

IANR All Hands Meeting

January 11, 2016

Ronnie D. Green
University of Nebraska


GROWING A HEALTHY FUTURE

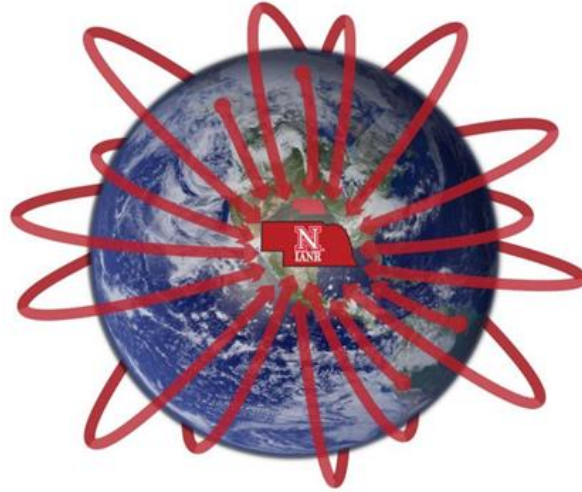
FOOD • FUEL • WATER • LANDSCAPES • PEOPLE

IANR to 2025

2010-2015

2015-2020





There has never been a time where the agricultural, food, natural resources, environmental, and human sciences have a bigger role to play, especially for **Nebraska**, in their impact on the world stage than the first half of the 21st century.

1,962

People Passionate about Making a Difference

- **1,224** IANR employees work on campus
- **738** IANR employees are located in Nebraska communities statewide
- **741** total faculty (40 TTF in recruitment)

UNL Goals

- Increase enrollment to 30,000
- Increase faculty by ~170
- Increase 6-year graduation rate to 70%
- Increase research expenditures to \$300 M
- Increase national/international recognition of faculty
- Successfully launch Phase I of Nebraska Innovation Campus



CASNR Student Enrollment

Fall 2015 Enrollment

2267 (+0.6%)

Up from 2254 in 2014

11th Year of Increase

Total Number of Undergraduates = 2,761 (-0.6%)

**Includes Biochemistry (182) +9%
and Biological Systems Engineering (312) -12%*

Professional Students = 60

Graduate Students = 661

TOTAL = 3,482 (+14% since FY12)



2015 Enrollment Growth

Non-Resident Total = 728 (24.5%)

International = 310 (10.6%)

*Total UNL + NCTA = **3,994***



**UNL Total Enrollment
Fall Semester**

Fall	UNL Total	Under-grad	Prof	Grad
2003	22559	17851	489	4219
2004	21792	17167	193	4162
2005	21675	17037	488	4150
2006	22106	17371	478	4257
2007	22973	18053	502	4418
2008	23573	18526	547	4500
2009	24100	18955	554	4591
2010	24610	19383	607	4620
2011	24593	19345	569	4679
2012	24207	19103	545	4559
2013	24445	19376	515	4554
2014	25006	19979	510	4517
2015	25260	20182	502	4576

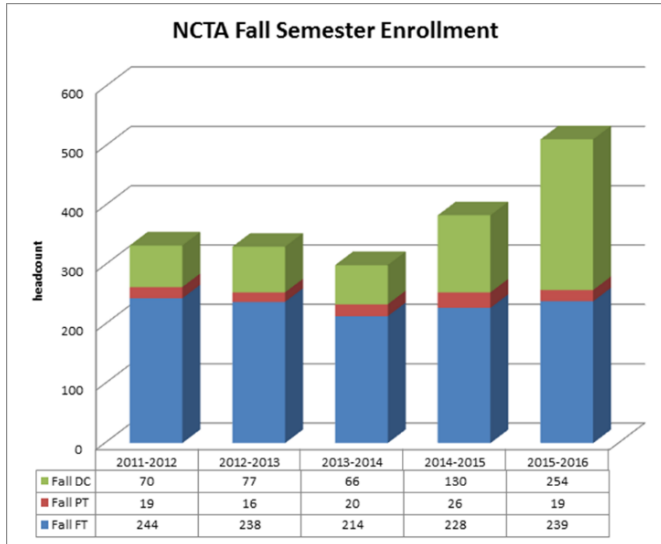
**IANR Total Enrollment
Fall Semester**

Fall	CASNR Total	Under-grad	Prof	Grad
2003	1910	1503	0	407
2004	1880	1466	0	414
2005	1990	1553	0	437
2006	2061	1606	0	455
2007	2331	1794	25	512
2008	2569	2015	50	504
2009	2775	2166	50	559
2010	2990	2321	55	614
2011	3056	2402	59	595
2012	3142	2486	58	598
2013	3316	2616	64	636
2014	3482	2777	61	644
2015	3482	2761	60	661

