The amazing people of IANR
Retirements -- Staff and Faculty

Timothy Arkebauer
Joel Barnett
Douglas Bauer
Diane Brown
Douglas Carlson
Glenda Fells
Michael Finley
Charles (Chuck) Francis
Judy Fredrick
Steven Garrison
Bethleen Hagemeyer
Ronald Herbek
Ronald Hoagland
Connie Imler
Leslie Howard
Karen Jackson
William Robert Jonas
Leslie Kambell
Marjorie Kostelnik
Karma Larsen
Mary Loftis
Gerald Lokie
Bryan Ludemann
Betty McCutchan
Leo Thomas McFarland
Duane Mischnick
Jeffrey Noel
David Ostdiek
Cheryl Pflueger
Cindy Porter
Janaki Rajagopal
Sheri Ramirez
Charles Rezac
John Rieckman
Diane Schroeder
Linda Sue Scott
Constance Scott
Roddy Spangler
Robert Stetson
Susan Svoboda
Kathryn Wally
Patricia Wemhoff
RoNelle Woodward
Tenure and Promotion

Judy Wu-Smart
Melanie Downs
Philip Johnson
John Benson
Renee McFee

Brian Vander Ley
Elizabeth VanWormer
Reka Howard
Yuzhen Zhou
Surin Kim
Tenure and Promotion

Michelle Krehbiel  Matthew Stockton  Keenan Amundsen  James Schnable  Kim Todd

Karla Wilke  Jeffrey Bradshaw  Dustin Loy  Matthew Wiebe  Bradley Schick
Tenure and Promotion

Katherine Krause
Kathryn Pekarek
Leah Sandall
Meghan Sindelar
Matthew Douglass
Manuel Roberto Cortinas
Brian Fuchs
New Faculty Colleagues

Joao Carlos Gomes Neto
Becky Haddad
Christine Haney
Jingjie Hao
Melanie Hess
Brandi Hilton-Hagemann
Sheila Hoppe
Yihi Huang
Hayley Jackson
Caitlyn Jacobson
New Faculty Colleagues

Blaine Johnson  Ingrid Lindal Chavarria  Marianne Lorensen  Dylan Mangel  Jessie Morrill

Jill Motschenbacher  Laura Nagengast  Bruno Patias Lena  Wayde Pickinpaugh  Luis Gerardo Posadas Martinez
New Faculty Colleagues

Peter ReVelle
Randall Ritzema
Xueheng Shi
Kimberly Stanke

Emily Stine
Saleh Taghvaeian
Lindsay Waechter-Mead
Melissa Westbrook
New Leadership Appointments

- Jentry Barrett
- Lisa Karr
- John Porter
- Amy Topp
- Jerry Volesky
- John Westra
- Mary Emery
ARD Dean

Search Advisory Committee
Tiffany Heng-Moss
Ed Cahoon
Don Becker
Andrea Cupp
Stephen Wegulo
Nic Brozovic
Amanda Ramer-Tait
Yufeng Ge
Dipti Dev
Jessica Corman
Jayne Stratton
Gabi Carmona
Kelly Brunkhorst
Mark Boggess
Lisa Lunz
Jennifer Nelson

Derek McLean
Department Head Updates

Larry Van Tassell
Agricultural Economics
Two on-campus visits this week and next

David Jones
Biological Systems Engineering
National search underway

Clint Krehbiel
Animal Science
National search in JAN 2023 – Internal interim will be named
Congratulations!
Kim Todd
IANR in the news
Like most extraordinary ideas, the Feedlot Innovation Center at Eastern Nebraska Research Extension and Education Center (ENREEC) near Mead, Nebraska, began with a vision. For Galen Erickson, PhD, that vision spurred from a desire to modernize the current feedlot research facilities.

Erickson has acute insight into the needs of the feedlot research facility because he supervises employees, facilitates faculty research and procures funds for research projects at the current feedlot. As University of Nebraska-Lincoln (UNL) feedyard extension specialist, he also teaches undergraduate and graduate classes about feedlot operations and facilities management.

