska, and about new possibilities at Nebraska Innovation Campus. Larkins said life sciences research and

innovation at Nebraska is on its way up.



Civic engagement is new focus for undergraduates A new civic engagement program at UNL is aimed at make a difference in the quality of life in a community, has been



placing windows in th

sparking that reaction in undergraduates. The program, unique in the Big Ten, wraps co-curricular experiences within UNL's general education curriccollege or major — emerge with a Certificate in Civic engagement, loosely defined as connect-

ng classroom learning with the opportunity to

high on the wish list for UNL for a number of years. The new civic engagement certificate program will mentor

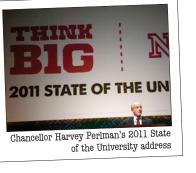
students through the process of applying what they have learned ulum and participants — regardless of their home to real-world experiences, helping them to analyze and reflect on their experiences and complete a service-learning project. The first cohort of students begins the program with the

spring 2012 semester. The goal is to roll the project out in a small pilot class, eventually attracting many more undergraduates.



Barbara Gorski Wally Peterson Janet Harkness Richard Harnsberger

inpictures







robotics program is nationwide The UNL 4-H program

Geospatial and Technologies for the 21st Century has grown to reach thousands of youth across the nation, getting them interested in science, technology, engineering and math (STEM)

GEAR-Tech-21
— which started with a \$2.5 million grant from the National Science Foundation is based on the Nebraska Robotics and GPS/GIS in 4-H program. in 4-H program. The initiative teach-

es robotics, GPS and GIS technologies through building and programming a robot, navigation and mapmaking activities. Since its start, the program has

expanded regionally to nationally

with 60 programs across the coun-

These programs include learning in a variety of formats, including 4-H Clubs, after school programs, Scout groups or for teachers to use in the classroom.

While the grant ends in 2013,

the project's team also continues to

sustainable.

look for ways to keep the program http://go.unl.edu/r66

Luthans' article among top 50 most cited

Luthans received a 2011 Emerald Management Citations of Excellence Award. Luthans' article, with former UNL Ph.D. student Carolyn Youssef, "Emerging positive organizational behavior (Journal of Management, 2007) was one of the top 50 articles with the most citations and impact among all business journals since its publication date.

http://go.unl.edu/d83

http://go.unl.edu/pn4

UNL professors Chris Calkins, Tiffany Heng-Moss and Carolyn Pope Edwards were selected among the 2012 winners of the University of Nebraska's most prestigious awards for research, teaching and

The universitywide awards

is a 2012 winner of the Innovation, Development and Engagement Award, a University of Nebraska systemwide honor that recognizes faculty members who have extended their academic expertise beyond the boundaries of the university in ways that have enriched the broad-

Heng-Moss, a professor in the http://go.unl.edu/u5a

Creativity Award. Edwards, a Willa Cather

Read more about the awards at









BIG POTENTIAL





UNL ties record with 9 student Fulbrights

UNL students who earned a Fulbright scholarship and where the award will take them are (clockwise, from top left): Lindsey Andersen, to Brazil to research the

role of grassroots human rights movements in the nation's transitional justice efforts; Kaylee Barber, to Germany to teach English; Stephanie Herzog, to Romania

to teach English and do educational advising at a university; Alanna Hoffman, to South Korea to teach English; Cara Morgenson, to Poland to teach English; Loni

Lincoln tied a campus record in the 2011-2012 academic year with nine students earning Fulbright

Scholarships to study abroad. The Fulbright Program, established in 1946 and funded by the U.S. Department of State, is designed to foster understanding between the United States and other countries. The U.S. Student Fulbright program gives recent graduates, graduate students and young professionals the opportunity to conduct research,

The University of Nebraska– tries that the program operates. About 8,000 grants are awarded annually, and about 1,600 of those grants are awarded to U.S. students.

UNL is boosting its efforts to help students compete successfully for these prestigious scholarships by identifying potential applicants early in their college careers and coaching candidates to enrich their academic

Laura Damuth, director of national and international fellowships for the University Honors Program, overstudy or teach in one of the 155 counsees all Fulbright applicants.

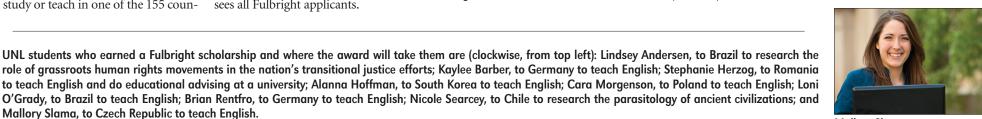
UNL among top producers of Fulbright scholars

UNL was ranked among the top 45 colleges and universities that produced the most U.S. Fulbright Scholars in 2011-2012. The research institutions list was announced by the Fulbright Program.

ative activities. The success of the top-produc-The news came on top of the September 2011 announcement ing institutions is highlighted in the that UNL was listed in U.S. News Oct. 24 edition of The Chronicle of and World Report as one of the Higher Education, at http://chrontop 28 institutions in the U.S. for icle.com/article/Fulbright-Pressesundergraduate research and cre-Forward-/129499/







Mallory Slama, to Czech Republic to teach English.

