



# **GROWING A HEALTHY FUTURE**

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FOOD • FUEL • WATER • LANDSCAPES • PEOPLE

Agricultural Research Division  
Nebraska Agricultural Experiment Station

ARD/IANR Research Faculty Meeting

Monday, August 17, 2015



A year flies by –  
Significant progress.....Important work to do



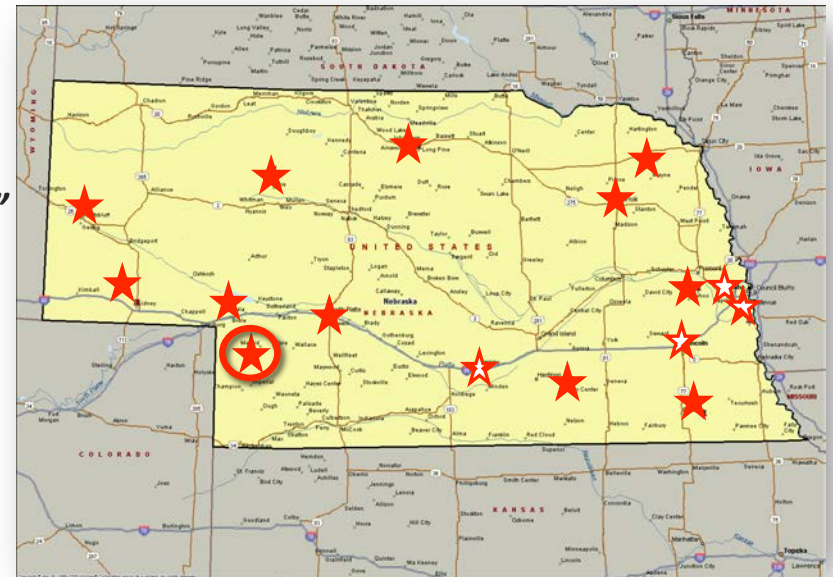
Significant progress.....Important work to do



***Leveraging New Power from our  
State-wide University of Nebraska System***

***Leveraging the Power in our State-wide “Living Laboratories”***

- Diverse Agricultural and Natural Systems
- Diverse Communities
- Stakeholder Networks/Private-Sector Partnerships
- ARD/IANR State-wide Infrastructure and Capacity



# President Hank M. Bounds, PhD

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***Became the 7<sup>th</sup> President of the University of Nebraska April 2015***

- A native of Mississippi and first-generation college student with bachelor's and master's degrees from the University of Southern Mississippi and a doctorate from the University of Mississippi
- Began as a high school teacher, and rose to principal, superintendent and state superintendent before becoming Mississippi's commissioner of higher education, overseeing a complex system with 8 public universities
- During his tenure as commissioner, student enrollment and degrees awarded in the system increased by 13.3 and 11.4 percent; he provided oversight for private fundraising in excess of \$250M
- President Bounds and his wife, Susie, are the parents of a son, Will, and a daughter, Caroline

President Hank M. Bounds, PhD

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University of Nebraska  
#GiantInHigherEd

**JOIN THE CONVERSATION**  
**WITH DR. BOUNDS:**

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**TWITTER:** @hankbounds

**INSTAGRAM:** @hmbounds

**EMAIL:** [president@nebraska.edu](mailto:president@nebraska.edu)

**WEB:** [nebraska.edu/president](http://nebraska.edu/president)

UNIVERSITY OF  
**Nebraska**



9:30 to 10:30

**ARD Updates**

- Review initiatives from FY15 and plans for FY16
  - o Undergraduate/Graduate Fellowships
  - o Bridge and Strategic (Miscellaneous) Funding Programs
  - o Foundation Program funding – update of progress
  - o Multi-state Hatch Program
  - o Transition to Team Hatch Projects
  - o USDA/USMARC – update of progress
  - o Investment aimed at Big Problems/Questions
    - Consortium on Integrated Translational Biology (CITB)
    - Sustainable Irrigation in the High Plains (ARD/DWF)
    - Next Big Problems/Questions – seeking your input

10:30 to 10:45 **Break**

10:45 to 11:00

**Position Prioritization and Hiring Process**

- Phase II
- Core Positions
- Your feedback on process

11:00 to 11:40

**Team Science – a FY16 Focus**

- Discuss methods for describing and assessing team contributions
  - o Faculty perspective (reporting)
  - o Team perspective (enhanced team performance)
  - o P/T committee and Unit Leader perspective (evaluation)
- Kickoff of year-long emphasis on Team Science
  - o This afternoon's jointly sponsored program with ORED
  - o Plans for the year

11:40 to 12:00

**Optimizing and Sustaining Critical Research Infrastructure**

# ARD Staff

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Debra Lawrence



## Office Associate

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### ***Joined ARD in 2008***

- General Office Support: Reception and Assistance
- Event Planning and Special Projects
- Scheduling for ARD Leadership Team
- Travel Management for all ARD Staff
- Administrative Support for ARD Leadership Team

Sheila Hayes



## Business Associate

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***Joined ARD in 2015***

- Monitor ARD Internal Finances
- Manage Foundation Funded Accounts and Projects
  - IANR Faculty Travel Program
  - Foundation Funded Internal Grant Programs (Spring RFA)
  - Student Travel, Fellowship, and Honors Program Awards
  - Industry Income
  - Federal Excess Property Program

Jared Evert



## Data Management Specialist

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### ***Joined ARD in 2014***

- Strategically Manage Programmatic Data and Reporting for External Research Funding
  - Commodity Boards
  - USDA Capacity & Multi-State Funds
  - USDA REEPORT
  - USDA Plan of Work
  - Biotechnology Quality Management System Support
  - Activity Insight Support
- Strategically Manage Budgets for ARD Service Centers

Barbara Gnirk



## Project and Office Management Specialist

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### ***Joined ARD in August, 2014***