8.5%

13.8%

NCTA Enrollment



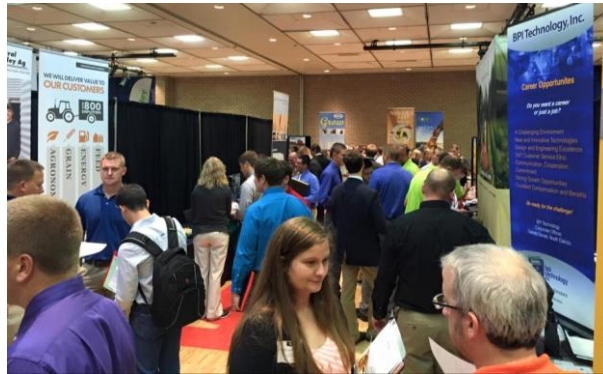
Record enrollment this fall with **512 students**, based on dual credit, part-time and full-time enrollees.

The enrollment is a **4.8%** increase in on campus students from 2014, and **33% increase overall**.

6-YEAR GRADUATION RATE ➔ **82%**

2008 CASNR Class – ~75%

2008 UNL Class – 67%



**Placement Rates
are above 90%**

RESEARCH EXPENDITURES

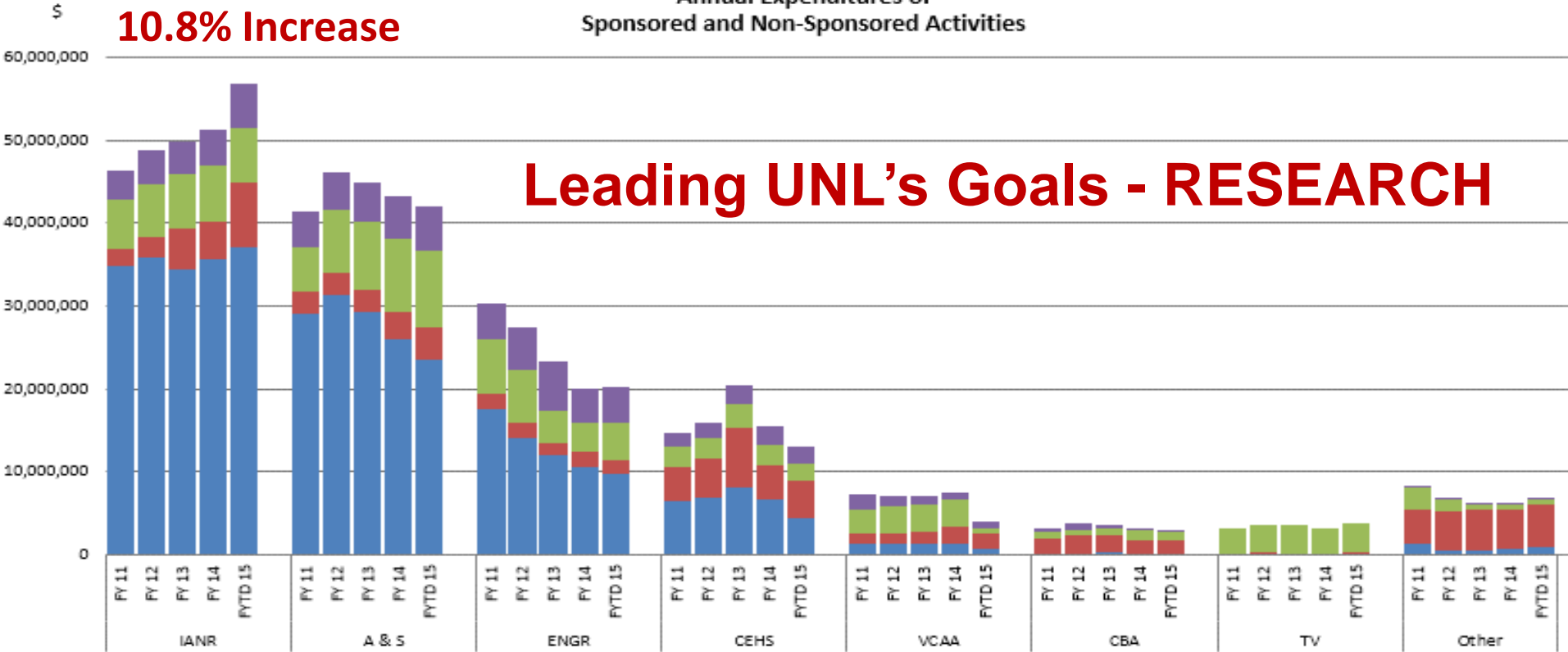
Fiscal Year	Total IANR Research Expenditures	Total Sponsored IANR Research Expenditures	Tenured & Tenure Track FTE	Total IANR Research Expenditures per Headcount FTE	Sponsored Research Expenditures per FTE
2014	123,279,217	46,358,960	279.20	441,544	166,042
2013	116,788,119	40,741,153	275.01	424,669	148,144
2012	107,844,403	39,364,810	265.71	405,873	148,150

