# IANR All Hands Meeting































# 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 Kampbell 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** 

# 150 50



**Judy Wu-Smart** 



**Melanie Downs** 



Philip Johnson



**John Benson** 



Renee McFee



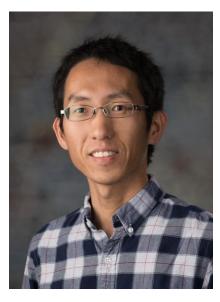
**Brian Vander Ley** 



Elizabeth VanWormer



**Reka Howard** 



**Yuzhen Zhou** 



Surin Kim





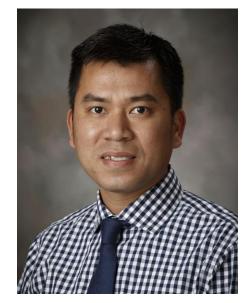




Bijesh Maharjan



**Benny Mote** 



Hiep Vu



**Toshihiro Obata** 



Xinghui Sun



**Nicole Iverson** 



**Forrest Kievit** 



**Aaron Mittelstet** 



Holly Hatton-Bowers

# 150 50







**Matthew Stockton** 



**Keenan Amundsen** 



James Schnable



**Kim Todd** 



Karla Wilke



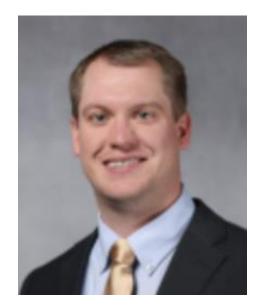
Jeffrey Bradshaw



**Dustin Loy** 



**Matthew Wiebe** 



**Bradley Schick** 

# CELEBRATION OF INNOVATION CASNR IANR 150 50



**Katherine Krause** 



**Kathryn Pekarek** 



**Leah Sandall** 



Meghan Sindelar



**Matthew Douglass** 



Manuel Roberto Cortinas



**Brian Fuchs** 

# CELEBRATION OF INNOVATION CASNR IANR 150 50



**Lord Ameyaw** 



Nicolas Cafaro La Menza



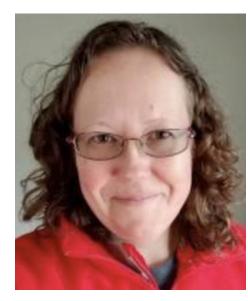
**Maria Cantu Hines** 



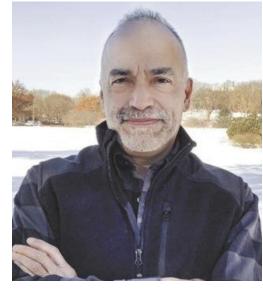
Caro Cordova Martinez



**Aaron Daigh** 



**Samantha Daniel** 



Alfredo DiCostanzo



**Nathaniel Dorsey** 



Michaella Fevold



**Teddy Garcia-Aroca** 

# CELEBRATION OF CELEBRATION OF INNOVATION GASNR IANR 150 50



Joao Carlos Gomes Neto



**Becky Haddad** 



**Christine Haney** 



Jingjie Hao



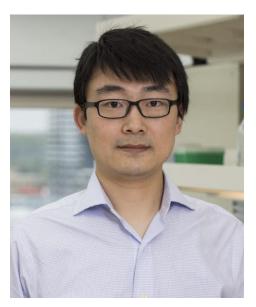
**Melanie Hess** 



Brandi Hilton-Hagemann



Sheila Hoppe



Yihi Huang

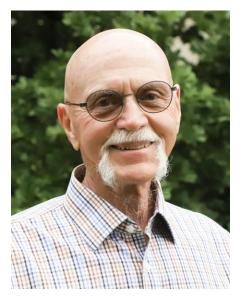


**Hayley Jackson** 



**Caitlyn Jacobson** 

# CELEBRATION OF INNOVATION CASNR IANR 150 50



**Blaine Johnson** 



Ingrid Lindal Chavarria



**Marianne Lorensen** 



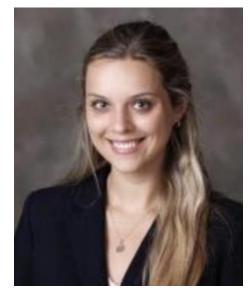
**Dylan Mangel** 



Jessie Morrill



Jill Motschenbacher



Laura Nagengast



**Bruno Patias Lena** 

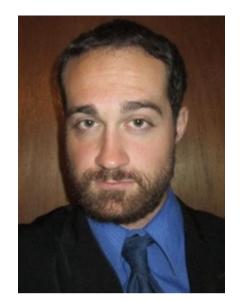


**Wayde Pickinpaugh** 



Luis Gerardo Posadas Martinez

# CASNR IANR 150 50



**Peter ReVelle** 



Randall Ritzema



**Xueheng Shi** 



**Kimberly Stanke** 



**Emily Stine** 



Saleh Taghvaeian



Lindsay Waechter-Mead



Melissa Westbrook

# New Leadership Appointments

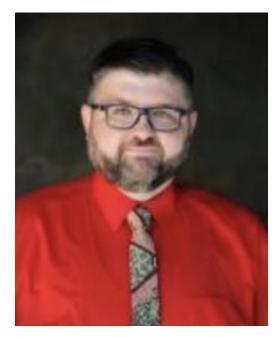




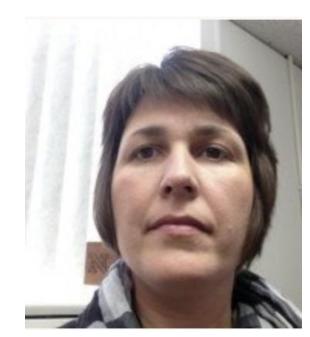
casnr ianr 150 50



Lisa Karr



**John Porter** 



**Amy Topp** 



**Jerry Volesky** 



John Westra



**Mary Emery** 

### ARD Dean



**Derek McLean** 

# **Search Advisory Committee**

Tiffany Heng-Moss

Ed Cahoon

Don Becker

Andrea Cupp

Stephen Wegulo

Nic Brozovic

Amanda Ramer-Tait

Yufeng Ge

Dipti Dev

Jessca Corman

Jayne Stratton

Gabi Carmona

Kelly Brunkhorst

Mark Boggess

Lisa Lunz

Jennifer Nelson



# 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



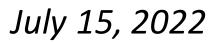
# Congratulations!