- Management support for the ARD Dean
- Supervisory Oversight of ARD Office Functions and Staff:
  - Grants/Contracts/Awards
  - Budgeting and Financial Management
  - Data/Electronic File Management
  - Purchasing
  - Scheduling
- Responsible for Professional Development of ARD Office Staff
- Apply Project Management Methods to Internal ARD Projects
- Develop IANR Resources and Support for Faculty Project Management

## Hector Santiago



## Assistant Dean and Assistant Director

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***Joined ARD August 1, 2014***

- Support farm/livestock management and business and facility operation at ARDC, Research and Extension Centers and Ag Labs/Ranches
- Represent IANR/ARD on Commodity Boards
- Administrative coordinator for field releases of regulated plant materials, APHIS BQMS Quality Manager
- Assist the Dean and Director, in conjunction with other ARD staff, in coordinating and facilitating IANR's broad research mission
- Contribute to the exploration and development of stakeholder relationships and strategic industry partnerships
- Coordinate IANR Department / Center Academic Program Reviews

Tala Awada



## Interim Associate Dean & Associate Director

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### ***Joined ARD in 2015***

- Co- lead to the Consortium for Integrated Translational Biology (CITB), and the UNL USDA-ARS Long-term Agroecosystem Research (LTAR) Network
- Provides support for team building, transdisciplinary research, and high-performing research teams
- Administers the ARD Undergraduate Student Research competitive grant program, the Graduate Students Fellowship program, and the Larrick/Whitmore Graduate Student Travel Grants
- Serves as the administrative point of contact for Activity Insight
- Assists the Dean and Director, in conjunction with other ARD staff, in coordinating and facilitating IANR's broad research mission



Deb Hamernik



## Associate Dean and Associate Director

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### *Joined ARD in 2009*

- Administer Hatch and multi-state research portfolio and internal competitive research grant programs
- Facilitate faculty interactions and networking with federal funding agencies
- Link IANR faculty with UNL resources to enhance competitiveness for external funding and increase scientific impacts
- Approve IANR grants and Interest and Outside Report Forms (IOARF) in NUgrant
- Assist the Dean and Director, in conjunction with other ARD staff, in coordinating and facilitating IANR's broad research mission

## Archie Clutter



## Dean and Director

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### *Joined ARD in 2011*

- Optimize life science, agricultural and natural resources, research capabilities of 40,000+ acres, 250+ research faculty, 4 research centers across the state and an annual budget of \$80 million in grants and contracts
- Interact with other administrative leaders on campus and across the country, as well as stakeholders, including commodity organizations, to help shape IANR's life and social science research agenda
- Leverage the unique abilities within ARD for transdisciplinary, integrated research across basic, translational and applied sciences towards the demands of a quickly growing global population
- Core Value Goals for the ARD Culture:
  - Transparency
  - Accountability
  - Collaboration
  - Excellence
  - Value of Feedback
  - Respect
  - Inclusiveness

# ARD Funding Opportunities

## ***Base Programs -***

- Student Fellowships, Travel
- Faculty Travel
- Bridge/Revision Funding
- Strategic Miscellaneous Funding
- USDA Multistate Funding
- Foundation/Commodity Funding

## ***Thematic Initiatives –***

- USMARC Joint Initiative
- CPSI Seed Funds

<http://ard.unl.edu/faculty-funding>

## CURRENT--Internal ARD Funding Opportunities (cont'd):

### **IANR ARD Undergraduate Student Research Program:**

Awarded twice per year, ARD provides up to \$2,500 per student, and 50% matching is required by the participating units and/or faculty mentor

	# Apps	# Awards	Total Requested from ARD	Total ARD Investment
2014 (April and December deadlines)	6	6	\$15,000	\$15,000
2015 (April)	8	8	\$20,000	\$20,000

## CURRENT--Internal ARD Funding Opportunities

### **Larrick/Whitmore Graduate Student Travel Grants:**

Awarded on a competitive basis 3 times per year (application deadlines: January, April & August). ARD provides up to \$500 per student, to cover expense for those students who are personally presenting the results of their research and/or scholarly activity

	Total # Apps	Total # Awards	Total Requested	Total ARD Investment
2014	44	35	\$22,000	\$16,500
2015 (January & April)	30	23	\$15,000	\$11,000

## CURRENT--Internal ARD Funding Opportunities

Graduate Fellowships (2015)	Amount / award	# Apps	# Awards	Total
<b>Widaman Distinguished GA Award</b> (Research in Agriculture, 8 awards per year)	\$2,000	8	8	\$16,000
<b>Shear-Miles Agricultural Scholarship/ Fellowship</b> (Research in Agriculture, 1 award per year)	\$2,000	7	1	\$2,000
<b>Hardin Distinguished Graduate Fellowship</b> (Plant/stress physiology, 2 awards per year) *stipend, ^student program)	\$3,000* \$2,000^	3	2	\$10,000



## CURRENT--Internal ARD Funding Opportunities

<b>Graduate Fellowships</b>	<b>Amount / award</b>	<b># Apps</b>	<b># Awards</b>	<b>Total</b>
<b>Moseman Fellowship</b> (A & H students, international agriculture and genetics, 1 award per year)	\$2,500	0	0	\$0
<b>Skala Fellowship</b> (New industrial uses of ag. Products, 4 awards per year)	\$5000	4	4	\$20,000

## CURRENT--Internal Funding Opportunities:

**Faculty Travel:** *Present* original scholarly work at professional or scholarly meetings

- \$500 for travel in the U.S.
- \$800 for international travel
- Can apply at any time of the year and travel at any time
- Review deadlines:
  - January 15
  - April 15
  - July 15
  - October 15

## CURRENT--Internal ARD Funding Opportunities:

### **ARD Bridge or Revision Funding:**

**Bridge:** Provide support between one extramurally funded project and another

**Revision:** Provide support to revise and resubmit external application that received meritorious scores, but was not funded