UNL

Annual Expenditures of Sponsored and Non-Sponsored Activities

10.8% Increase

Leading UNL's Goals - RESEARCH





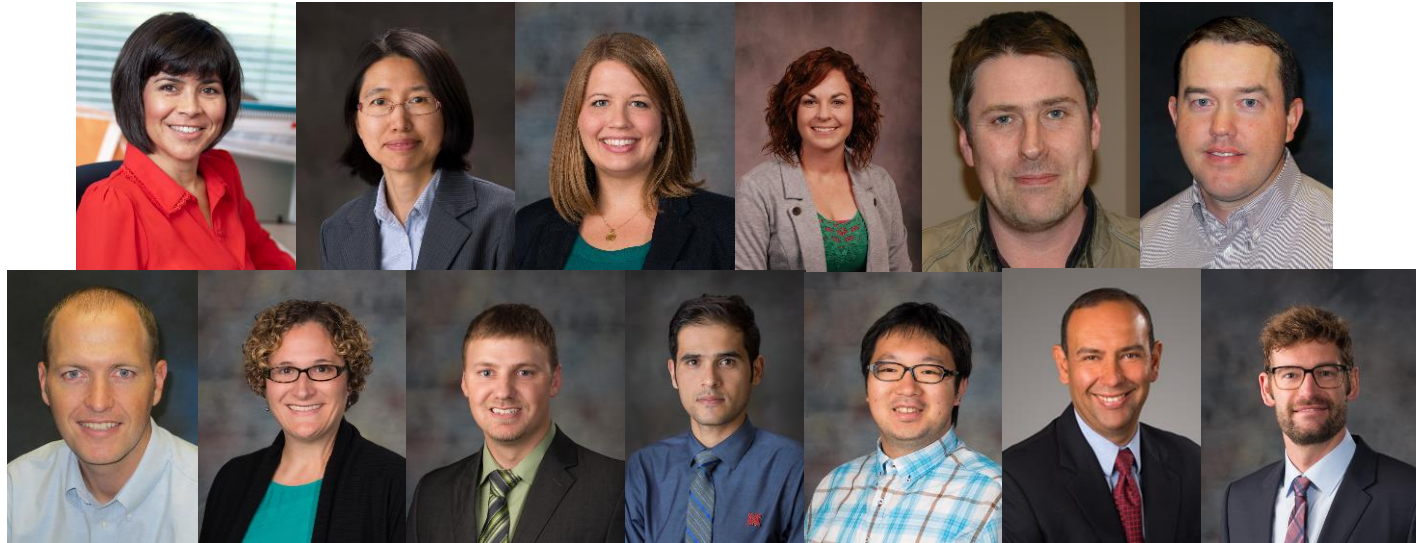
Since January 1, 2012:

Total of **103 Tenure Track Faculty** Hires Completed

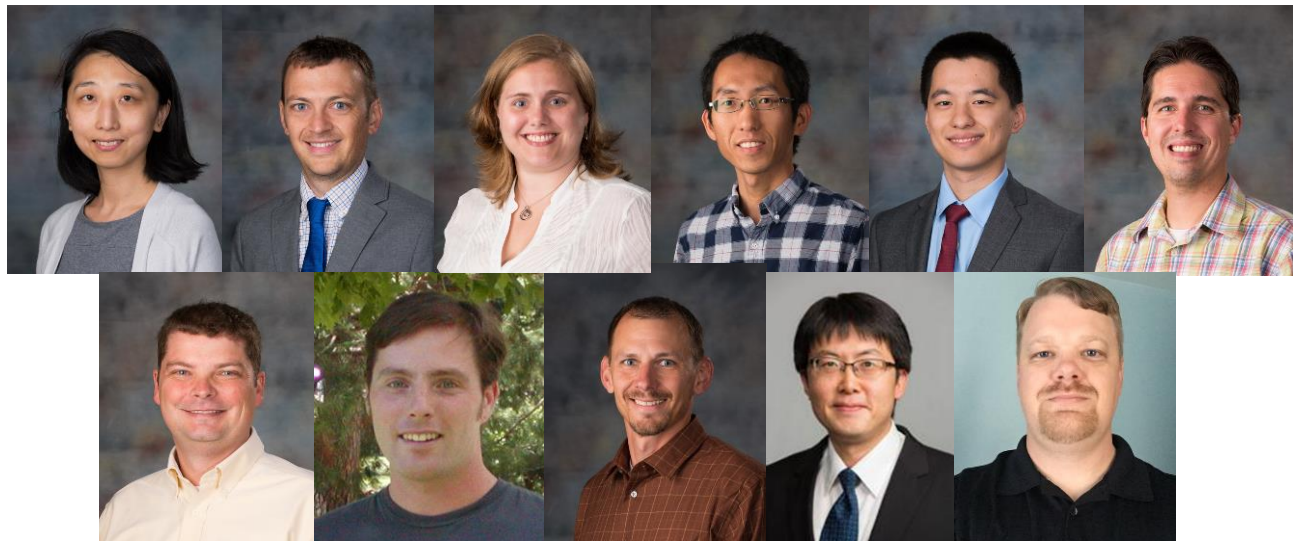
GRAND TOTAL by 2016 = 140 positions
(of which **72** are newly created positions)