# IANR in the news





# Feedlot Innovation Center could revolutionize UNL research



ike 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



Agriculture & Environmen

Arts

cinece & Law

On Campus

Science & Technolog

April 6, 2022 · 3 mir

### Governor signs budget with investment in ag innovation facility

by University Communication and Marketing



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:



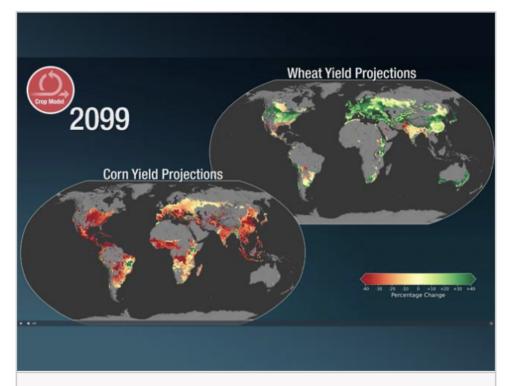












NASA officials are working to hone satellite technology to better help farmers make cropping decisions, including a crop model that could allow producers to consider several scenarios that could determine yield. (Screen capture from NASA presentation)

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







Agriculture Environmen Community & Busines

Health & Nutrition

Research

**On Campus** 

# 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.

# Matt Allmand



# Ricketts signs state budget into law, UNL receives \$25 million for ag facility

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

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# Regents approve \$7.5 million for IANR Feedlot Innovation Center

# Groundbreaking Set for November 4th

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# USDA awards \$960K for UNL-led ag data cooperative

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- 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

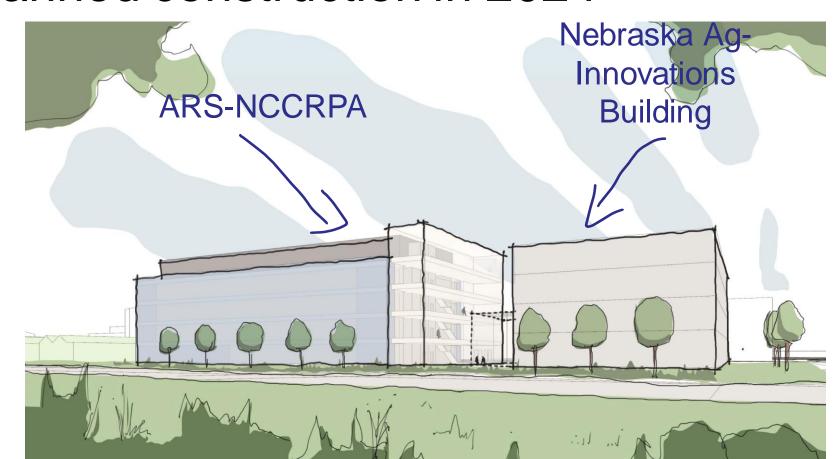
# Strategically Located to Optimize Agricultural Impact





# 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



## All Hands Meeting, Oct. 4, 2022

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.







Pedestrian Plazo



emonstration Gardens



Fire Access Corrido



ebraska Flora and Fauna Campus Corridor



ble Paving for Dairy Store Parking



edestrian Mo



pen Space



nmock Forest



ating Nodes



Terrace Steps

## IANR deans' updates





# College of Agricultural Sciences and Natural Resources

## Strategic Priorities

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

- The Power of Every Person: <a href="https://casnr.unl.edu/diversity-inclusion">https://casnr.unl.edu/diversity-inclusion</a>
- Student Success:
  - Student Success Framework: <a href="https://casnr.unl.edu/student-success-strategic-framework">https://casnr.unl.edu/student-success-strategic-framework</a>
  - 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

#### Attributes of a CASNR Graduate



Evidence-based decision making for a complex world using a systems-thinking approach



A spirit of entrepreneurship, leadership, civic engagement, and service to positively impact communities.



A global mindset and appreciation of diversity across cultures, ethnicities, religions, gender, sexual orientation, and



A collaborative, inclusive approach to problem solving and innovation.

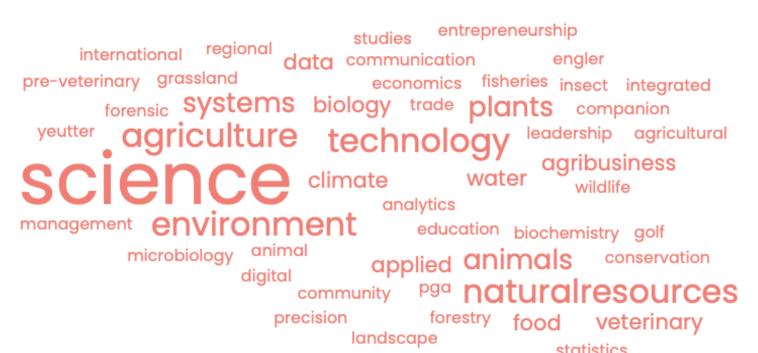
## Strategic Priorities

- Continue to advance our framework for graduate education: <a href="https://casnr.unl.edu/framework-graduate-education">https://casnr.unl.edu/framework-graduate-education</a>
- Smart, sustainable pathways to grow enrollments be the destination for diverse educational pathways at the nexus of food, energy, water, and societal systems (FEWS<sup>2</sup>)
- Focus on the continuum of learners
- Teaching and learning innovation
- Amplify our impact through partnerships