Gov. Pete Ricketts on April 4 signed a mid-biennium budget package for the state that makes investments in key priorities of the University of Nebraska System, including the University of Nebraska–Lincoln’s agricultural innovation facility.

The budget package includes $25 million for the agricultural innovation facility, which will serve as a companion to the United States Department of Agriculture’s proposed National Center for Precision, Resilient and Regenerative Agriculture. Both facilities are being planned for construction on Nebraska Innovation Campus.
NASA Satellite Tech to Help Farmers

NASA Continues to Expand Space Missions Designed to Study Earth, Help Farmers

8/23/2022 | 2:10 PM CDT

By Todd Neeley, DTN Staff Reporter

Connect with Todd:
@toddneeleyDTN

LINCOLN, Neb. (DTN) -- When you think of NASA, your mental images likely are of lunar landings, space shuttle launches and rovers on Mars. A little-known fact, however, is that NASA plays a significant role in studying Earth through satellite technology and helping develop technology to give farmers better tools.

Speaking during the Heuermann lecture, "Space for Ag: NASA Satellites and Science to Support Food and Water Security" at the University of Nebraska-Lincoln on Monday, Karen St. Germain, director of NASA's earth sciences division, said NASA currently has about 25 satellite and/or space missions taking pictures of Earth and measuring precipitation in the atmosphere and soil moisture.

NASA is in the process of developing about 10 more missions centered on various aspects of information collection on Earth, she said.

"So, one of the things we want to do is make sure that we're building the most impactful systems for the future so..."
Robots and artificial intelligence bring Nebraska $25 million
Build Back Better initiative funds Heartland Robotics Cluster

Nebraska MEP to start up new automation demonstration and training facility

by Jon Wilson

Lincoln, Neb. — To further bolster the state’s manufacturing companies, the Nebraska Manufacturing Extension Partnership is creating a robotics demonstration facility and training curriculum for manufacturers across the state.
Ricketts signs state budget into law, UNL receives $25 million for ag facility

Congress appropriates $20 million for National ARS Center, planning begins

Regents approve $7.5 million for IANR Feedlot Innovation Center
Groundbreaking Set for November 4th

USDA awards $960K for UNL-led ag data cooperative
• USDA scientists have conducted cooperative plant and soil science research with the University of Nebraska-Lincoln (UNL) for more than 120 years.

• ARS-Lincoln is co-located on UNL East Campus

• Two Research Units in Lincoln, ~65 employees:
  • Wheat, Sorghum and Forage Research Unit
  • Agroecosystems Management Research Unit
Agroecosystem Management Research Unit

➢ Virginia Jin, Research Leader & Location Coordinator
➢ 3 Research Projects with 9 scientists (1 Vacancy)
  **Entomology** – Jerry Zhu, Vacancy
  **Manure** – Dan Miller, Lisa Durso, John Gilley
  **Soils** – Marty Schmer, Virginia Jin, Girma Birru, Ariel Freidenreich
Wheat, Sorghum, & Forage Research Unit
➢ Scott Sattler, Research Leader
➢ 3 Research Projects with 8 scientists

Wheat – Satyanarayana (TS) Tatineni, Jeff Boehm, Xiwen Cai
Sorghum – Scott Sattler, Deanna Funnell-Harris
Forage & Biomass – Rob Mitchell, Gautam Sarath, Serge Edme
Two Proposed New Research Units with 19 New Scientists (SYs)

➢ AMRU – 1 new scientist
   ➢ Agronomist

➢ WSFRU – 3 new scientists
   ➢ Forage Geneticist, Bioinformatics Biologist, Wheat & Barley Pests

➢ Water, Climate, & Resilience Research Unit – 5 new SYs
   ➢ Hydrologist, Soil Ecologist, Micrometeorologist, Landscape Ecologist, & Research Social Scientist