Total number of IANR faculty (335) will have
increased by 27%
when hiring is complete in 2016
(42% in 4 years)

New Faces – 2015



New Faces – 2015



Faculty Diversity

Tenure-Line Faculty

Year	Female	Male	Diversity	TOTAL
2011	48	199	35	247
%	19.4%	80.6%	14.2%	
2015	65	225	68	290
%	22.4%	77.6%	23.4%	
% CHANGE	35.4%	13.1%	94.3%	17.4%

Non-Tenure Faculty

Year	Female	Male	Diversity	TOTAL
2011	18	34	14	52
%	34.6%	65.4%	26.9%	
2015	19	39	21	58
%	32.8%	67.2%	36.2%	
% CHANGE	5.6%	14.7%	50.0%	11.5%



NEBRASKA
INNOVATION
CAMPUS



380,000
sq ft

UNIVERSITY OF NEBRASKA - LINCOLN



Alliance for Advanced Food Sanitation

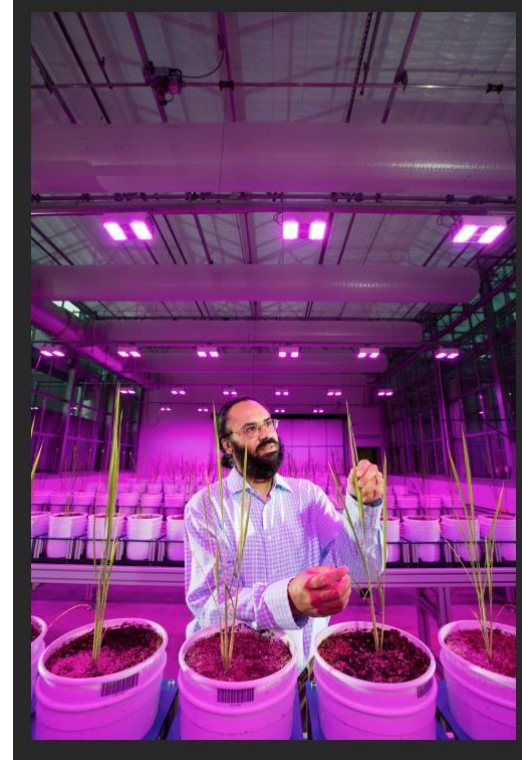
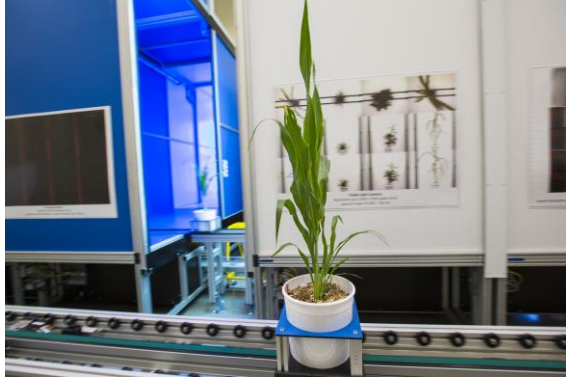


INNOVATION AND ADVANCEMENT IN PRODUCTION SANITATION

A unique opportunity exists for the creation of the Nebraska Alliance for Advanced Food Sanitation. The University of Nebraska–Lincoln and industry partners will conceptualize, create, and disseminate improved sanitation approaches and practices. More efficient and effective sanitations will result in a reduction in the quantities of chemicals used in sanitation, savings in time and operational costs resulting in more affordable food at the consumer level, and consistently safer food products.

The timing for this initiative is opportune to support the mandates for validated preventive controls for food safety hazards that will be promulgated by the U.S. Food and Drug Administration's Food Safety Modernization Act (2011). Alliance activities are envisioned to focus on all manner of food safety concerns including microbial pathogens, allergens, and toxic chemicals; food quality and shelf life; cost and risk benefit assessments; water conservation and reusability; and genetically engineered foods.





UNIVERSITY OF NEBRASKA - LINCOLN





Water for Food

ROBERT B. DAUGHERTY INSTITUTE

at the University of Nebraska



CATALYTIC COLLABORATIONS

Building Public-Private Partnerships for Water and Food Security

April 24-26, 2016

Nebraska Innovation Campus | Lincoln, Nebraska, USA

UNIVERSITY OF
Nebraska

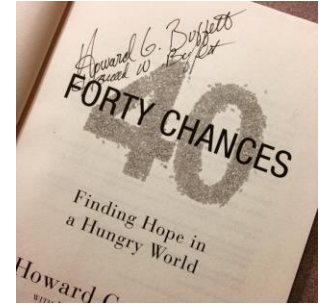


Water for Food
GLOBAL CONFERENCE





Officially launched:
September 27, 2012





\$140M in the Past Five Years!