*January 1, 2014 to August 1, 2015:*

	<u># Apps:</u>	<u>#Awards:</u>	Total Request from ARD:	Total ARD Investment:
Bridge	10	5	\$612,937	\$369,987
Revision	3	2	\$178,395	\$99,695

<http://ard.unl.edu/faculty-funding>



## CURRENT--Internal ARD Funding Opportunities:

**ARD Strategic (Miscellaneous) Funding:** Support for unique one-time needs not met by state allocations, grants, or other internal funding programs (usually requires unit matching funds)

*January 1, 2015 to August 1, 2015:*

			Total Request from ARD:	Total ARD Investment:	Total Match:
<u># Apps:</u>	<u>#Awards:</u>	<u>Total Cost:</u>			
35	32*	\$3.54 M	\$2.06 M	\$1.72 M	\$1.57 M

\*3 applications on hold, pending Hatch project, concept paper, other funding options

<http://ard.unl.edu/faculty-funding>



## CURRENT--Internal ARD Funding Opportunities:

### **2015 UN Foundation:**

Wheat, Wheat Products & Other Small Grains

Research (\$133,101)

Equipment (\$123,501)

Graduate Research Fellowships (\$173,675)

Water & Land Conservation Research (\$180,000)

GRA Support for Soil Conservation (\$0)

GRA Support for Breeding & Genetics of Food & Feed Grains  
(\$66,000)

## ANTICIPATED--Internal ARD Funding Opportunities:

### **2016 UN Foundation RFA:**

Wheat, Wheat Products & Other Small Grains

- Research
- Equipment
- Graduate Research Fellowships\*\*

Agro-ecosystems Research

- Range & pasture management
- Beef production & grassland research
- Sandhills/range management/ecology of beef & range systems

<http://ard.unl.edu/faculty-funding>



## Hatch “regular” funding:

**~\$3.0 M/year + state match:**

- 80% used for faculty salaries
- ARD faculty **MUST** have Hatch project
  - If faculty research aligns with USDA mission
  - Not for faculty with biomedical research interest
- 20% used for start-up packages, retention packages, salaries + benefits (not tuition)
  - **Encourage Team Hatch projects???**

## Team Hatch projects (since January 1, 2015):

- 7 new Team Hatch projects submitted
  - 5 peer-reviewed and approved by ARD
  - 2 reviews are scheduled
  - 4 projects submitted to NIFA
  - 4 approved by NIFA

## Review of Team Hatch Projects:

- If faculty from more than one department, submit project to Department Head of lead PI
  - Department Head reads, may suggest revisions before submitting to ARD, recommends reviewers to ARD
  - ARD schedules peer review
- All team members **MUST** be present at review meeting!

## Expectations of Team Members:

- 1) Intellectual contribution to research questions/hypotheses; writing/editing project; design/analysis of experiments;
- 2) Active participation in team meetings, sharing data;
- 3) Contribute data and updates to annual progress reports;
- 4) If no contributions, team members will be removed from teams and must develop a new Hatch project or join another team; and
- 5) If faculty are members of multiple Team Hatch Projects, **MUST** contribute to all projects as described above. If no contributions, will be removed from team.

## CURRENT—Internal ARD Funding Opportunities:

### **Hatch Multistate (~\$1.2 M/year + state match):**

- Transition to competitive process in 2012 for FY2013 funds
- Next application deadline: January 2016
- Funding starts on October 1, 2016 (federal fiscal year 2017)
- Eligibility:
  - National, five-year multistate project must start on October 1, 2016 (**start first year of 5 year project—eligible for 5 years of funding from ARD**)
  - National, five-year multistate project must have started on October 1, 2015 (**in the first year of the 5 year project—eligible for 4 years of funding from ARD**)

<http://ard.unl.edu/faculty-funding>

## **Hatch Multistate Projects that expire in 2016:**

(eligible for 5 years of funding from ARD—apply in January 2016)

NC1034 (Impact Analysis & Decision Strategies for Ag Research)

NC1191 (Weeds as Phytometers in a Changing Environment)

NC1192 (An Integrated Approach to Control Bovine Resp Diseases)

NC1193 (Assessing & Addressing Individual & Environmental...)

NC1195 (Enhancing Nitrogen Utilization in Corn Based Cropping...)

NCCC046 (Development, Optimization, & Delivery of ...)

W2112 (Reproductive Performance in Domestic Ruminants)

W2173 (Impacts of Stress Factors on Performance, Health...)

<http://ard.unl.edu/faculty-funding>





## **Hatch Multistate Projects that expire in 2017:**

(eligible for 5 years of funding from ARD—apply in January 2017)

NC007 (Conservation, Management, Enhancement, Plant Genetic...)

NC1199 (N-3 Polyunsaturated Fatty Acids & Human Health...)

NC1200 (Regulation of Photosynthetic Processes)

NC1201 (Methods to Increase Reproductive Efficiency in Cattle)

NC1202 (Enteric Diseases of Food Animals: Enhanced Prevention...)

NC213 (Marketing & Delivery of Quality Grains & Bioprocess...)