#### **EDUCATION PATHWAY**





## 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

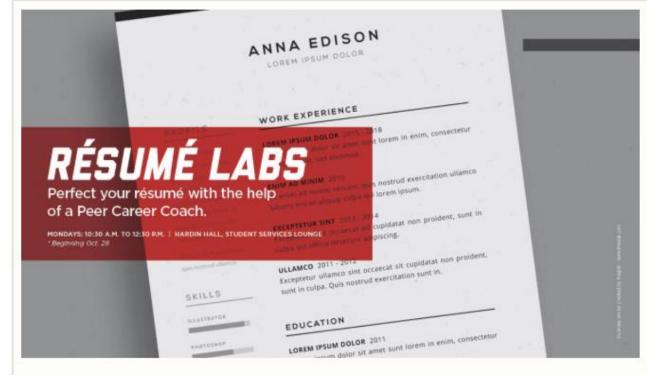








## Stone Family Innovation and Collaboration Hub





## **Upcoming CASNR events**

Salute to graduates

Fri., Dec. 16

**Graduate Winter Fellowship Awards Luncheon**Wed., Dec. 7

Winter Interim Workshop
TBD

## Thank You!



## Brianna Gable





## Nebraska Extension



## 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















### **ALIGNMENT WITH...**







- University of Nebraska Strategic Priorities
- UNL Aims N|2025

IANR Initiatives



- 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

#### All Hands Meeting, Oct. 4, 2022



## Fall Conference

Nov. 15-17, 2022

More information: myextension.unl.edu/fall-conference





## Agricultural Research Division

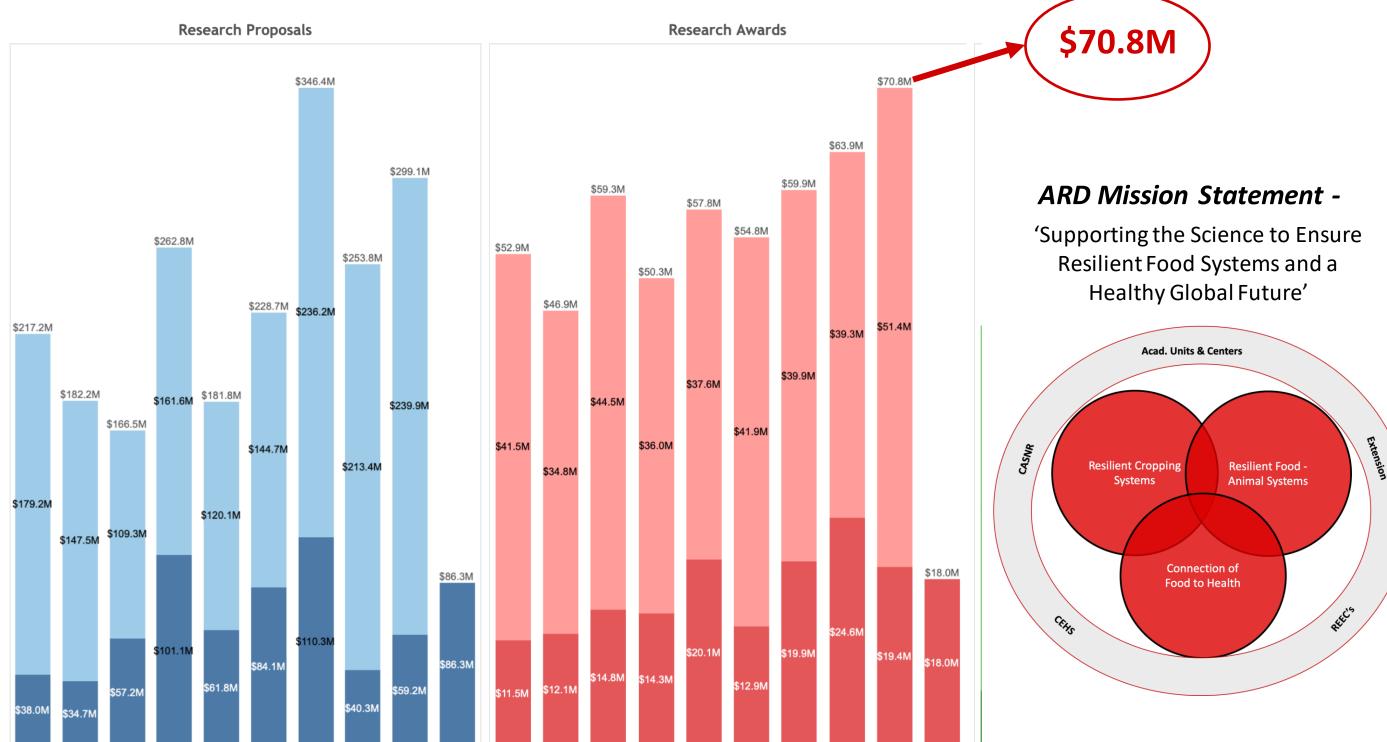
### **Records Continue to Fall!**

FY22 Externally Sponsored Research Awards

2017 2018 2019 2020 2021 2022 2023



**CASNR** 



2014 2015 2016 2017 2018 2019 2020

#### 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



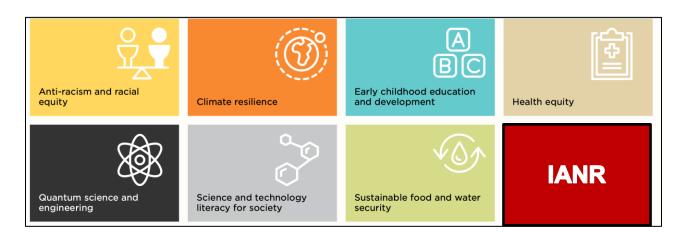
\$25M federal award to expand robotics development, entrepreneurship, outreach

#### 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





#### **B5: Bigger, Better Brassicaceae Biofuels and Bioproducts**

#### Team

UNL

Ed Cahoon Washington St **Phil Bates KSU** Tim Durrett Montana St Ruth Welti Chaofu Lu Mizzou U. Minnesota Jay Thelen Mike Smanski Joshi Trupti Dong Xu **Danforth Center** Doug Allen U. Colorado Malia Gehan Jerome Fox

Aim 1: Plastid Biofactory Aim 3: Interrogation Safely Deployed Brassicaceae with Aim 2: Bigger, Better Synthetic Biology **Tool Development** 

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.