“25 by 2025”

Endowed Chair Campaign

Nebraska Corn Board Presidential Chair (2014)

Ron Hanson Nebraska Ag Bankers Chair (2014)

Yeutter International Trade & Finance Presidential Chair (2015)

Allen Food for Health Presidential Chair (2014)

Robert B. Daugherty Water for Food Chair (2012)

Nebraska Wheat Growers Presidential Chair (2011)

Nebraska Soybean Board Presidential Chair (2013)

Engler Agribusiness Entrepreneurship Chair (2011)

Heuermann Agronomy Chair (2011)

Ralph and Alice Raikes Chair (1999)

William F. Allington Distinguished Plant Pathology Chair (1995)

George Dempster Smith Chair (2009)

*William F. Splinter Chair**

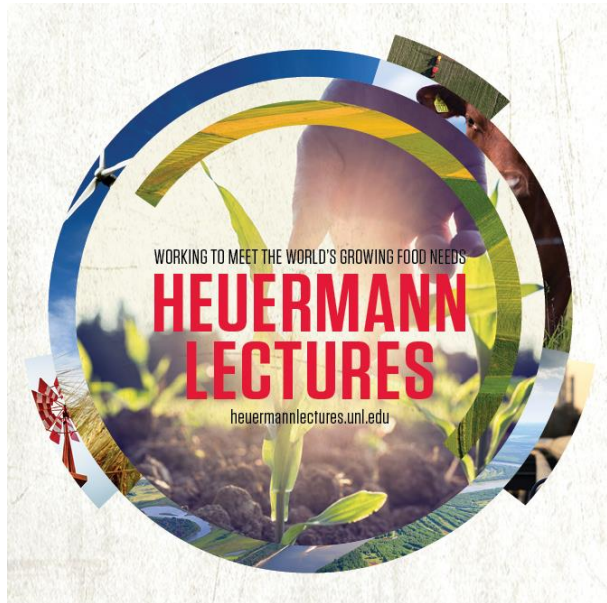
+

43 Endowed Professorships Holders



\$382 Million in Facility Improvements





“A Dialogue on Global Trade in Agriculture”

Clayton K. Yeutter

Former U.S. Secretary of Agriculture
Former US Trade Ambassador



Amb. Darci Vetter

U.S. Department of Agriculture
Chief Agricultural Negotiator



January 12th – 7 pm

Nebraska Innovation Campus Conference Center

Nebraska Extension – Issue Focused

- Nebraskans care about issues
 - They want us to be relevant and proactive
 - They can help us identify important issues
- Encourages interdisciplinary work
- Diversifies membership
 - Scientists, external partners, etc.
- Strengthens engagement → synergy



Extension - Issue Teams

- Stakeholder Survey (1,987 responses)
- August – Faculty Survey
- August 22 – 19 issues announced
- Issue Discovery Webinars
 - Describe the issue, outcomes, products
- Issue Teams launch March 2016