NE1201 (Mycobacterial Diseases of Animals)

NE1227 (Ovarian Influences on Reproductive Success in Ruminants)

S1056 (Enhancing Microbial Food Safety by Risk Analysis)

W3177 (Enhancing the Competitiveness & Value of U.S. Beef)

<http://ard.unl.edu/faculty-funding>

## CURRENT—Internal ARD Funding Opportunities:

### **Hatch Multistate (FY2016 funding—applied in January 2015):**

- Supplemental Funding (\$10,000/PI)
- Enhanced Funding (\$100,000/single PI or team)

	<u># Apps:</u>	<u>#Awards:</u>	<u>Total Request from ARD:</u>	<u>Total ARD Investment:</u>
Supplemental:	4	4	\$232,740	\$160,000
Enhanced:	7	7	\$2.66 M	\$2.53 M

## CURRENT--Internal ARD Funding Opportunities:

### **McIntire-Stennis:** Cooperative forestry research

- Deadline: Friday, August 14
- One new project (\$75,000/year x 5 years)
- Start October 1, 2016
  
- Anticipate similar RFA in 2016 for FY2017 funding  
*(contingent upon available federal funding)*

## CURRENT—Internal ARD Funding Opportunities:

### **Animal Health & Disease Research (Section 1433)**

- Current: Six projects at \$19,000/year x 5 years
- One project expires September 30, 2016
- Anticipate new RFA in 2016 for FY2017 funding  
(start date October 1, 2016)  
*(contingent on available federal funding)*

## CURRENT--Internal ARD Funding Opportunities:

**ARD and US MARC:** Enhance existing research collaborations , or initiate new research collaborations, between IANR faculty with an ARD appointment and scientists at the US MARC

- \$250,000/year ARD + \$250,000/year US MARC
- 2014 RFA: 5 projects (\$431,518 total)
- 2014 Targeted Investments: 6 projects (\$505,084 total)
- Future...

## CURRENT—Ongoing Internal ARD Funding:

### Center for Plant Science Innovation Competitive Seed Grant Program – Initiated in 2013

- 3 proposals funded, each at \$60K/yr for up to two years
- Jointly funded:



<http://ard.unl.edu/faculty-funding>



# ARD Funding Opportunities

## ***Base Programs -***

- Student Fellowships, Travel
- Faculty Travel
- Bridge/Revision Funding
- Strategic Miscellaneous Funding
- USDA Multistate Funding
- Foundation/Commodity Funding