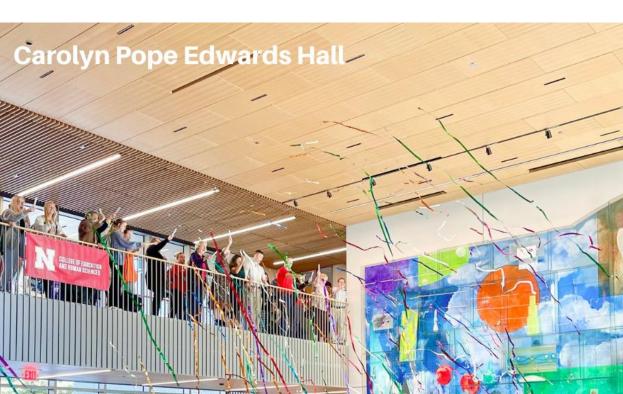


2022 Nebraska Camelina



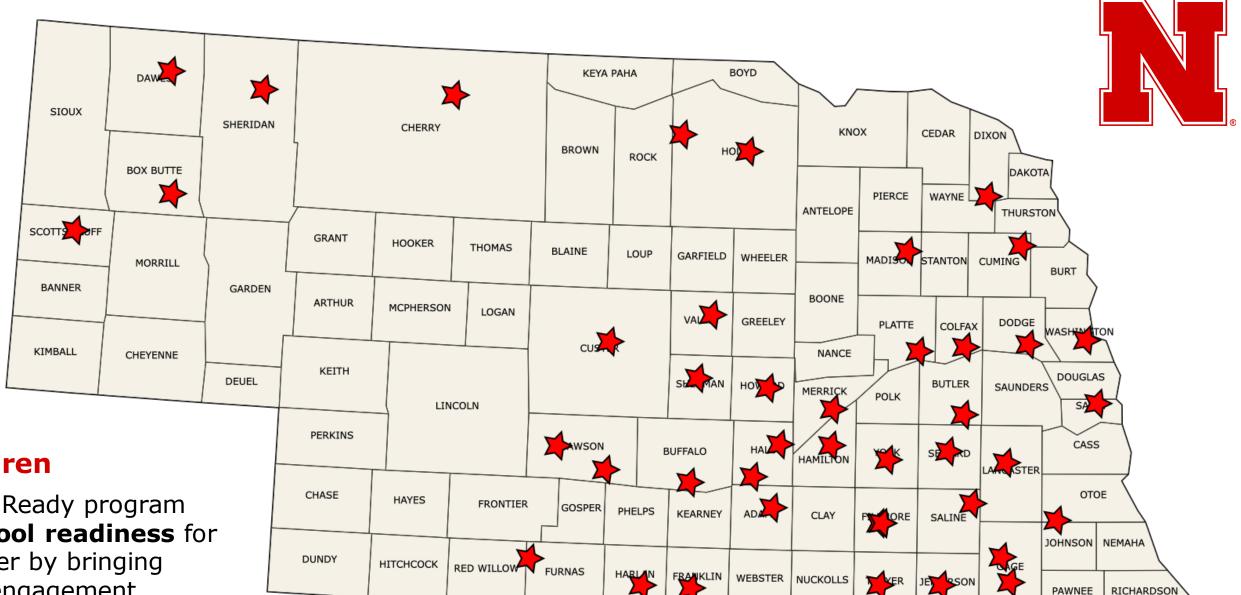
# College of Education and Human Sciences