Honored students

■ Juan A. Colon Santana, an electrical engineering doctoral student, was recognized at the national level for research excellence. The American Vacuum Society awarded him the 2011 Falicov Prize for outstanding research performed by a graduate student in areas related to magnetic interfaces and nanostructures. http://go.unl.edu/x4e

■ Anastasia Czarnick, a fourth-year interior design student, was selected by the Angelo Donghia Foundation for a \$30,000 scholarship as one of 13 winners of its 2012 Student Scholarship Program in Interior Design. Czarnick is the fifth UNL student in the College of Architecture to have won the Donghia scholarship.

http://go.unl.edu/rej

■ Sarah Jo Lambert, a sophomore in the College of Journalism and Mass Communications, was one of 22 Americans selected to be a torchbearer for the summer Olympics in London. She was selected for her work on projects that affect local and international communities. http://go.unl.edu/z0c

■ Kelleen Browning, Raina Thomas McHale and Karina Pedroza were named Gilman Scholars. Each received scholarships up to \$5,000 to study abroad. Browning, a junior in the College of Education and Human Sciences, studied German in Berlin. Keel, a junior fisheries and wildlife major, participated in the International Studies Abroad Language, Culture and Economics program in Brazil. McHale studied community public health in Botswana. Pedroza participated in the International Studies Abroad Spanish, Business and Latin America Studies program in

Argentina and Peru. http://go.unl.edu/kri

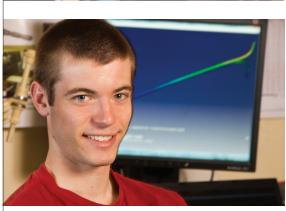
■ The Skyros String Quartet is the first graduate string quartet to be recruited by UNL. The quartet is Sarah Pizzichemi, violin, from Seattle, Wash.; James Moat, violin, from Toronto, Ontario; Justin Kurys, viola, from Timmins, Ontario; and William Braun, cello, from Tucson, Ariz. For their doctoral education, Skyros will study with the Chiara String Quartet. Skyros makes their Lincoln performance debut on Sept. 11 during the Chancellor's State of the University address.

http://go.unl.edu/ru4

Research Retention Reputation Recruitment









UNL set a record with four students being named Goldwater Scholars. Four is also the maximum attainable through the Goldwater program. Winners (clockwise from top left) are: Rachel Coburn, Elizabeth Spring Jaensch, Joseph Phillips and Jared Paul Ostdiek.

Four Goldwater Scholars named

petitive, national Goldwater Scholarships for their excellence in science. Because UNL is limited to four nominees in the competition, four winners is the maximum attainable — and a record number of scholarships for UNL in this annual competition.

Winners are: Rachel Coburn of Papillion, Elizabeth Spring Jaensch of Naperville, Ill., Jared Paul Ostdiek of Columbus and Joseph Phillips of Omaha. All are majoring in the biological sci-

The scholarships are awarded annually to future scientists, mathematicians and engineers. About 300 college sophomores and juniors receive the scholarship nationwide. The awards are for up to \$7,500 per year for educational expenses. UNL

UNL students (from left) Corbin Groothuis and Neal Larson work

with director of photography Craig Ladwig during filming of "Digs" outside the Nebraska Union in May. The film is the second in the

Carson School Film Series. Organized through the Johnny Carson

School of Theatre and Film, the series is a unique project that teams

film industry professionals with students, faculty and staff from two

colleges and Nebraska Educational Telecommunications to create a

25- to 30-minute short film. Read more at http://go.unl.edu/frh.

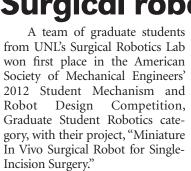
Lights, camera, action.

have received four Goldwater scholarships.

Both Coburn and Jaensch are biochemistry majors. Ostdiek is a biological systems engineering major. Phillips graduated with a degree in biological sciences and is studying toward a doctorate in ecology and evolutionary biology.

The Barry M. Goldwater Scholarship and Excellence in Education Program was established by Congress in 1986 to honor Goldwater, who served his country for 56 years as a soldier and statesman, including 30 years of service in the U.S. Senate. The Goldwater Foundation seeks students in mathematics or the sciences who display intellectual curiosity and intensity and possess potential for significant future contributions in

http://go.unl.edu/goldwater2012



Team members are Jack Mondry, Joseph Bartels, Thomas Frederick and Eric Markvicka.

years for a UNL team at the competition, following a team led by Chi Min Seow that won the 2010

Campus Compact promotes service learning, civic engagement

Twelve Nebraska colleges and universities are founding mem- by NCC is an AmeriCorps projbers of the new Nebraska Campus ect under which 36 students from Compact, an affiliate of a national organization that promotes service learning and civic engagement among college students.

Nebraska is the 36th state to affiliate with the national Campus Compact.

The first project undertaken the 12 institutions will work either in after-school projects for at-risk youth or participate in Volunteer Income Tax Assistance programs in local communities.

http://go.unl.edu/tg3

Music major earns Truman Scholarship On Nov. 21, Zachary Smith was

awarded a prestigious Marshall Each year, up to 40 Marshall

scholars are selected receive these scholarships, which allow winners spend two years at a British institution pursuing any area of study.

Smith, 20, will attend the School of Oriental and African Studies at the University of London.

A senior music and political science major from East Troy, Wis., Smith is not new to receiving scholarships. In May 2010, he received a Boren scholarship, which he used to travel to Jordan for six months to study Arabic language and international studies.

PNAS publishes senior's paper

Before collecting his undergraduate degree in May, Scott Bokemper scored an achievement that even tenured faculty would be proud to nab.

The political science major was among the co-authors of a paper examining the neural basis of egalitarian behavior published recently in the Proceedings of the National Academy of Sciences, one of the world's most prestigious scientific journals.

The major finding in the paper was that the insula, the part of the brain involved with instinctual processes, also is associated with egalitarian behavior.

http://go.unl.edu/pr7

Surgical robot team wins

A team of graduate students

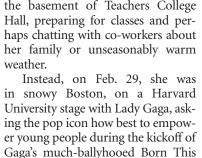
It was the second win in two gory, with their project, "Miniature graduate-level robotics division.

> Gerald Steinacher, assistant professor of history, received the 2011 National Jewish Book Award for "Nazis on the Run: How Hitler's Henchmen Fled Justice."

> > http://go.unl.edu/5ra Janos Zempleni, professor of

nutrition and health sciences and director of the Nebraska Gateway for Nutrigenomics, received the 2012 Outstanding Investigator Award from the American Society of Nutrition.