***How do we  
incentivize, and  
leverage to, the next  
level of impacts?***

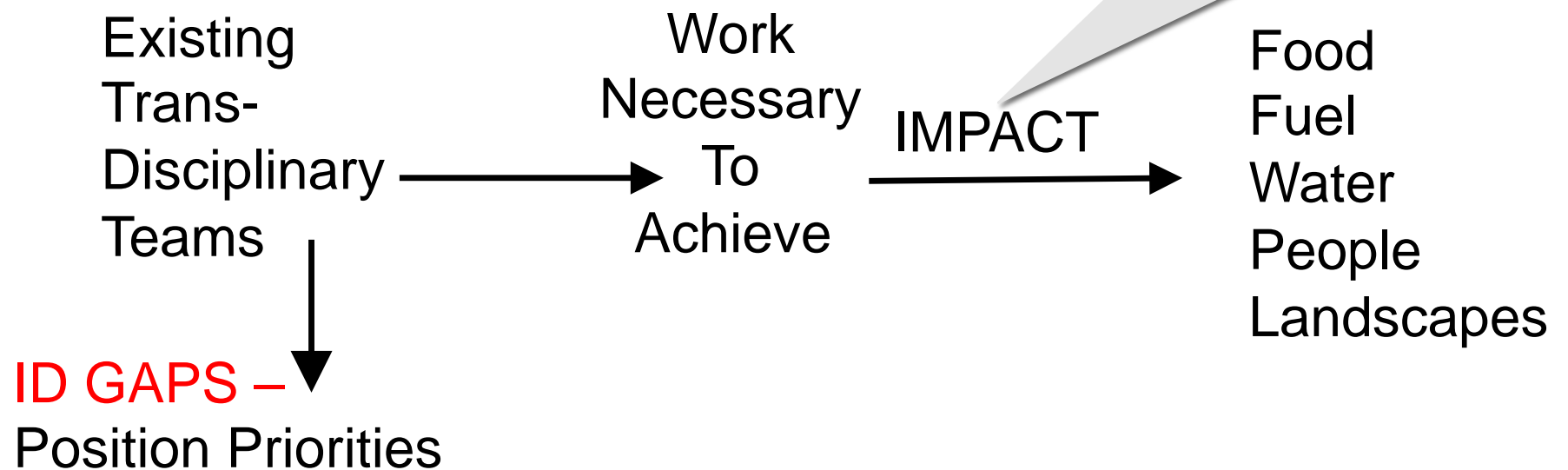
## ***Thematic Initiatives –***

- USMARC Joint Initiative
- CPSI Seed Funds

<http://ard.unl.edu/faculty-funding>

# IANR Strategic Growth Initiative

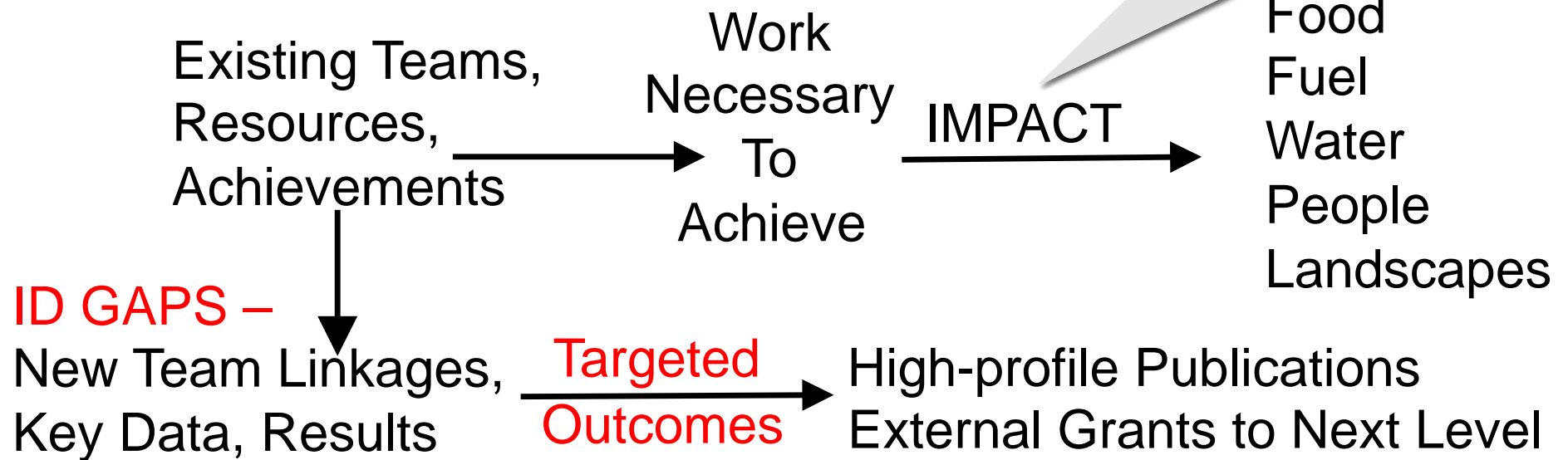
## *Phase II and Beyond*





# ARD Strategic Investment

*Aimed at Solving Big Problems/Qu*

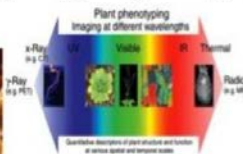


# ARD Strategic Investment

## *Aimed at Solving Big Problems/Questions*

**Consortium for Integrated Translational Biology**  
Creating a transdisciplinary environment to bridge the  
genotype to phenotype gap

**Plant Genetic Variation**



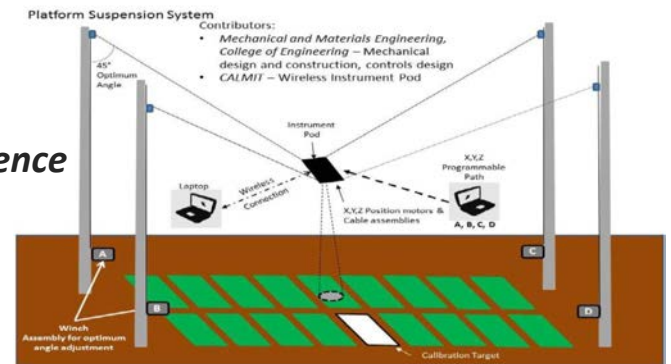
**Capturing Phenotype**



***Multi-scale Phenomics and Other Infrastructure for Translational Plant Science***

*Jointly funded –*

AGH, PSI, ARD, IANR VC, Nebraska Research Initiative





Institute of Agriculture and Natural Resources  
Agricultural Research Division  
Nebraska Agricultural Experiment Station  
University of Nebraska-Lincoln



## **ARD/DWFI Request for Concept Papers: Sustainable Irrigation Systems**

***Concept Papers due: March 31, 2015***

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**PURPOSE:** While irrigated cropland systems are important for producing food, feed and fuel, there is concern that irrigated systems in the High Plains region of the United States may not be sustainable. For the purposes of this Request, sustainable food production is defined as systems that are socially acceptable, economically feasible and environmentally responsible. In addition, sustainable food production systems in the High Plains require effective management of natural resources and the environment as well as economic development opportunities to maintain or enhance rural communities. Thus, one of the big questions facing food, feed, and fuel producers is, “Are there existing or potential models for sustainable irrigated cropping systems in the High Plains region of the United States?”

This question is of interest to the ARD and the Robert B. Daugherty Water for Food Institute (DWFI). As such, the two units are partnering to provide assistance to IANR faculty to address this question.

## *Around What Critical Problems/Questions is IANR/UN Uniquely Positioned to Lead ?*

- Start to draw your input today- and plan additional discussions
- Some parallel events can give us a framework –

Today's afternoon session:

INFEWS (Innovation in Food, Energy, and Water Systems)

U of Nebraska – Food for Health Initiative

Developing Plans for 2016 Heuermann Lecture Series

Debate format (similar to Intelligence<sup>2</sup> format)

Draft Debate Themes:

- Sustainable, science-based livestock systems for global protein demand
- Role of organic production in an optimized global food system