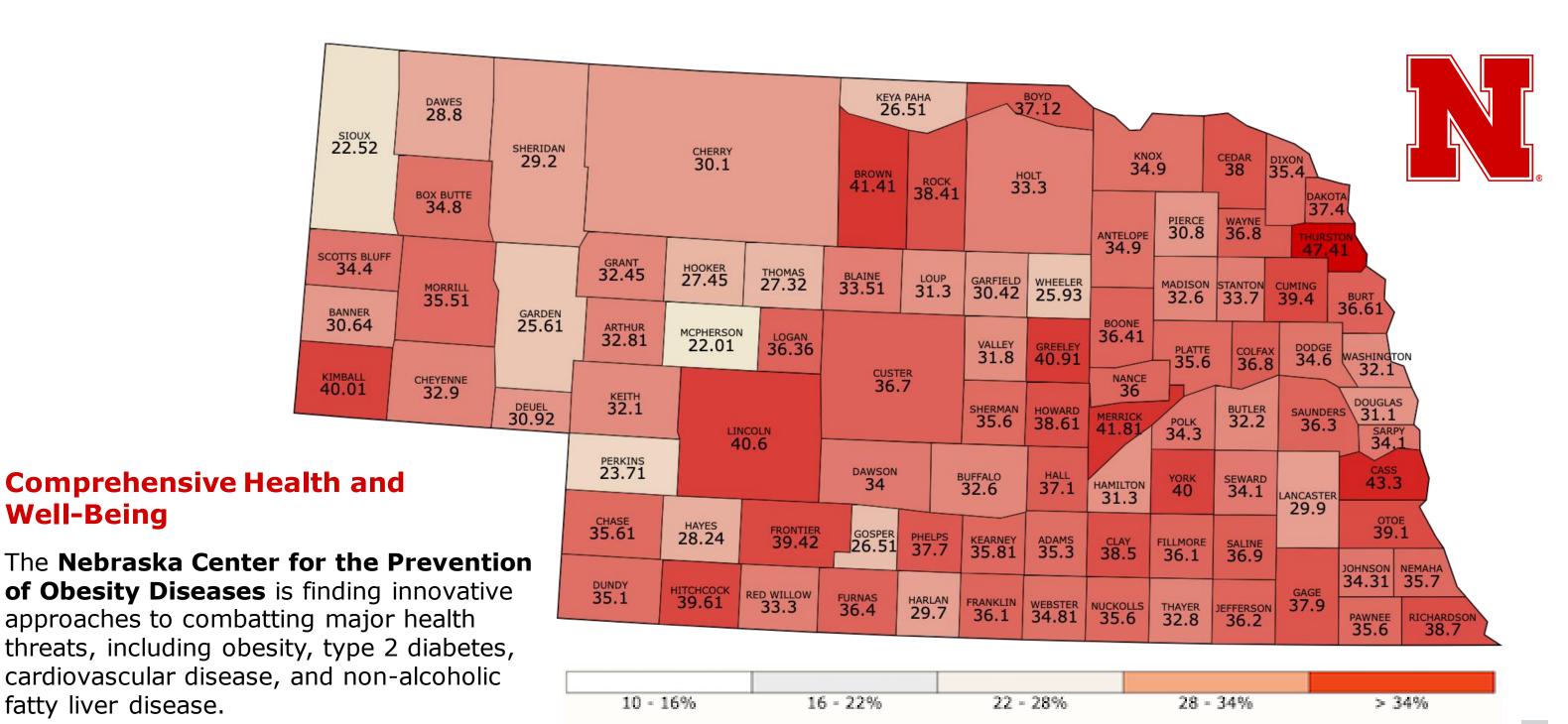






#### **Thriving Young Children**

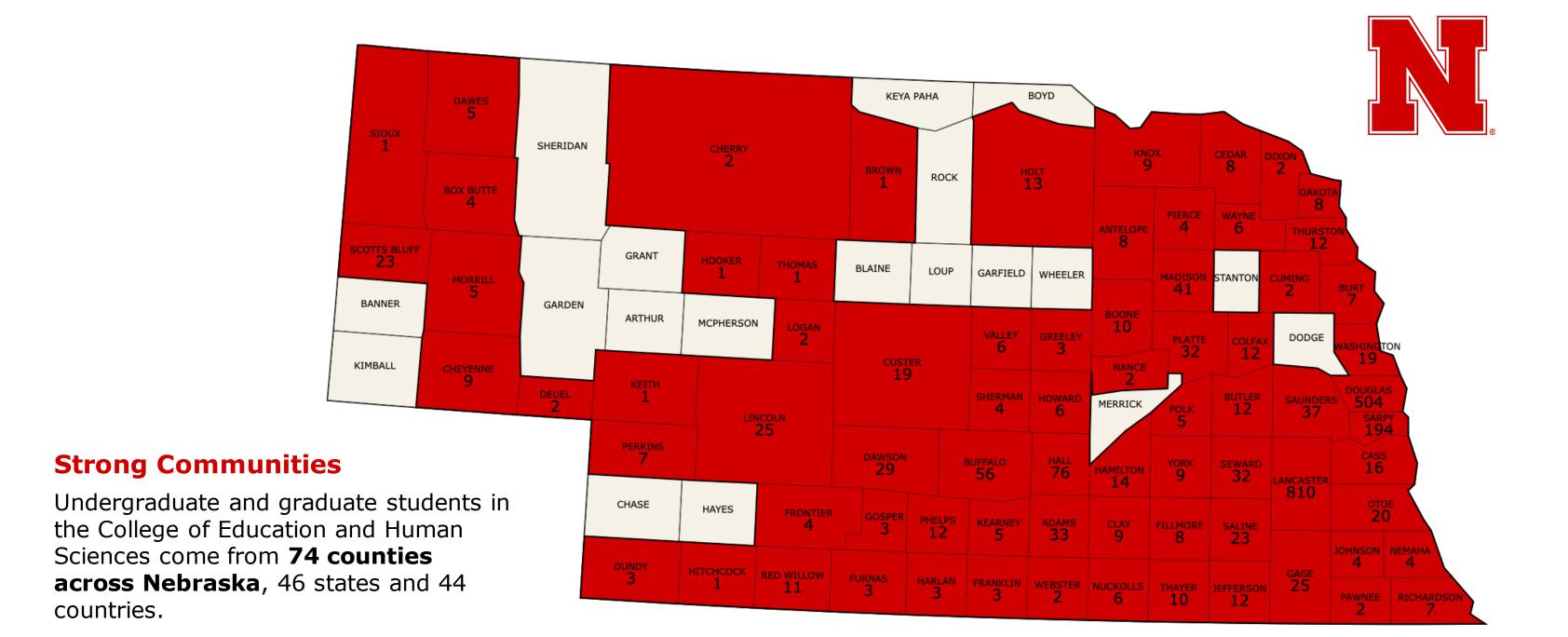
For 15 years, the Getting Ready program has helped **enhance school readiness** for children age 5 and younger by bringing evidenced-based parent engagement strategies to early childhood programs throughout Nebraska and across the U.S.



Source: CDC Diabetes County Data Indicators, 2006-2017.

**Well-Being** 

fatty liver disease.