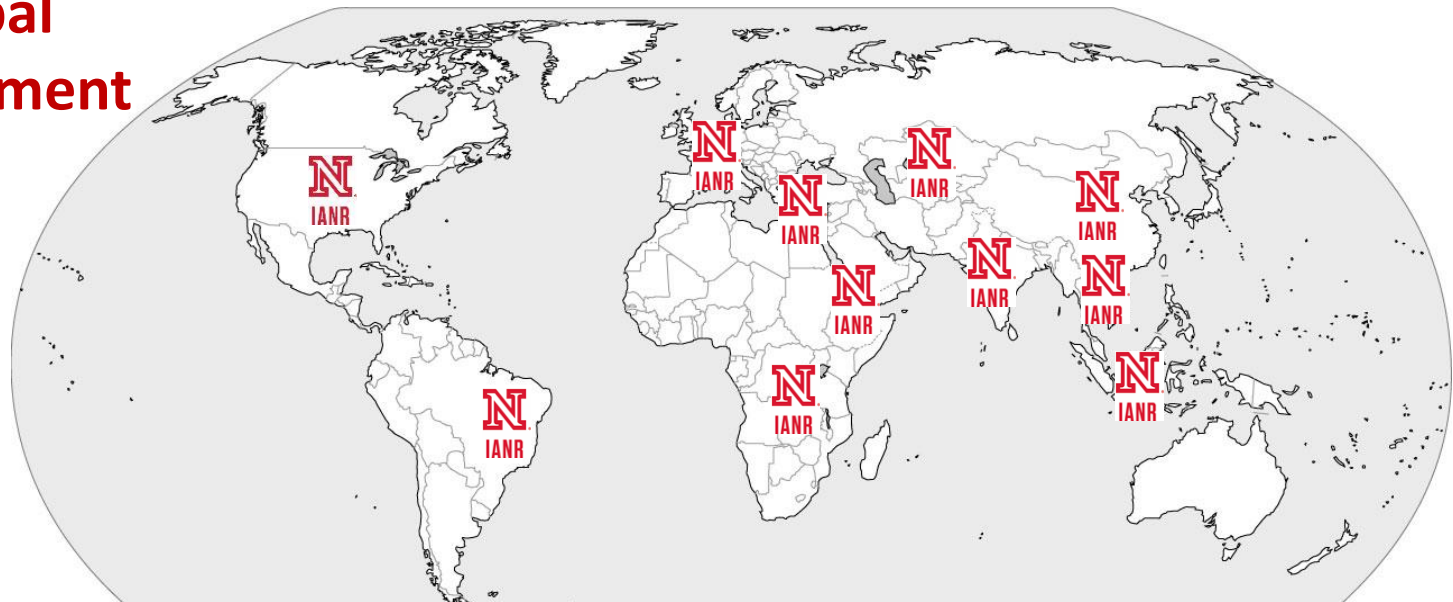
Science Literacy

- Engagement with unit administrators and faculty
- Unit-level Science Literacy plans
- Accountability and reporting through Activity Insight (available 2016)

SCIENCE
LITERACY



Global Engagement



CHINA (Northwest A&F, China Ag, IWHR), **BRAZIL** (ESALQ, CAPES, BSMP, UFRGS), **INDIA** (IARI, MSSRF, JAIN, NIFTEM), **TURKEY** (Ataturk University), **NETHERLANDS** (UNESCO-IHE), **ETHIOPIA**, **MIDDLE EAST** (USAID/MENA, NASA Drought), **TANZANIA** (CIRCLES), **VIETNAM** (LMPPI-Harvard Kennedy School). **INDONESIA** (Bogor, USBI),

Global Engagement

Externally

- New Joint Degree Program in Food Science with Northwest Ag & Forestry University in China
- Recruiting Top Performing Undergraduate Students from Rwanda
- Advancing Research Partnerships in Brazil, Indonesia, and elsewhere



Internally

- Establishing a culture of Comprehensive Internationalization
- Creating regional interest groups and other opportunities for like-minded faculty to come together
- Expanding seed funding through “International Impact Awards”
- Institutionalizing the global engagement office – new space and larger staff

Research Growth

Major additional investments have been made in focal research areas such as:

- Nebraska Center for Virology
- Center for Plant Science Innovation
- Molecular Mechanisms of Disease
- Redox Biology Center
- Gut Function Initiative / Food for Health
- Nebraska Gateway for Nutrigenomics / Nebraska Center for Obesity Diseases
- Nebraska Food Processing Center
- Food Allergen Research and Resource Program
- Global Yield Gap Atlas
- National Drought Mitigation Center
- High Plains Regional Climate Center / Nebraska Climate Office
- Water for Food Institute / Nebraska Water Center
- Nebraska Center for Manufacturing
- Nebraska Energy Sciences Center
- Industrial Ag Products Center
- Computational Sciences Initiative
- USDA and USGS Partners





N IANR

BIG

Goals for the Next Five Years



Increasing Student Enrollment

- **550+** additional CASNR undergrad students
- **200+** additional CASNR graduate students
- **200+** additional NCTA resident students



Significant goal:

- Increasing non-resident student enrollment from **25%** to **35%**
- Increasing international student enrollment from **10.6%** to **15%**

Graduate Student Enrollment (w/out CEHS)

Program	Grad	Prof	Cert
Agricultural and Biological Systems Engineering	26		
Agricultural Economics	26		
Agricultural Education/Leadership	8		
Agronomy (MS)	70		
Agronomy and Horticulture (PhD)	70		
Animal Science	69		
Applied Science	47		
Biochemistry	29		
Biological Engineering	10		
Entomology	80		
Food Safety and Defense			5

Program	Grad	Prof	Cert
Food Science and Technology	69		
Grassland Management			4
Horticulture (MS)	4		
Integrative Biomedical Science	15		
Mechanized Systems Management	3		
Natural Resource Sciences	81		
Statistics	43		
Veterinary Science	2		
Doctor of Plant Health		8	
Professional Program in Veterinary Medicine		52	
TOTAL	652	60	9

661 → **865**

Increasing 6-Year Graduation Rates

From 75% to 82%



Faculty Success

- Assure all faculty are successful in their teaching, research, and extension missions
- Incorporate the importance of team science in to promotion and tenure, as well as annual evaluations
- Continue to recruit increasingly high quality, diverse new faculty to fill vacancies as they occur





Endowed Chairs

Increase the
number of
endowed chairs
from **13** to **25** –
next emphasis in animal,
wildlife and grassland
sciences



Increasing Faculty Recognition

Increase the number of National Academy of Sciences (NAS) faculty members in IANR

- Currently 2 of the 3 UNL NAS members are senior IANR faculty
- ***Goal of 5 in IANR by 2025***



Increasing Research

Increase research expenditures by an **additional 50%** over the current level of **\$125M**, while holding faculty numbers relatively constant.