# Food – Fuel – Water - People



Grazing/Livestock  
Systems

Cropping  
Systems

Food  
Systems



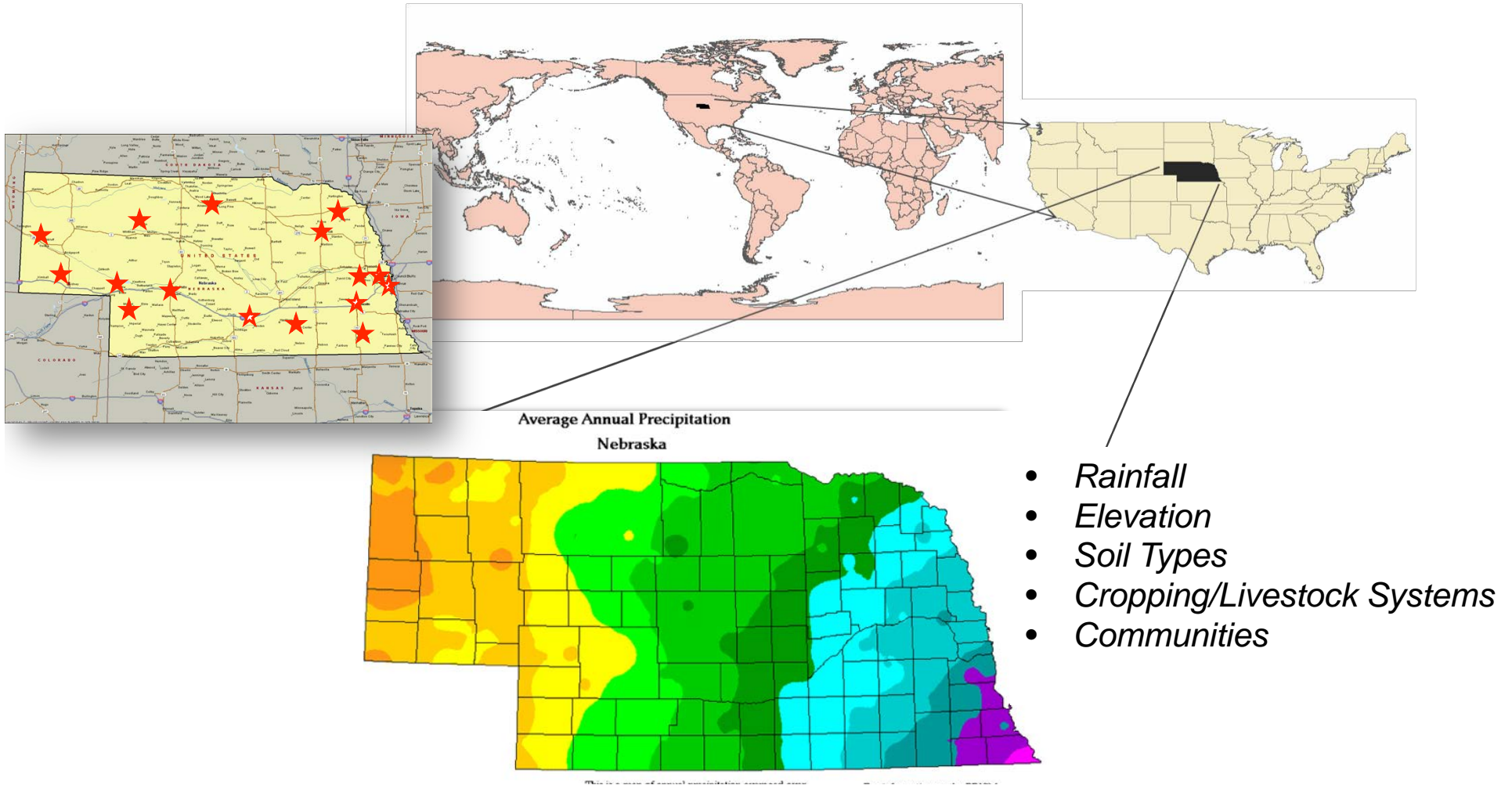
Landscapes



Communities

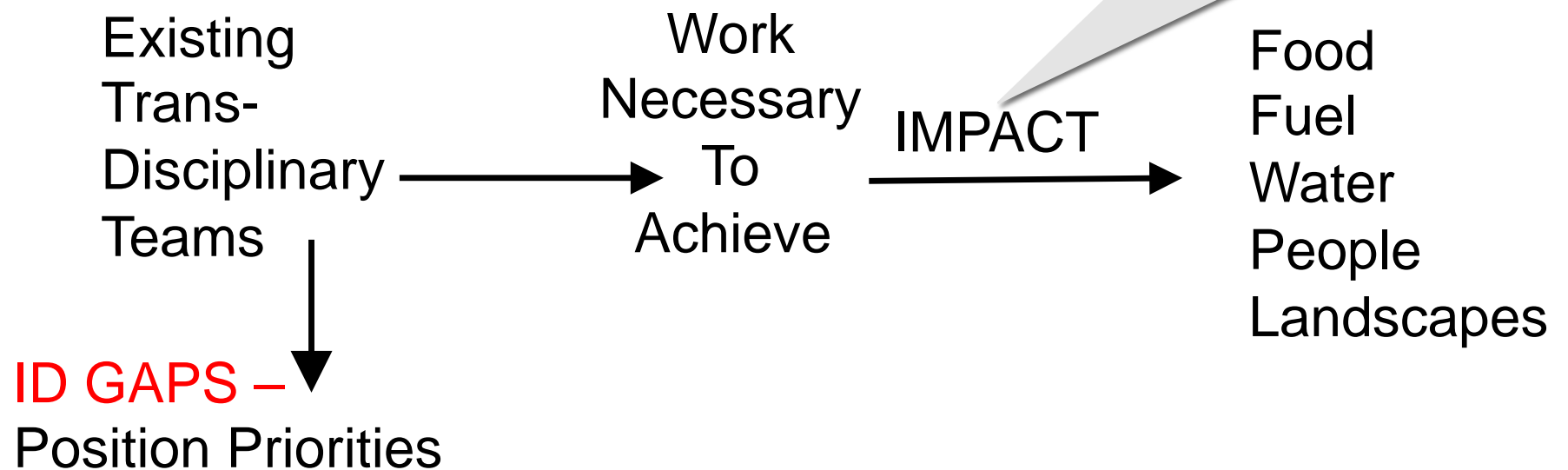


## *Nebraska is a 'Living Laboratory' of Natural Environments...*



# IANR Strategic Growth Initiative

## *Phase II and Beyond*



Phase I Recap - 38 Positions Successfully Filled!  
34 with ARD appt. (21.5 FTE)

## Priority Positions – Phase I

### Core Positions

- Community Leadership Development
- Advanced Machinery Systems Engineer
- Rangeland Ecologist
- Behavioral Economist
- Micrometeorologist
- Food Allergy Risk Assessment Specialist (2)
- Cropping Systems Agronomist (2)

### Science Literacy

- Life Sciences Education
- Science Literacy Coordinator
- Science Literacy Specialist

### Stress Biology

- Plant Arthropod Interactions
- Plant Molecular Physiologist (2)

- Advanced Sensing Systems Scientist/Engineer
- Plant Biotic Stress Biologist
- Plant Virologist
- Animal Stress Physiologist
- Functional Genomics
- Animal Breeding Genomics
- Animal Theoretical Quantitative Geneticist
- Agroecosystems Ecologist
- Quantitative Ecologist

### Computational Sciences

- 'Omics
- Organismal

### Healthy Humans

- Behavioral Based Epidemiology
- Behavioral Economics & Health Disparities

- Childhood Health Behaviors
- Food Safety Risk Assessment
- Food Lipid Chemistry & Functionality
- Lipid Metabolism & Health