On a typical Wednesday, Susan Swearer would be in her office in the basement of Teachers College Hall, preparing for classes and perhaps chatting with co-workers about



Swearer helps launch Lady Gaga's Born This Way Foundation

Maybe not a typical day at the office, but for UNL's nationally Panelists featured in the Born this Way Foundation launch were (from renowned anti-bullying expert, it's left) Harvard's Drew Faust and Charles Ogletree; Alyssa Rodemeyer; starting to come with the territory. Kathleen Sebelius; Deepak Chopra; David Burtka; and UNL's Susan

Way Foundation.

Swearer, a professor of school psychology in the College of Education

Study led by Susan Swearer shows kids with behavior issues, disabilities are bullied more, bully others more

http://go.unl.edu/9uk

day. (Gaga's) platform is huge —

and Human Sciences, helped Gaga U.S. Secretary of Health and Human launch the new foundation — which Services Kathleen Sebelius. addresses issues like self-confidence, "It was, in many ways, a surreal well-being, anti-bullying, mentorday," Swearer said. "But it was a great

research, education and advocacy which is the attraction for me, for — by leading sessions at a morning linking academic research and findings to her voice, which has such far symposium at Harvard and then by participating on a select panel with

Gaga's representatives contacted Swearer, who co-directs the Bullying Research Network.

http://go.unl.edu/gaga

Research Retention Reputation Recruitment

Swearer. (Photo courtesy Rose Lincoln, Harvard)

Awards

Paul Barnes, professor of piano.

continued his collaboration with

American composer Philip Glass

with a March 31 performance of

"A Retrospective on Philip Glass at

75" in the Bruno Walter Auditorium

at Lincoln Center in New York City.

Robert D. Brown. professor

emeritus of educational psychol-

ogy, was awarded the American

College Personnel Association-

College Educators International's

2012 Lifetime Achievement Award.

Richie Graham, an associate

professor in the University Libraries,

was nominated for a Will Eisner

Comic Industry Award. He was nom-

inated for the 2012 awards for his

work on "Government Issue: Comics

for the People: 1940s-2000s" (2011,

Priscilla Grew, professor in

Earth and Atmospheric Sciences

and director of the State Museum,

has been designated a lifetime

National Associate of the National

Research Council of the National

Lesa Hoffman, an associ-

ate professor of psychology, won

the 2011 Cattell Award from the

Society of Multivariate Experimental

Psychology. The honor is awarded

annually to a young researcher who

has made outstanding contribu-

Shirpat Kamble, professor of

entomology, received the 2011

Recognition Award in Urban

Entomology from the Entomological

Foundation. The award is given for

outstanding extension, research

and teaching in urban entomology.

Kevin Lee, research associate

professor in physics and astron-

omy, received the 2012 David

Halliday and Robert Resnick Award

for Excellence in Undergraduate

Mathias Schubert, associate

professor of electrical engineering,

has been elected a fellow of the

American Physical Society. Election

to the fellowship is limited to no

more than one-half of 1 percent of

Ravi Sohi, associate dean of

graduate programs and research

in the College of Business

Administration, was awarded the

2012 Louis W. Stern Award by the

American Marketing Association.

the society's membership.

Physics Teaching.

tions to the field.

Abrams ComicArts).

http://go.unl.edu/akw

http://go.unl.edu/dek

http://go.unl.edu/idw

http://go.unl.edu/yg5

http://go.unl.edu/357

http://go.unl.edu/djx

http://go.unl.edu/6x9

http://go.unl.edu/uvm

http://go.unl.edu/yd0

Joseph "Andy" Anderson



rie Schooner, was named a Guggenheim Fellow. Dawes also received the 2011 Barnes & Noble Writers for Writers award, which recognizes writers who have given generously to other writers or to the broader literary community. Read more about the award at http://go.unl.edu/

Dawes named a Guggenheim Fellow

applicants.

his work on the poem cycle, "August: A Quintet," which is based on the work of August Wilson, an American playwright and Pulitzer Prize winner whose work illustrated the African-American experience

Dawes called the award a tremendous honor, adding that he's grateful to all the writers who wrote in support of his

"I have long regarded the Guggenheim Fellowship as a

Kwame Dawes, professor of English and the new editor of the Prai-

Luschei Editor of Prairie Schooner, received a John Simon Guggenheim Memorial Foundation Fellowship. He is among 181 scholars, artists and scientists in the United States and Canada who were selected for the honor from nearly 3,000 The fellowship will support

in the 20th century.

of English and Glenna and significance of the work of American artists and artists from around the world. I waited until I thought I had a fit project before applying, and I am glad I did," he said. Dawes joined the UNL fac-

ulty as a Chancellor's Professor

in 2011 and took the helm of the Prairie Schooner, UNL's quarterly literary magazine that for the past 85 years has published the fiction, poetry, essays and reviews of talented writers of all levels. He is the author of 16 poetry collections, three works of fiction, and several anthologies, produced plays, and books of literary criticism and aesthetics, not counting forthcoming works. His long list of accomplishments includes a 2009 Emmy Award for a multimedia documentary project on HIV/AIDS in Jamaica.

http://go.unl.edu/dawes

Award supports Jacobs' new book

Margaret Jacobs, Chancellor's American Indian children within Professor of History, has been non-Indian families. She intends to use her yearlong fel-

awarded a highly competitive fellowship from the American Council of Learned Societies. The fellowship will support her latest book project, which continues a line of research that in 2010 helped her win a top honor in her field.

Jacobs' latest project explores the history of the fostering and adoption of

lowship, which started Aug. 15, to write the book manuscript. The project will significantly contribute to studies of American Indian history, gender history, family history, studies of colonialism, and American and world history over-

http://go.unl.edu/0u9

win app-development challenge

Bartelt-Hunt uses CAREER award to study diseases

Shannon Bartelt-Hunt, assistant professor of civil engineering, is shedding light on the complex interaction between prions and soil. A five-year, \$413,883 Faculty Early Career Development Program award from the National Science Foundation supports this research. This is NSF's most prestigious award for outstanding pre-tenure faculty and supports their development as researchers and teacherscholars.

ing and career development through

Those "others" included Oprah

Winfrey, author Deepak Chopra,

TV personality David Burtka and

the singer and others.