Water *for* Food

ROBERT B. DAUGHERTY INSTITUTE
at the University of Nebraska

rural
futures
INSTITUTE
at the University of Nebraska



Buffett
Early Childhood
Institute
at the University of Nebraska



NATIONAL STRATEGIC
RESEARCH INSTITUTE
at the University of Nebraska



Increased Collaboration

Enhance collaboration across the NU system

- UNMC in the life sciences
- UNO and UNMC in engineering and NSRI
- UNK through new 2+2 programs in agricultural sciences and natural resources and engineering

GUT
function
initiative

Global Engagement



Externally

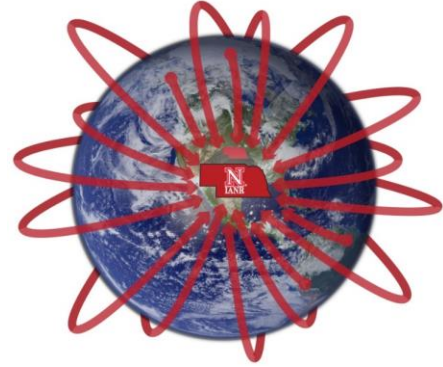
- Success of Joint Degree Program in FS&T with Northwest Ag & Forestry University in China & added at least **2** more
- Expanded to grad/completed **200** Rwandan undergrads
- Robust/Mature Research Partnerships in Brazil, China, India, Indonesia, Turkey, and Africa



Global Engagement

Internally

- Routine culture of Comprehensive Internationalization
- Successful regional interest groups
- “International Impact Award” seed funding resulted in major new international partnerships
- **2X** international enrollment & **3X** study abroad



Complete Campus Facility Upgrades

Including projects such as:

- Nebraska Veterinary Diagnostic Lab
- East Campus Student Residence Hall
- New Library Repository Module
- Renovations/Addition for Nebraska East Union
- East Campus Student Learning Commons
- NCTA Men's Dormitory
- Ruth Staples Early Childhood Lab, Nature Learning Classroom
- Greenhouse Renovations / Capacity





Capital Construction Plan

Goal: Increase Annual Funding

- Add \$11 million each to current funding stream from state and NU
- \$22 million each, 12 years = **\$400M** (approx. proceeds)
- State: Less than 2% of base increase
- NU: 1% tuition increases for 4 years

UNK – Otto Olson (Replace)	UNMC – Wittson
UNK – Fine Arts	UNMC – Pharmacy
UNL – Nebraska Hall (Replace)	UNMC – Eppley Science
UNL – Scott Engineering	UNMC – Admin (Replace)
UNL – Food Industry (East Campus)	UNMC – Nursing
UNL – Mabel Lee/Henzlik	UNO – Arts & Sciences
UNL – CBA	UNO – Durham Science
UNL – Manter	UNO – ExpansionNew Building
UNL – Hamilton	UNO - Strauss

Eastern Nebraska Research and Extension Center



Progress Update

Don Adams appointed Transitional RED on Nov. 1, 2015

- Conversations with Department Heads/Chairs
- Developing organizational chart and program planning model
 - Position descriptions for key leadership roles
- Met with ARDC staff, Northeast and Southeast Extension employees



Timelines

January 15, 2016

- Steering Committee (Heads/Chairs) meets

January/February 2016

- Finalize org charts and position descriptions
- Assess land resources for optimal use

March-April 2016

- Search for Associate REDs

July 1, 2016

- Soft launch of new ENREC





**Fill all possible
public-private partnerships at
Nebraska Innovation Campus
in Phase I capacity.**

**Bring online the next 240,000
square feet of partners.**





NEBRASKA
INNOVATION
CAMPUS



Foundation for Food and Agriculture Research



Water *for* Food

ROBERT B. DAUGHERTY INSTITUTE

at the University of Nebraska





NEBRASKA
INNOVATION
CAMPUS

FOOD
FUEL
WATER



Raise an additional
\$200M
in private funding
to support IANR
programs



Budget Increase

Increase the
aggregate
IANR annual budget
from
\$225M to \$325M



Allocation of New Resources

- **Past five years – faculty / infrastructure**
- **Priorities in the “near” term**
 - **Added graduate student support**
 - **Optimizing staff resources (amount and level)**
 - **Additional infrastructure with added growth**
 - **Additional resources for global engagement**