### Healthy Systems for Agricultural Production & Natural Resources

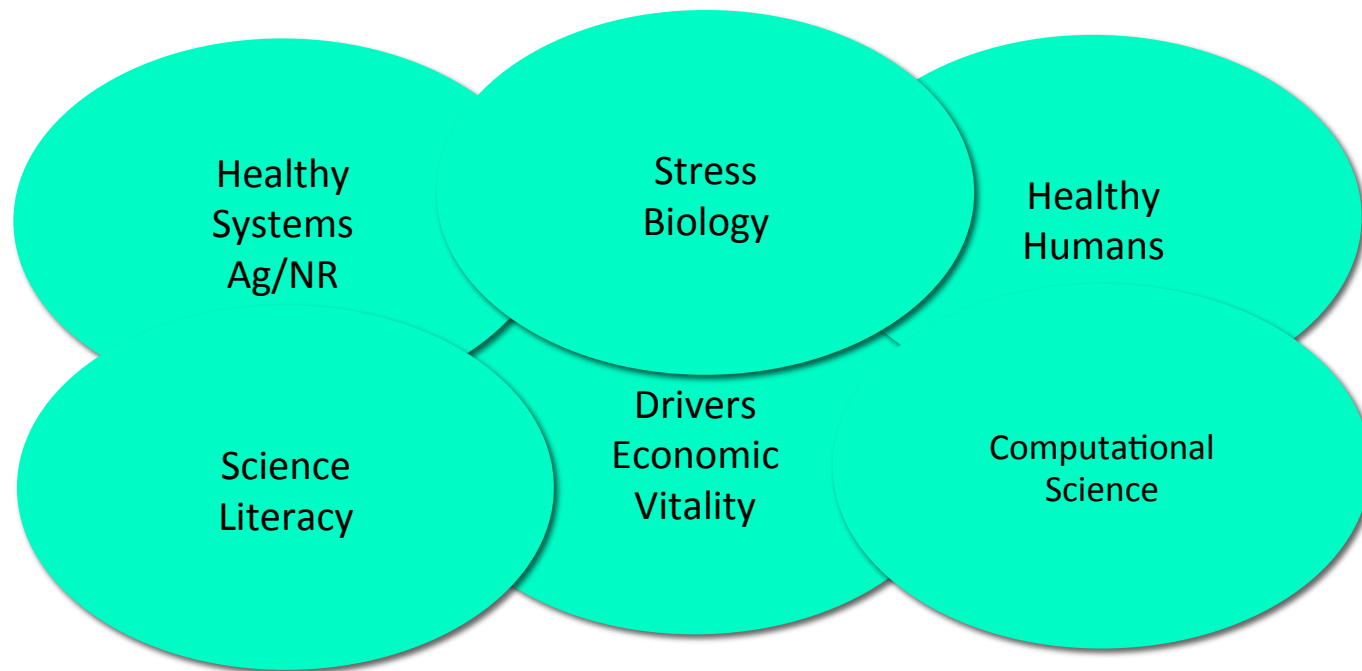
- Beef Systems Specialist
- Biosystems Economist
- Forage/Crop Residue Systems Specialist
- Range/Forage Management Ecologist
- Dryland Cropping Systems Specialist
- Water Resource Management Engineer

Updated 3/12/2015



# IANR Strategic Growth Initiative

## *Phase II Update*



[HOME](#)[STUDENTS](#)[FACULTY & STAFF](#)[RESEARCH & EXTENSION](#)[ALUMNI, FRIENDS & DONORS](#)[CONNECT WITH US](#)

## Join Our Growing Team at IANR

A LITTLE BACKGROUND ON IANR'S RECENT HIRING INITIATIVES:

The Institute of Agriculture and Natural Resources (IANR) at the University of Nebraska-Lincoln (UNL) is committed to world-class excellence in applications of agricultural and life sciences towards a sustained high quality of life for the citizens of Nebraska, and for a quickly growing global population.

Early in 2013, reflecting this commitment, IANR launched an initiative to hire new tenure-track faculty members in strategic impact areas of: Science Literacy; Stress Biology of Plants, Animals, and Agroecosystems; Healthy Humans; Healthy Systems for Agricultural Production and Natural Resources; and Computational Sciences. This Phase 1 effort was very successful, resulting in the recruitment and hiring of 38 highly skilled tenure-line faculty members. [Click here to see all Phase 1 new hires.](#)

IANR is now moving forward with Phase 2 of this hiring initiative. Check back on this page for continued updates on new positions available and also dates and times for candidate seminars.

## RECENT FACULTY HIRES



Karsten Koehler, *Nutrition and Health Sciences*, Start Date 8/12/2015

[VIEW UPCOMING CANDIDATE SEMINARS](#)[VIEW PHASE 2 OPEN POSITIONS](#)[VIEW CORE OPEN POSITIONS](#)