Prion diseases — such as those that cause chronic wasting disease and bovine spongiform encephalopathy — are highly infectious and can spread to soil through blood, saliva, feces, urine and even antler velvet. Once in the soil, infectious prion proteins can persist and remain infectious for decades. Her CAREER project involves

testing how exposure to changing environmental conditions, includ-



ing heat and moisture, alters the protein over time. Bartelt-Hunt said her goal is to discover which factors may slow the prions' ability to replicate.

http://go.unl.edu/rgh

Harnisch helps teach teachers

an American view of education, cation in the College of Education teachers are in need of retooling and Human Sciences, will spend six their skills and approaches. A UNL faculty member who is skilled in helping established teachers learn the skill of "assessment literacy," will spend the first six months of 2012 in the Republic of Georgia, helping language teachers there to become better teachers.

Del Harnisch, a professor of

As nations worldwide embrace teaching, learning and teacher edumonths as a Fulbright Scholar at the University of George in Tbilisi. He is the second faculty member from UNL to travel to Georgia on a Fulbright grant; Miles Bryant also spent six months in the country in

http://go.unl.edu/efi

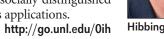
Image earns NSF award

Joel Brehm, graphic and web designer for research and economic development, earned an honorable mention award for this scientific illustration of variable diameter carbon nanotubes. The award came from the International Science and Engineering Challenge, sponsored by the National Science Foundation and the journal "Science." Brehm designed the illustration to help visualize research by Yongfeng Lu, Lott professor of electrical engineering, and his team. Read

Hibbing a AAAS fellow

Political scientist John Hibbing joined an elite group of scientists with his designation in December as a fellow in the American Association for the Advancement of Science — and the distinction of being one of just 15-20 political scientists among the ranks. Election as an AAAS Fellow is an honor bestowed upon AAAS members by their peers. Hibbing was one of 539 new members honored in 2011 for their scientifically or socially distinguished efforts to advance science or its applications.

more about the award at http://go.unl.edu/aeg.



Schleck wins Folger Fellowship

Julia Schleck, assistant professor of English and acting director of UNL's Medieval and Renaissance Studies Program, has been awarded a fellowship to pursue research next spring at a world-renowned research center on Shakespeare.

The Folger Shakespeare Library in Washington, D.C., has awarded a short-term fellowship to Schleck to pursue her latest book project, "The Genres of Early Capitalism." http://go.unl.edu/bo5





UNL spearheads \$25M E. coli research project

a \$25 million project to reduce throughout the beef production chain the occurrence of E. coli strains that pose a major threat to public

The U.S. Department of Agriculture's National Institute of Food and Agriculture announced the

The project targets Shiga-toxin producing E. coli, or STEC, which cause more than 265,000 illnesses in the United States annually. Eating contaminated food or having direct contact with fecal matter from infected cattle and other ruminants cause most of these illnesses.

UNL will lead a team of 48 scientists from 11 land-grant universities and other partner institutions to conduct integrated research, education

and extension projects on eight types of STEC. Studies will include the best-known STEC, E. coli O157:H7, along with seven strains that are not as well understood, partly because outbreaks due to these strains are rarely identified.

UNL and Kansas State University - with 32 scientists — will conduct most of the research, education and extension work for this project.

"This research has enormous ramifications here in Nebraska and across the nation," said UNI

Chancellor Harvey Perlman, "Beef is big business in the state, and the industry prides itself on delivering a safe product to consumers. This project will help ensure the safety of beef products, through the research conducted at participating institutions, the transfer of this knowledge to collaborators in the beef industry and educational programs for con-

The \$25 million grant is the largest-ever USDA grant to UNL and one of the single largest grants it has

Jim Keen, a UNL veterinary scientist, is leading the project.

Keen said the first goal is to develop diagnostic techniques to determine the presence of STEC in cattle,

http://go.unl.edu/zo6

NSF award fuels Hong's nanoscience study

award for outstanding pre-tenure

faculty to help them develop as

bine two oxides to create a multifer-

With her award, Hong will com-

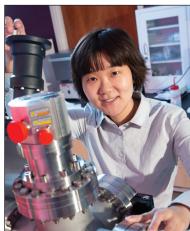
teacher-scholars and researchers.

The key to making computers and other electronics smaller, faster and less expensive lies in overcoming the limitations of existing materials. Xia Hong believes her research on nanoscale materials will help break through current barriers.

Hong, assistant professor of physics and astronomy and a researcher in UNL's Materials Research Science and Engineering Center, earned a five-year, \$600,000 Faculty Early Career Development Program Award from the National Science Foundation to continue her research. Also known as a CAREER award, it is NSF's most prestigious

ric nanomaterial with both magnetic and ferroelectric properties. Ferroelectric materials have positive and negative polarization directions. Applying electricity can reverse the polarization. In a multiferric material, electricity also can control mag-

research promises to advance the understanding of magnetoelectric coupling and could lead to novel materials and devices.



USDA grant funds agriculture policy research

All consumers are not the same. Neither are all agricultural producers. Yet ag policy analysis typically has assumed they are, which can result in ineffective or inefficient policies. UNL is leading a new research effort to change that approach.

UNL received a two-year \$766,166 grant from the U.S. Department of Agriculture to establish a new policy research group within its Center for Agricultural and Food Industrial Organization.

Traditionally, policy studies have imagined a "representative consumer" or "representative producer" in analyzing ag policy, said Konstantinos Giannakas, UNL agri-

cultural economics professor who will lead this research. However, there's really no such thing. Consumers respond to food policies in very different ways, driven by preferences, income and other factors. Producers'

Partnership brings opportunity

UNL's partnership with UNESCO-IHE brings international agriculture and water study opportunities http://go.unl.edu/2jx

responses to ag policies vary, too, depending on factors. The research will build on work Giannakas and colleagues have been doing for a decade. Once developed, this new framework will be used to analyze important

The research, which also will use behavioral and experimental economic methods in policy analysis and design, will involve about 11 faculty as well as graduate and post-doctoral students.