➢ Precision Production Research Unit – 10 new SYs
   ➢ Ag Engineer, Precision Animal Management, Plant Physiologist, Digital Rangeland Ecologist, Entomologist, Computational Biologists/Ag Engineer, Agronomist, Precision Irrigation Specialist, Soil Physicist, & Economist
Strategically Located to Optimize Agricultural Impact
Proposed National Center for Resilient and Regenerative Precision Agriculture

➢ $31.2 million appropriated to date
➢ Two facilities on Nebraska Innovation Campus
  ➢ 120,000 square feet of Lab and Office Building
    – 4 story building
  ➢ ~25,000 square feet of headhouse (10k) & greenhouse (15k)
Status of USDA-ARS NCRRPA

- Functional Statement: Completed
- Planning Phase: in process
- Designed to be certified as LEED Silver for sustainability
- Final design by September 2023
  - GH/HH—Planned construction in 2024
**LB 384 Projects** (first round of projects through 2025)

**Greater Nebraska**
- Great Plains Veterinary Education Center (GPVEC) in Clay Center
- Elliot Building at Panhandle Research and Extension Center (PHREC) in Scottsbluff
- West Central Research and Extension Center (WCREC) in North Platte

**East Campus**
- Ag Hall
- Human Sciences Building
- Chase Hall
- Food Industries Complex
- Vet Med and Biomedical Sciences Hall

*These projects include roof replacement, HVAC upgrades, fire sprinkler system upgrades and more. Total investment of more than **$13.2 million** in Greater Nebraska and **$9.7 million** on East Campus.*
IANR deans’ updates
Strategic Priorities

Aligned with IANR’s Strategic Plan, N2025, and NU 5-Year Strategy

• The Power of Every Person: https://casnr.unl.edu/diversity-inclusion

• Student Success:
  ▪ Student Success Framework: https://casnr.unl.edu/student-success-strategic-framework
  ▪ Focus on increasing degree completion and closing the equity gap
  ▪ College-wide engagement and prioritizing retention and graduation outcomes

• Holistic Student Development:
  ▪ Transformative Educational Experience
  ▪ Health and Wellbeing
  ▪ Inclusive Excellence
  ▪ Mentoring and Coaching
Strategic Priorities

• Continue to advance our framework for graduate education: https://casnr.unl.edu/framework-graduate-education

• Smart, sustainable pathways to grow enrollments - - be the destination for diverse educational pathways at the nexus of food, energy, water, and societal systems (FEWS²)

• Focus on the continuum of learners

• Teaching and learning innovation

• Amplify our impact through partnerships

#ThisIsCASNR
Fall 2022 Enrollment

- Over 3,300 undergraduate, graduate and professional students
- Total undergraduate enrollment up from Fall 2021; graduate and professional enrollment level
- Increase in new students:
  - 635 new students; increase of 7.1%
  - Second largest enrollment of new students; FTF up 8.0%
  - 25% increase in new out-of-state students
- First-year retention: 85.2%; up 6.7 percentage points
- Matriculation success:
  - Second largest number of May graduates in the history of the College
  - 4-year graduation rate: increase of 20% over the last 5 years
  - 6-year graduation rate: highest 6-year graduation rate for UNL

Welcome Class of 2026
Exciting Initiatives and Partnerships - East Campus Visitor's Center
Upcoming CASNR events

Salute to graduates
Fri., Dec. 16

Graduate Winter Fellowship Awards Luncheon
Wed., Dec. 7

Winter Interim Workshop
TBD
Thank You!