New Performance Management Process for IANR Staff

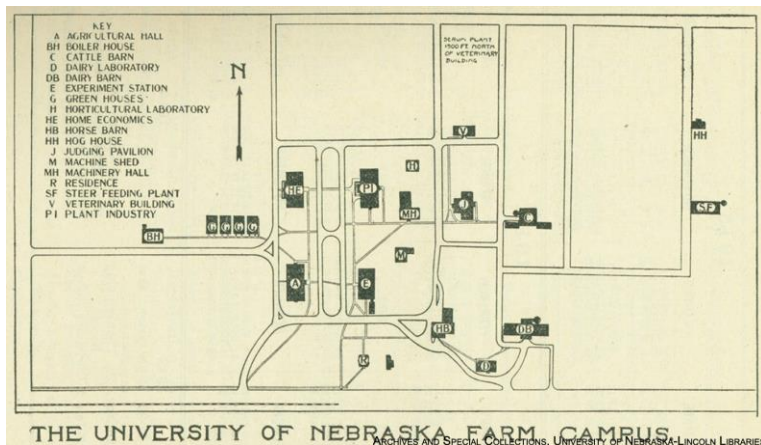
- Starting Spring 2016
- Impacts all IANR regular staff and staff supervisors
- Process will address feedback received through 2015 IANR Staff Culture Survey
- Allows for more frequent and meaningful conversations
- Performance conversations - 2 times per year focused on accomplishments, goals and priorities, and development opportunities
- Training for all staff and staff supervisors begins February 2016 – invitation to be sent by email

IANRHR.unl.edu

IANRHR@unl.edu

Succession Planning

Growing and Changing, Thanks to Years of Invested Leaders



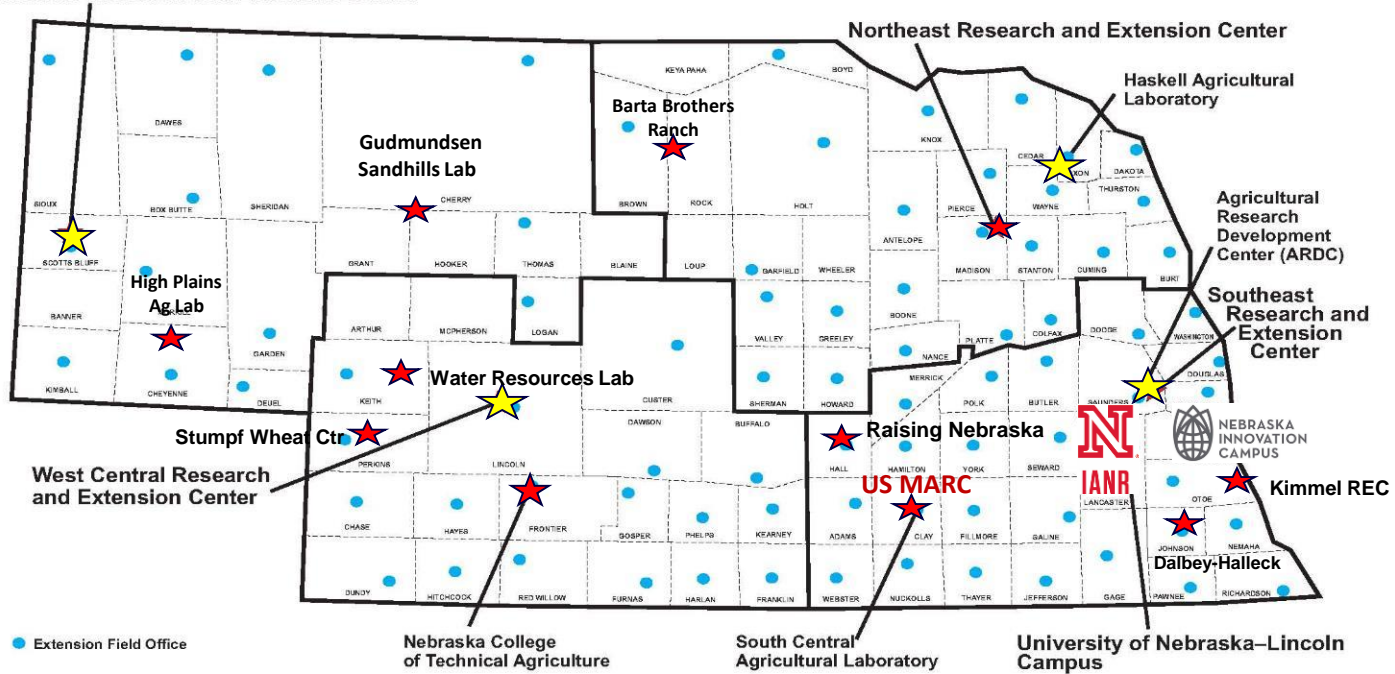
East Campus Maps during 1896 - 1914



Future Growth

UNIVERSITY OF NEBRASKA - LINCOLN

Panhandle Research and Extension Center



Integrated Teaching, Research and Extension

IANR = 38,950 acres







To be the leading public university in the world in *sustainably* “feeding the future” . . . through advancing food, energy, environmental and rural landscape security.

IANR to 2025

**What will
we look
back and
say in
January
2021?**