NATURAL

DISCOVERIES

Titanoboa is prehistoric snake discovered in Colombia

by a research team that includes

UNL's Jason Head. Estimated

to have measured 49 feet long

and weighed 2,500 pounds

Longer than a modern school

bus, Titanoboa was featured

in a 90-minute, Smithsonian

SHRINKING HORSES

Sifrhippus, the earliest known

horse, weighed in at around 12

pounds when it pranced around

the forests of North America

more than 50 million years ago.

Research assisted by UNL's Ross

Secord discovered that the min-

iature horse got even smaller

down to about 8.5 pounds, the

size of a small house cat - as

temperatures rose some 56 mil-

http://go.unl.edu/3nt

http://go.unl.edu/9ib

Channel special.

GIANT SNAKE

(BIG, SMALL AND LONG)

http://go.unl.edu/dm0



UNL's Alexandra Trout pictured on the Boys Town campus with Boys Town researchers (from left) Patrick Tyler, McLain Stewart and Ronald Thompson.

\$3.5 million grant to assist special needs teens, parents

Study eyes worker dignity at Foxconn, Apple plants

Teenage kids "kind of get lost help special-needs teenagers and in the system." They're almost adults, and not really needing to and school. be protected like babies or young children — or so it may seem.

Special education researcher Alexandra Trout of UNL disagrees with this conventional attitude and wants to take a fledgling program nationwide. A \$3.5 million grant from the Department of Education's Institute for Education Sciences will help her and a team of researchers, educators and family service workers from UNL, Boys port. Town, and surrounding Lincoln and Omaha agencies intervene to

A study led by Kristen Lucas, an

assistant professor of communica-

tions studies, outlined ways in which

the Taiwanese company whose

huge Chinese factories assemble

the Foxconn Technology Group

their parents be successful at home

Trout's program, "On the Way Home," is family-centered academic aftercare services targeted to older children served in out-of-

The new grant will prove the efficacy of the On the Way Home program and replicate its model for other agencies. The program includes dropout prevention, parent training and homework sup-

the world's most popular consumer

electronics - can safeguard employ-

Journal of Business Ethics.

The study appeared in the

http://go.unl.edu/84o

ees' dignity.

http://go.unl.edu/syn

Nathan Muchhala led a

SUPER TONGUE

lion years ago.

research team that discovered Anoura fistulata, a bat that gained worldwide notoriety for an ability to snap its tongue out one and a half times its own body length. The bat was featured in the National Geographic Channel show "Untamed Americas."

http://go.unl.edu/fgu

Project creates new form of matter hat do you get when you take buckyballs, soak smashed them, they lost their cage-like structure,

them in a particular solvent and crush them as expected. What wasn't expected was what they under the pressure of more than 300,000 turned into. The obvious answer is a bunch of crushed bucky-

esearch Retention Reputation Recruitment

the right solvent at the right pressure, they created a new form of matter that they termed an "ordered amorphous carbon cluster." It's so hard it can dent diamonds, the hardest known substance. Like diamonds, buckyballs (technically buckmin-

sterfullerenes) are made of carbon. They're a wellordered, cage-like structures of 60 carbon atoms that look remarkably like soccer balls. When the scientists

"It's a new form of matter not seen before," said Zeng, Ameritas University Professor of Chemistry at

Xiao Cheng Zeng (right) and postdoctoral researcher Hui Li with their computer-generated images of the creation of "ordered amorphous carbon clusters."

Zeng dents diamonds, crafts nanotubes, earns award

balls. But a team of scientists that included UNL "The buckyballs originally are ordered, but if chemist Xiao Cheng Zeng has found that by using we crush them, it's an ordered amorphous carbon cluster. They become a mess, but they are still in a "And it turns out this new form of matter is super

hard. It can indent diamonds."

The discovery was announced in a paper published in the Aug. 16 issue of the international journal

What is a buckyball?

Buckyballs are carbon molecules arranged in a sphere shape with geometric patterns that resemble a soccer ball. Also know as fullerenes, buckyballs come in all shapes and sizes meaning the number of carbon atoms in each one can vary. Some are so large that other atoms can get trapped inside of them. Buckyballs are also resistant to damage from high speed collisions.

An international team of scientists, including

UNL chemist Xiao Cheng Zeng, has created what

is in effect a nanoscale sieve that is very selective in

what it will allow to pass through — and performs

in much the same way as the potassium ion channels

that are vital components of virtually all living cells.

a uniform diameter, as well as being self-assembling

and hydrophobic, characteristics that could lead to

of many rings. The rings come together through a

industrial and medical breakthroughs.

It's also the first synthetic nanotube that possesses

International team builds nanotube that mimics cell function

Zeng's group determined the size of the rings and the distance between them to find the structure of the devices, and found eight possible ways to stack the molecules. Crucially, computations also showed that the structures are stable at room temperature.

American Chemical

Society honors Zeng

Xiao Cheng Zeng, Ameritas

Distinguished University

Professor of chemistry, has been

named the 2011 recipient of

the Midwest Award from the

American Chemical Society's St.

Louis section. The honor, given

annually, recognizes a scientist

who has made "meritorious con-

tributions to the advancement

of pure or applied chemistry,

chemical education, and the

Zeng is internationally

known for his computational

studies of new phases of ice,

gold, and silicon clusters, and

nanostructured materials. He is

the fourth chemist from UNL to

profession of chemistry."

The success of the experiments, Zeng said, will lead to continuing research and development.

"One thing people are interested in in this field is desalination. Another is drug delivery," he said. "In Zeng said the nanotube can be viewed as a stack the future, our direction, also supported by NSF, is to functionalize the inner wall of the tube."

http://go.unl.edu/nanotubes

Nebraska Latino study is breaking new ground

stand what factors predict Latino youth adjustment by launching a large-scale study of Latino youth in Nebraska.