CASNR is a community where everyone challenges themselves, is inclusive, asks bold questions, co-creates and is optimistic about the future. Through our collective work, we positively transform the lives of our learners, Nebraskans and our global society.
Brianna Gable
Focused on Nebraska’s Sustained Success

From the University of Nebraska-Lincoln
Developing a skilled workforce
Enhancing health & wellbeing
Creating statewide economic vitality
Retaining & attracting young people
Leveraging our strengths for sustained success

What Nebraskans are talking about:
Strategic Direction

• Drives and guides our work for the next 5 years
• Relevant and matched to the interests of our stakeholders, our state leaders and a promising future for all Nebraskans
• Aligns with our strengths and proven areas of expertise
• Allows for flexibility without straying from our strategic fundamentals
STRENGTHEN NEBRASKA AGRICULTURE & FOOD SYSTEMS

INSPIRE NEBRASKANS & THEIR COMMUNITIES

ENHANCE THE HEALTH & WELLBEING OF ALL NEBRASKANS
By connecting with Nebraska Extension, Nebraska amplifies its strengths in agriculture, food production and natural resources stewardship in ways that are environmentally and economically sustainable—ensuring that all Nebraskans have access to safe and healthy food, abundant water, and the benefits of Nebraska’s outdoor spaces.
Inspire Nebraskans & Their Communities

By connecting with Nebraska Extension, Nebraska has a robust, diverse population of well-prepared, innovative and productive people—beginning with Nebraska youth—living in thriving, vibrant communities that are contributing to the sustained success and growth of the entire state.
Enhance the Health & Wellbeing of All Nebraskans

By connecting with Nebraska Extension, Nebraskans are healthier in every respect—physically, mentally and economically—leading to an even better quality of life, greater prosperity and a promising future for all.
• Extension is the **LOCAL CONNECTION** with the University across the state

• Bringing **RELEVANT RESEARCH & RESOURCES** directly to Nebraskans

• **ENGAGING WITH NEBRASKANS** to create an even more prosperous future for all
This is an exciting, transformative time for Nebraska. Nebraska Extension stands ready to provide its unique, statewide presence and expertise to help our state create the prosperous future we all envision.

We look forward to our journey together!

From the University of Nebraska-Lincoln
Fall Conference

Nov. 15-17, 2022
More information: myextension.unl.edu/fall-conference
Agricultural Research Division
Records Continue to Fall!

FY22 Externally Sponsored Research Awards

$70.8M

ARD Mission Statement -
‘Supporting the Science to Ensure Resilient Food Systems and a Healthy Global Future’
Some VERY Recent Examples of....

External Awards -

Husker research hones in on sorghum’s genetic makeup to improve nitrogen efficiency

Husker-led team exploiting oilseeds’ potential in biofuels, bioproducts

$25M federal award to expand robotics development, entrepreneurship, outreach

Institutional Awards for Leverage -

With Catalyst award, Helikar sets five-year goal for draft of digital immune system

Round 2 Coming Up....
ARD Annual Meeting

East Campus Union Great Plains Room
Friday, Oct. 21, 2022
8:30 a.m.-3 p.m.

More information: ARD.unl.edu
Ed Cahoon
B5 will address the imperative need for sustainable liquid fuels and oils of defined structures desired by the US bioenergy and oleochemical sectors. The project will integrate fundamental knowledge generation and synthetic biology tool development to predictably and more rapidly develop non-food Brassicaceae oilseeds that produce high quantities of oils and oils with tailored fatty acid compositions.
College of Education and Human Sciences
For 15 years, the Getting Ready program has helped enhance school readiness for children age 5 and younger by bringing evidenced-based parent engagement strategies to early childhood programs throughout Nebraska and across the U.S.
The Nebraska Center for the Prevention of Obesity Diseases is finding innovative approaches to combatting major health threats, including obesity, type 2 diabetes, cardiovascular disease, and non-alcoholic fatty liver disease.
Undergraduate and graduate students in the College of Education and Human Sciences come from **74 counties across Nebraska**, 46 states and 44 countries.
Updates, thoughts, and reflections
UNLOCKING THE WORLD

CDC suspends country-specific Covid-19 travel advisories

Marnie Hunter and Forrest Brown, CNN • Published 3rd October 2022
‘The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function.’