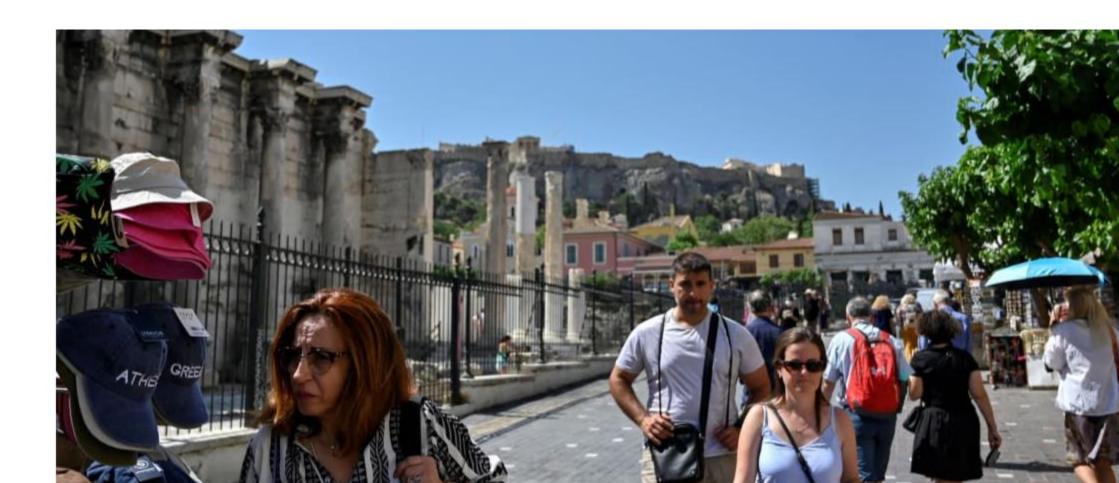
# Updates, thoughts, and reflections



#### UNLOCKING THE WORLD

## CDC suspends country-specific Covid-19 travel advisories

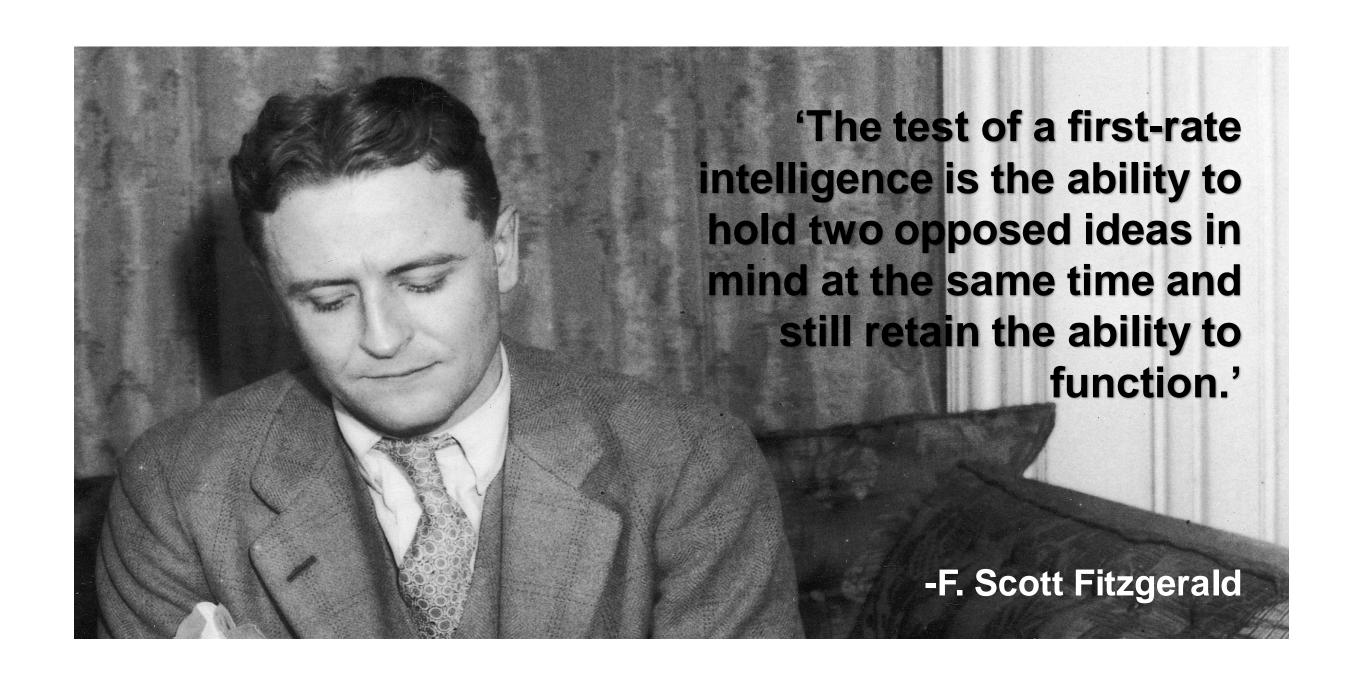
Marnie Hunter and Forrest Brown, CNN • Published 3rd October 2022