The goal is to understand the experiences of Latino youth in the state, their strengths and challenges, and the family and community supports that help them succeed. Latinos are the fastest growing ethnic group in Nebraska and the United

"We know relatively little about Latino youth in the U.S., because few studies have focused on them," said lead investigator Lisa Crockett, professor of psychology at UNL. "What we do know about Latino youth is based on youth in

A project to explore using

drones to do reporting got a boost

when UNL's drone journalism

lab received a \$50,000 prototype

grant from the John S. and James L.

tice in the College of Journalism and

Mass Communications, leads the

project. Waite and three undergrad-

uate student assistants will study

unmanned vehicles, or drones, as

potential tools for news and pub-

lic data collection. The university

will conduct live experiments and

research the ethical and legal issues

of drone usage in the civilian sector.

UNL's Drone Journalism Lab

Matt Waite, a professor of prac-

Knight Foundation in June.

Knight Foundation grant

supports drone journalism

research has been conducted. As a result, we know very little about the lives of Latino teenagers in other parts of the country and almost nothing about Latino youth in Nebraska.

"We think the situation for Latino youth in the Midwest is unique. Ours is the first study to focus on these youth.

Crockett said the study, funded by the National Science Foundation, will involve structured interviews with 250 families, starting in Lincoln and then moving into other areas of the state. Schools and community agencies will be contacted to help identify and contact potential research subjects.

The project focuses on ecological and personal

Prior research with Latinos in other parts of the country suggests that family and community characteristics influence developmental outcomes in Latino youth. Those outcomes are also affected by personal characteristics and experiences such as stress and discrimination, a sense of closeness to one's ethnic group, and coping skills.

The research team also includes Maria de Guzman, associate professor of child, youth and family studies and an UNL Extension specialist. The team will analyze the data from all par-

ticipating families, then disseminate the research findings locally and nationally. http://go.unl.edu/gwm

Transportation grant extends highway, rail safety research

U.S. Department of Transportation grant promoting highway and railway safety. The award enables UNL to continue hosting the Mid-America Transportation Center, a four-state regional center researching various elements of transportation safety.

Since 2006, UNL has hosted the Mid-America Transportation Center for transportation research in collaboration with universities and state transportation agencies in Nebraska, Iowa, Missouri and Kansas. The Transportation Department's \$3.5 million grant means UNL will continue hosting





research on such issues as the use of high-performance concrete, truck safety improvements at railroad crossings, and a variety of construction materials for roads and rails. http://go.unl.edu/mxi

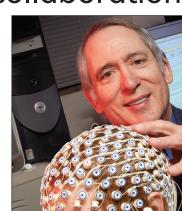


Molfese assists Big Ten, Ivy League collaboration

The Big Ten Conference and the Ivy League, in conjunction with the Committee on Institutional Cooperation, will engage in a cross-institutional research collaboration to study the effects of head injuries in sports, continuing efforts dating back more than two vears. UNL's Dennis Molfese is the Big Ten/CIC research collaboration director and will work on the

This historic collaboration brings together two prestigious academic and athletic entities, and allows for the coordination of ongoing efforts by each conference to research and address various aspects of head injuries in athletics, including concussions. The world-class academic and research capabilities of the institutions will help to promote a collaborative and collegial atmosphere to address a burgeoning issue affecting the welfare of athletes at all levels of sport. In May 2010, the Big Ten

became the first collegiate conference to establish a conferencewide concussion management plan. In 2011 the Ivy League devel-



UNL's Dennis Molfese is helping to build a world-class center focused on studying the brain. Read more at http://go.unl.edu/98k

oped and enacted a series of concussion-curbing measures in the sport of football after a year-long review. Since September 2011, the two conferences have examined the feasibility and benefits of collaboration, while outlining the framework and objectives associated with the initiative.

Research powers brain injury diagnostic device

A handheld tool is under development to diagnose traumatic brain injury on the spot using technology developed by a UNL chemist. Such a device could yield critical and in some cases life-saving information to guide triage decisions from the battlefield to the football

SFC Fluidics, a Fayetteville, Ark.based biotechnology company, recently entered into a license agreement with UNL's nonprofit affiliate, NUtech Ventures, to use technology developed by David Hage, professor of chemistry. Hage, a biognalytical

chemist, develops methods to separate and measure specific compounds in complex fluids, and in some cases to do so quite rapidly. In applications seeking to assess the severity of a traumatic brain injury, his methods can measure

specific proteins in blood serum that are released by the brain. In other words, the severity of brain injury can be diagnosed with a simple blood test.

http://go.unl.edu/xpe



chael Forsberg is using cameras to capture the ebb and flow of the Platte River Basin, showcasing how natural and manmade events change it over time. The cameras, positioned from the river basin's beginning in the Rocky Mountains in Wyoming and Colorado, to its run across Nebraska to the Missouri River, capture a single photo an hour in every daylight hour of every day. The project grew from an NET documentary on Forsberg's book "Great Plains: America's Lingering Wild." Read more at http://go.unl.edu/aq3.

Scientists discover drought memory helps plants survive

Plants subjected to a previous period of drought learn to deal with the stress thanks to their memories of the previous experience, UNL research has found. The findings could lead to development of crops better able to withstand drought. The research also confirms,

for the first time, the scientific basis for what home gardeners and nursery professionals have

NSF grant to guide irrigation management tool to market http://go.unl.edu/m8i

learned, often through hard experience: Transplants do better when water is withheld for a few days to drought harden them before the

http://go.unl.edu/89f

UNL joins forces with private sector to further polling, survey research

As society becomes more the next generation of survey tools. dependent on polling and survey data, the need to ensure accuracy and reduce errors becomes more

A \$2.97 million grant from the National Science Foundation to a team at UNL will be used to find ways to reduce survey error and look at ways to integrate technologies like the Internet and computer-assisted telephone surveys into

A UNL research team led by Allan McCutcheon, professor of statistics and survey research and methodology, will partner on this research with two private firms, Gallup and Abt SRBI.