-F. Scott Fitzgerald
## University of Nebraska-Lincoln

### State-Aided Operating Budget - Calculated Budget Reductions

**FY 2021 thru FY 2022, FY2023**

<table>
<thead>
<tr>
<th>VC</th>
<th>FY21 Target Reduction</th>
<th>FY22 Target Reduction&lt;br&gt;(%)</th>
<th>FY23 Target Reduction&lt;br&gt;(%)</th>
<th>3-Year Cumulative Reduction</th>
<th>Estimated 3-Year %</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNL Annual Deficit</td>
<td>$15,708,995&lt;br&gt;3.4%</td>
<td>$8,797,661&lt;br&gt;1.9%</td>
<td>$13,747,528&lt;br&gt;3.0%</td>
<td>$38,254,184&lt;br&gt;8.2%</td>
<td></td>
</tr>
<tr>
<td>Chancellor Base Budget</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chancellor Allocable Budget/Reduction</td>
<td>$290,060</td>
<td>$162,445</td>
<td>$253,842</td>
<td>$706,346</td>
<td>8.2%</td>
</tr>
<tr>
<td>EVC CAO</td>
<td>$9,960,010</td>
<td>$4,720,512</td>
<td>$7,376,434</td>
<td>$22,056,955</td>
<td>9.1%</td>
</tr>
<tr>
<td><strong>VCIANR</strong></td>
<td><strong>$3,563,463</strong></td>
<td><strong>$2,555,431</strong></td>
<td><strong>$3,993,204</strong></td>
<td><strong>$10,112,097</strong></td>
<td><strong>7.7%</strong></td>
</tr>
<tr>
<td><strong>VCORED</strong></td>
<td>$137,327</td>
<td>$98,480</td>
<td>$153,889</td>
<td>$389,696</td>
<td>7.7%</td>
</tr>
<tr>
<td><strong>VCBF</strong></td>
<td>$1,733,010</td>
<td>$1,242,776</td>
<td>$1,942,005</td>
<td>$4,917,791</td>
<td>7.7%</td>
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<tr>
<td><strong>VCSA</strong></td>
<td>$25,125</td>
<td>$18,018</td>
<td>$28,155</td>
<td>$71,297</td>
<td>7.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$15,708,995</strong></td>
<td><strong>$8,797,661</strong></td>
<td><strong>$13,747,528</strong></td>
<td><strong>$38,254,184</strong></td>
<td><strong>8.2%</strong></td>
</tr>
</tbody>
</table>
High-level Summary - Proposed Reduction Plan to Chancellor

IANR Reduction Target = $10,112,097
FY21 ($3,563,463) / FY22 ($2,555,430) / FY23 ($3,993,204)

- IANR VSIP positions - ~$1.9M
- 10% Administrative Reduction – VC IANR, CASNR, ARD, Extension - ~$1.9M
- T/TT Faculty Attrition - ~$0.3M
- Vacant TBA staff positions proposed by units - ~$1.1M
- Research support staff proposed by units – combination of eliminating open lines and transitioning others to non-state sources (FY22-FY25) - ~$1.7M
- Program Reduction/Realignments - ~$1.9M
- Reduce student remission liability by 10% - ~$1.3M
IANR 2030
Our Shared Future Vision
Trends with the potential to transform the human experience and reshape markets, societies and the global order

Globalization
Demographic shifts
Technological advances
Individual empowerment
Accelerating urbanization
Shift in global economic power
Climate change and resource scarcity
Growing demand for food, water, and energy
“Culture eats strategy for breakfast.”

-Peter Drucker
“If I had asked people what they wanted, they would have said faster horses.”

-Henry Ford
“...we cannot conduct business and program activities of the Association following the same procedures of those who came before us. The unmet needs of the members bring us discomfort. We feel the pressures of the challenges of the future, but we can view that future with optimism. We must find out what we have to do in order to become what we want to be...and then set attainable goals and priorities for action.”

Gwendolyn A. Newkirk, acceptance speech for the presidency of the American Home Economics Association, Sept. 1975
ALL IANR FACULTY AND STAFF ARE INVITED

WELCOME BACK

PICNIC

HOSTED BY THE INSTITUTE OF AGRICULTURE & NATURAL RESOURCES