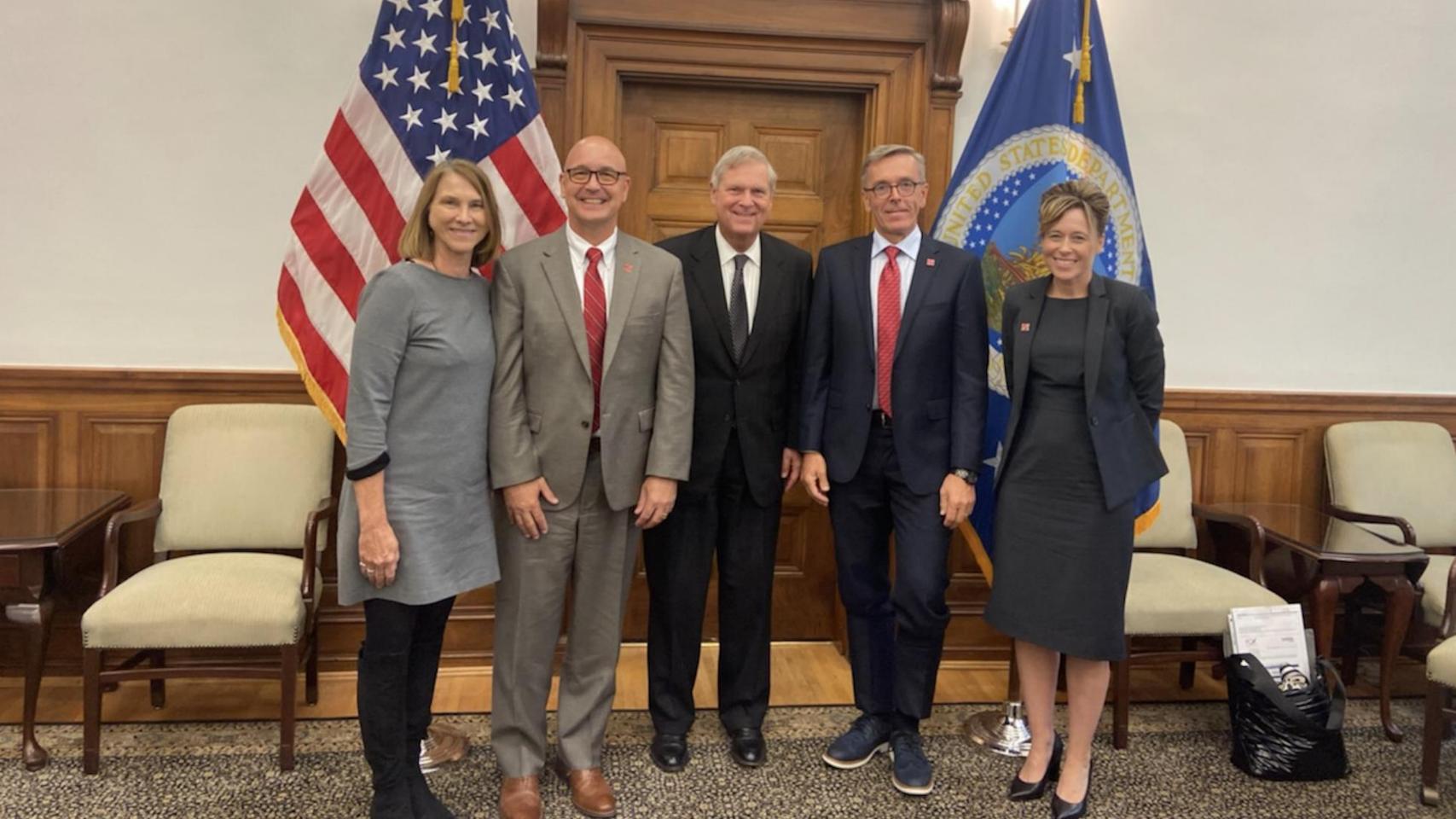
# University of Nebraska-Lincoln State-Aided Operating Budget - Calculated Budget Reductions FY 2021 thru FY 2022, FY2023

					3-Year	
	F	Y21 Target	FY22 Target	FY23 Target	Cumulative	Estimated
VC	Reduction		Reduction <sup>2</sup>	Reduction <sup>2</sup>	Reduction	3-Year %
UNL Annual Deficit	\$	15,708,995	\$ 8,797,66	1 \$ 13,747,528	\$ 38,254,184	
Percent Annual Reduction Required		3.4%	1.9%	3.0%	8.2%	
Chancellor Base Budget <sup>1</sup> University Fixed Costs						
Chancellor Allocable Budget/Reduction		\$290,060	\$162,44	\$253,842	\$706,346	8.2%
EVC CAO <sup>3</sup>		\$9,960,010	\$4,720,51	2 \$7,376,434	\$22,056,955	9.1%
VCIANR	\$	3,563,463	\$2,555,43	1 \$3,993,204	\$10,112,097	7.7%
VCORED	\$	137,327	\$98,48	\$153,889	\$389,696	7.7%
VCBF	\$	1,733,010	\$1,242,77	\$1,942,005	\$4,917,791	7.7%
VCSA	\$	25,125	\$18,01	\$28,155	\$71,297	7.7%
Total	\$15,708,995		\$8,797,661	\$13,747,528	\$38,254,184	8.2%