The grant aims to try to find more cost-effective and accurate ways to conduct the decennial U.S. Census, McCutcheon said.

http://go.unl.edu/8i7

Research and **Creative Activity**

Stephen DiMagno, professor

of chemistry, and his entrepreneur ial team were among the inaugural recipients of the National Science Foundation's Innovation Corps Awards. DiMagno used the \$50,000 award to assess if his method for producing imaging agents for staging and managing certain cancers, includ ing pediatric cancers, cardiac disease as well as various neurological disorders, like Alzheimer's disease and Parkinson's disease, can be brought to the marketplace.

http://go.unl.edu/9sr

Peter Harms, assistant professor of management, co-authored a first of-its-kind study that suggested one on-one mentorships are more potent in developing strong leaders than formal group training. However, to be effective, the mentorship was effective only if protégés fully trusted their mentor and were willing to handle blunt criticism, not just empty praise. http://go.unl.edu/qsg

Julia McQuillan, professor of sociology, co-authored a study that showed the classic figure of a distant career-focussed father who has little time for his kids might be getting out dated. The study found 75 percent of U.S. men rated being a good father as very important. Just 48 percent said the same about having a successful

http://go.unl.edu/4se

Timothy Nelson, assistant professor of psychology, was lead author of a study that found that physical ailments are often an overlooked factor in why youth end up in residential treatment centers such as Boys Town. Working in collaboration with Boys Town, Nelson found that more than a third of youths admitted to Boys Town in the last 10 years had physical maladies. The study was published in the journal Pediatrics.

http://go.unl.edu/xey

Brian Pytlik Zillig, associate professor and digital initiatives librarian is principal investigator of a \$183,000 grant from the Andrew W. Mellon Foundation to fund completion of Abbot, a software project designed to improve the ability of humanities researchers to use the growing number of digital archives and other digital projects. Project partners include UNL's Stephen Ramsay, associate professor of English.

http://go.unl.edu/o8t

Petronela Radu, assistant professor of mathematics, was awarded a Fulbright Scholar grant to teach and conduct research at Trinity College in Ireland, Radu will work alongside Trinity College's Paschalis Karageorgis, an expert in the field of nonlinear wave equations. Together, they will examine two areas of high interest in hyperbolic differential equations: instability and existence

and uniqueness of solutions. http://go.unl.edu/hbw

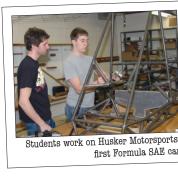
Karl Reinhard, professor of forensic sciences, was lead author of a study that examined fossilized feces from the American Southwest to see just what ancient Native Americans ate. The data, published in the journal Current Anthropology, found that the diet of ancient Natives may have made modern Natives more susceptible to diabetes as diets evolved to lower-fiber, higher glycemic index foods. http://go.unl.edu/odo

Kevin Smith and John Hibbing professors of political science, pub lished a study that found the amount of disgust you feel when looking at gross images may lend insight into personal political beliefs.

http://go.unl.edu/tpw

Greg Snow and UNL's experimental high-energy physics team continues to work with physicists at CERN's atom smashing Large Hadron Collider On July 4, it was announced that the a new particle whose characteristics match the long-theorized Higgs boson particle had been observed.

http://go.unl.edu/aa9











was established in November as part

of a broad digital journalism and

http://go.unl.edu/esb













Speech team wins UNL's first Big Ten title

The UNL speech and debate team became the first Nebraska team to win a Big Ten title with its victory at the Conference Challenge Tournament, Oct. 8-9 at Northwestern University in Evanston, Ill.

UNL led the field with a two-day point total of 261 points, ahead of tournament host and second-place finisher Northwestern at 138 points.

In their first Big Ten season, the Nebraska Cornhuskers earned conference championships in women's gymnastics, women's indoor track and field and volleyball. Read more about the Huskers' exploits at www.huskers.com.

In addition to the team championship in a conference that has a long tradition of academic excellence and excellence in speech and debate, UNL students captured seven individual Big Ten titles. Senior Nick Herink

of Omaha won conference championships in prose interpretation, dramatic interpretation, and duo interpretation with partner sophomore Grace Kluck of Lincoln.

Other students winning conference cham-

pionships included senior Jimmy Simpson Jr. of Lyons in persuasive speaking, senior Eli Barts of Bellevue in informative speaking, junior Lauren Schaal of Omaha in afterdinner speaking and sophomore Josh Planos of Omaha in program oral interpretation.

The team is part of UNL's Department of Communication Studies in the College of Arts and Sciences.

'Biology of Human' education project earns NIH grant

Recent biomedical research has transformed scientific understanding of human biology. But many of these advances haven't filtered into public awareness, hindering our ability to make the best healthrelated decisions.

A new educational program — Biology of Human — will help the public, particularly young people, better understand advances in biomedical research. University of Nebraska State Museum, the Nebraska Center for Virology and UNL sociologists are teaming with children, science writers and multimedia developers to create educational materials for use nationwide. The project is funded by a five-year, \$1.3 million grant from the National Institutes of Health's Science Education Partnership Award program.

http://go.unl.edu/jqp

CIC awards **Smithsonian** Fellowship to **Pesendorfer**

Mario Pesendorfer, a doctoral candidate in the School of



Pesendorfer

Biological Sciences, has been awarded a Smithsonian Institution Fellowship through the Big Ten Conference's Committee on Institutional Cooperation.

The CIC nominates scholars from each member school to compete for one of six Smithsonian predoctoral fellowships.

The CIC/Smithsonian fellowship will allow Pesendorfer to work with Scott Sillett at the Smithsonian Conservation Biology Institute in Washington, D.C.

Research Retention Reputation Recruitment



Greg Brown, chief preparator in the University of Nebraska State Museum's division of vertebrate paleontology, prepares fossils of an Ashfall Fossil Beds rhino. The museum and Henry Doorly Zoo worked together to create an interactive Ashfall dig site at the zoo. The exhibit opened in May.

NU Museum, Omaha zoo collaborate on dig project

collaboration allowed Greg Brown to pass his love for paleontology — and the Ashfall State Fossil Beds — on to younger genera-

The University of Nebraska State Museum and Omaha Henry Doorly Zoo worked together to create an Ashfall-inspired dig site at the zoo. The exhibit opened in May.

"What we're planning on doing at the zoo is installing several of the baby (rhinoceros fossils) in an area that they want to turn into a dig site," said Brown. "It will be mostly for kids, to sort of experience the excitement of excavating a fossil."

Brown, chief preparator in the museum's division of vertebrate paleontology, created several plastic animal casts for the zoo dig site. The work included three adult rhinos, two baby rhinos and a horse. All of the casts are exact replicas of fosMore new Ashfall digs

Research has expanded at Ashfall with the opening of the Dickinson Fossil Heritage Center http://go.unl.edu/c3q

sils unearthed at Ashfall, a research arm of the museum and a national natural landmark located near Royal, Neb.

The dig site collaboration was initiated by Tim Hubbard, a prominent Ashfall and Omaha zoo

"We had been looking at possibilities for showcasing Ashfall at various venues across Nebraska for a few years," said Mark Harris, associate director of the museum. "But when the prospect of collaborating with the Omaha zoo came up in early 2011, it trumped all other concepts."

http://go.unl.edu/ashfall_dig

Team's discovery has implications for finding life on Mars

Moqui marbles, unusual balls of rock that can be found rolling around the southwestern U.S. sandstone regions, were formed roughly 2 million years ago with the help of microorganisms. This discovery by a UNL research team has implications for finding life on Mars and for better understanding Earth's past.

The research by Karrie Weber, assistant professor of geomicrobiology and microbial biogeochemistry, and her colleagues is featured on the cover of the August issue of Geology, the journal of the Geological Society of America.

Moqui marbles, which range in size from BBs to cannonballs, weather out of sandstone and have a hard, round shell made of iron oxide, or rust, and a soft, sandy interior. Previous theories of their formation had suggested a chemical



reaction devoid of life, but Weber's team discovered

clear evidence that microorganisms played a role. 'We found iron oxide is associated with these organic carbon structures

that resemble microorganisms," Weber said. "So all of the information put together tells us that microbial life was present, active and played a role in iron biomineralization."

The discovery demonstrates that life could persist in this type of rocky, iron-rich environment. It provides a guide for searching for life elsewhere on Earth, or even on Mars, where similar structures have been found.

Weber's team included David Loope and Richard Kettler in UNL's Department of Earth and Atmospheric Sciences, research assistant Trisha Spanbauer, and Matthew Kilburn and David Wacey at the University of Western Australia.

http://go.unl.edu/w8z

Explore Center ready to assist students undecided on major

A new center within Academic Affairs has been created to assist undergraduate and pre-professional students who have not selected a major area of study.

The center, called the Exploratory and Pre-Professional Advising Center, replaces the Division of General Studies. The Explore Center features six advisers to assist students and is led by Katie Kerr, assistant director. Further oversight is provided by Bill Watts, director of campus advising services and the College of Arts and Sciences' assistant dean for student

The Explore Center combines advising assistance for undecided undergraduates (formerly part of General Studies) and pre-law and pre-health students (formerly part

Setting a new course

Academic Affairs saw a number of changes as it realigned to pursue UNL's new goals. Read about Academic Affairs' realignment at http://go.unl.edu/2zd and http:// go.unl.edu/xmv. Information on changes to International Affairs is available at http://go.unl.edu/zw8.

of the Arts and Sciences advising center). The center advisers also assist students transitioning to new majors.

"We want students to know that, if they are undecided on a major, UNL has a place for them to go to explore their academic options," said Kerr.

http://explorecenter.unl.edu

India indepth

Photojournalism students in the College of Journalism and Mass Communications traveled to India in May as part of a depth-reporting trip. The students traveled to large cities, slums and villages in India, recording the trip through photos, stories and video. The photo above was taken by Morgan Spiehs and shows Muskan Salim and his classmates singing in a slum school in Nangloi, New Delhi, India. The trip was led by professors Bruce Thorson and Scott Winter. For more information, go to http://go.unl.edu/indiareportage.



Darryl White plays at Jazz in June



Zipcar comes to UNL

Nebraska Innovation Campus



Historic IAB to get life, facelift

Planners Nebraska Innovation Campus unveiled a new look and usage plan for the Industrial Arts Building, a historic structure at the former Nebraska State Fair Park. A design concept approved by the Nebraska Innovation Campus Development Corp. maintains the historic footprint and external facade of the 99-year-old building while enabling advanced greenhouse space to be developed on the second floor.

The concept for the renovated IAB involves a first floor to be used for greenhouse mechanical space, high bay research space needs and other functions. The second floor will house state-of-the-art greenhouse space, greenhouse support space and approximately 4,000 square feet of office space.

http://go.unl.edu/8d8



Nebraska app launched

UNL has launched the Nebraska App, a suite of mobile applications that makes essential university resources available on mobile devices. Students can check grades, access course content and browse the course catalog. Users can access the public directory and get in touch instantly, keep tabs on Husker sports, find places on the campus map, stay informed with the latest campus news, watch videos, and even listen to podcasts of popular lectures in iTunesU.

http://go.unl.edu/uje

Foundation collects record \$172.1M

Alumni and friends of the University of Nebraska demonstrated their generosity in 2011 by giving the most private support in history.

Donors gave more than \$172.1 million to the University of Nebraska Foundation during the fiscal year ending June 30, making it the best year ever in its 75-year history. More than \$130.2 million was transferred to



and CEO of the NU Foundation. Read more at http://go.unl.edu/ ewv.

the university system during the same period, also representing a record.

This is the sixth consecutive year annual gifts to the foundation exceeded \$100 million. The previous best year was 2008 when \$166.5 million was given.