#### **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





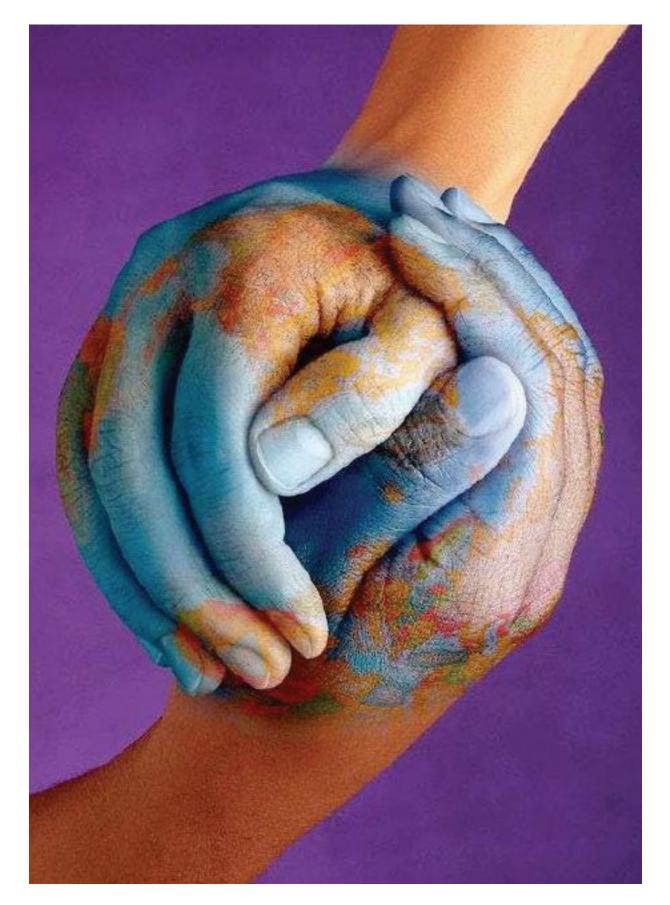


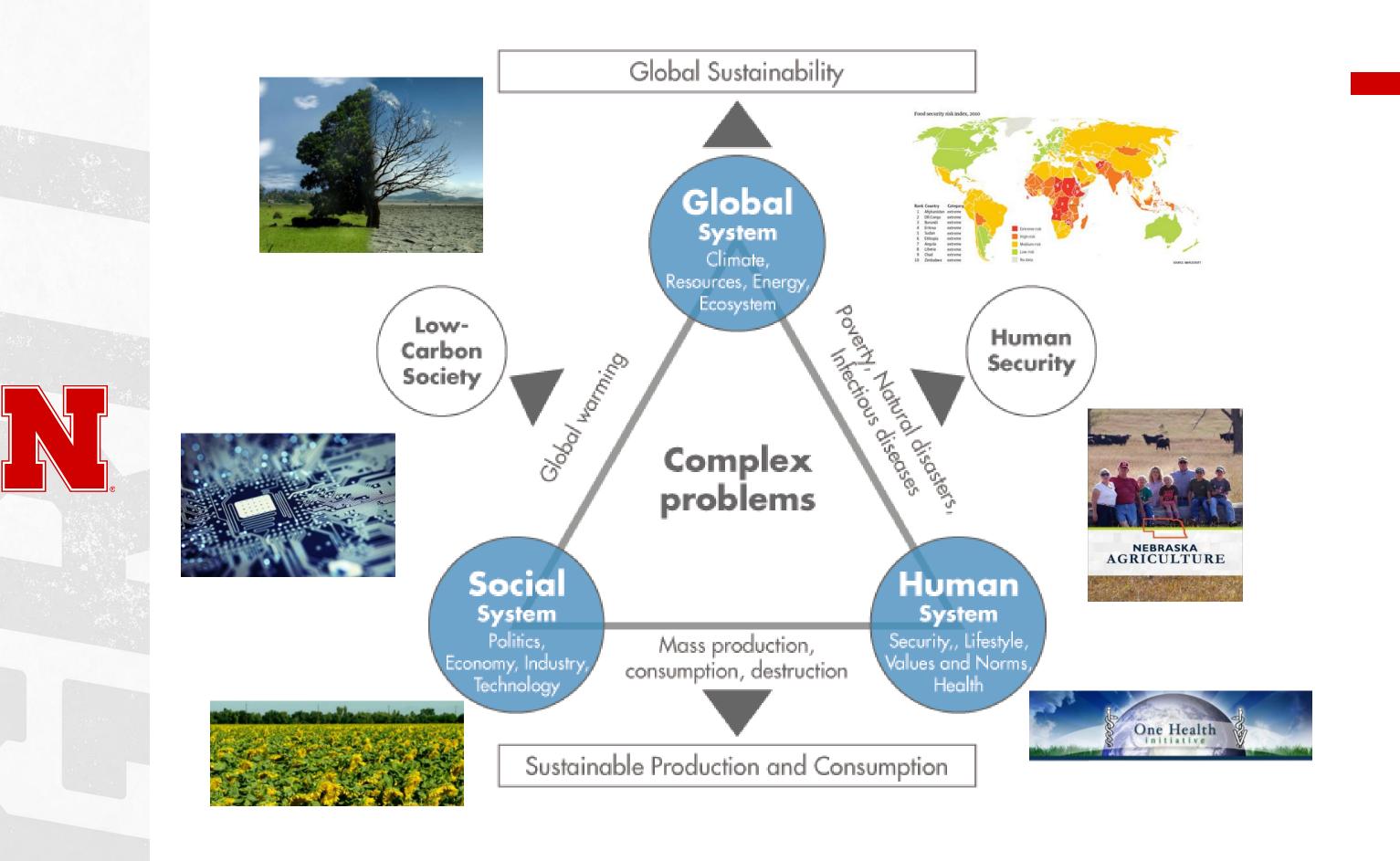
## IANR 2030

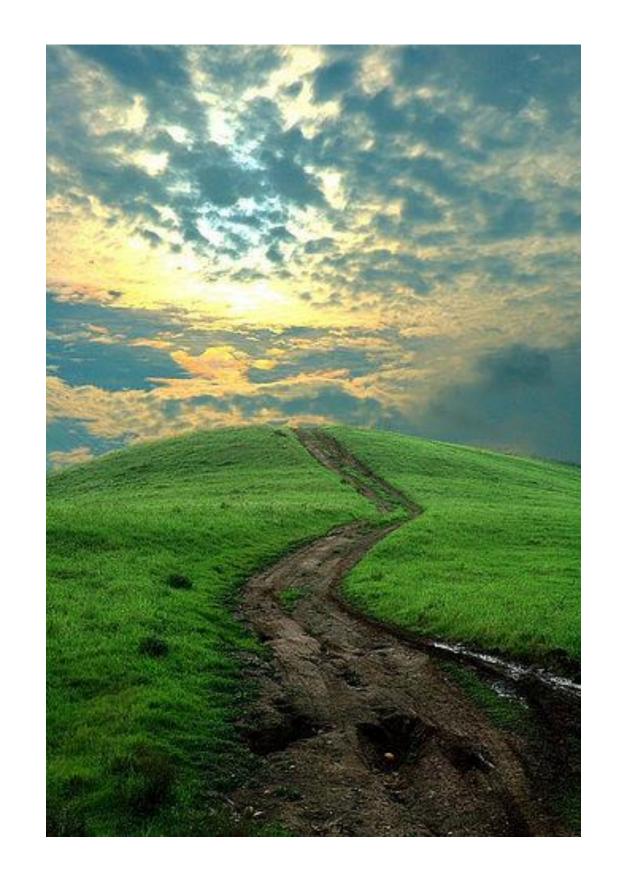
Our Shared Future Vision

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













"If I had asked
people what they
wanted, they would
have said faster
horses."

-Henry Ford







### All Hands Meeting, Oct. 4, 2022



"...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





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