## DID YOU KNOW?



**40 new faculty**

joined IANR since the summer of 2013



**34 new positions**

projected to be posted in 2015



**6 focus areas**

for Phase 2 positions



## Stress Biology Positions

POSITION	DESCRIPTION	APPLY LINK
<b>Cropping Systems Specialist</b>	Will lead a program in cropping systems under limited water availability, at the West Central Research and Extension Center at North Platte.	<a href="#">APPLY NOW</a>
<b>Integrated Weed Management Specialist</b>	Will lead a program to reduce competition from weeds in cropping systems important to Western Nebraska, at the Panhandle Research and Extension Center at Scottsbluff.	<a href="#">APPLY NOW</a>
<b>Metabolic Flux Analysis</b>	Will lead a program on metabolic flux analysis to enhance understanding of metabolic networks and increase the predictive nature of genetic manipulations for improved crop and/or microbe performance through collaborations with faculty in the Stress and Computational Biology Initiatives.	<a href="#">APPLY NOW</a>
<b>Microbiologist in Plant/Soil Systems</b>	Will lead a program in bacteriology with focus on applied research in agricultural systems using metagenomics and other molecular methods to address important basic and applied questions regarding plant root-microbe interactions, with focus on root and soil microbiomes to identify those communities and members that affect plant root structure and function.	<a href="#">POSITION CLOSED</a>
<b>Pollinator Health</b>	Will lead a program in apiculture and pollinator health that will complement existing programs and priorities in Entomology and the Institute of Agriculture and Natural Resources.	<a href="#">POSITION CLOSED</a>
<b>Soil Rhizosphere Chemist</b>	Will lead a program to ensure good soil health for providing sustainable yields by providing better understanding of soil nutrient and water availability for novel sustainable management strategies.	<a href="#">COMING SOON</a>
<b>Soybean Genomics</b>	Will lead maintenance and growth of soybean research capacity at the University of Nebraska aimed at understanding soybean genome structure and function with applications to breeding, genetics, physiology, and production systems.	<a href="#">POSITION CLOSED</a>



## Healthy Systems for Agricultural Production and Natural Resources Positions

POSITION	DESCRIPTION	APPLY LINK
<b>Climate Risk and Adaptation</b>	Will lead a program on climate with focus on climate risks, climate impacts, and climate adaptation strategies associated with agricultural and natural resource systems.	<a href="#">COMING SOON</a>
<b>Beef Systems Veterinarian</b>	As a member of the Beef Systems cluster, provide educational leadership for a statewide Veterinary and Livestock Extension program encompassing veterinary preventive medicine, animal health, animal husbandry, and livestock stewardship.	<a href="#">APPLY NOW</a>
<b>Environmental Horticulturist</b>	Will develop a high-impact teaching program that is recognized nationally and internationally in Environmental Horticulture.	<a href="#">APPLY NOW</a>
<b>Swine Extension Specialist</b>	Will provide statewide programming and coordinate efforts among state and national partners to collectively develop, deliver, and assess innovative technologies benefiting Nebraska's swine industry.	<a href="#">APPLY NOW</a>
<b>Veterinary Epidemiologist</b>	Will lead a program focused on prevention of bovine respiratory disease in beef cattle, with principal goals of contributing to the viability of the beef industry in Nebraska through research and extension programming.	<a href="#">APPLY NOW</a>
<b>Water Quality Engineer/Scientist</b>	Will lead a program that addresses emerging water quality issues in agricultural and natural resource systems at the field and watershed scales.	<a href="#">APPLY NOW</a>



## Healthy Humans Positions

POSITION	DESCRIPTION	APPLY LINK
<b>Cancer and Metabolic Disease</b>	Will lead a program focused on the interface of nutrition, microRNAs and fetal programming, with emphasis on obesity-related metabolic diseases, and possible links to cancer.	<a href="#">POSITION CLOSED</a>
<b>Food Physical Chemist</b>	Will lead a program in food physical chemistry with focus on how molecular and physical interactions of food components affect functional, nutritional, processing, and storage of foods.	<a href="#">POSITION CLOSED</a>
<b>Health Policy</b>	Will lead a program on the role of health and food policy in the food environment and will contribute to the "Healthy Humans: Food Environment," focused on the interrelationships among health and food policies, the food environment, nutrition, behavior, risk reduction and health outcomes.	<a href="#">POSITION CLOSED</a>
<b>Biomarkers of Human Disease</b>	Will lead a research program focused on the discovery, validation and application of laboratory-based biomarker protocols to assess disease risk.	<a href="#">APPLY NOW</a>
<b>Poverty / Social Determinants of Health and Opportunity</b>	Will contribute expertise to the food environment cluster related to the effects of poverty and other social determinants of health on food availability, food choices, food insecurity, health, and health and education inequalities.	<a href="#">APPLY NOW</a>
<b>Fetal Programming and Dietary MicroRNAs</b>	Will develop a nationally and internationally recognized, federally-funded (including NIH) research program focused on the interface of nutrition, microRNAs and fetal programming, with emphasis on obesity-related metabolic diseases.	<a href="#">POSITION CLOSED</a>
<b>Genetics and Metabolic Diseases</b>	Will develop a nationally and internationally recognized, federally-funded (including NIH) research program focused on the genetics of obesity-related metabolic diseases and nutrition.	<a href="#">POSITION CLOSED</a>



## Computational Sciences Positions

POSITION	DESCRIPTION	APPLY LINK
<b>Agricultural Information Systems</b>	Will lead a program creating information technology to record, transmit, archive, and access digital information to manage the health, productivity, and sustainability of agricultural and natural resource systems.	<a href="#">COMING SOON</a>
<b>Agro-Ecosystems Spatial Economist</b>	Will incorporate spatially explicit data in economic analyses to address the proper management of ecosystems.	<a href="#">POSITION CLOSED</a>
<b>Bayes Spatio-Temporal Analysis</b>	Will lead a program in methodological development of Bayes spatio-temporal modeling and analysis.	<a href="#">POSITION CLOSED</a>
<b>Quantitative Remote Sensing Scientist</b>	Will lead a program in the development of innovative data integration and analysis methods of multi-scale remote sensing observations with practical application in agriculture (e.g., crop phenotyping and plant stress), water resources, natural resources, and environmental monitoring.	<a href="#">APPLY NOW</a>
<b>Statistical Prediction – Genetics</b>	Will lead a program in predicting plant phenotypes using a variety of data types, in particular using image analysis.	<a href="#">APPLY NOW</a>





## Drivers of Economic Vitality Positions

POSITION	DESCRIPTION	APPLY LINK
<b>Agribusiness Management</b>	Will lead a program regarding how an agribusiness firm operates in the food and agricultural sector; how firms coordinate and respond to the external business environment; and how agribusiness managers make decisions and plan for long-term changes.	<a href="#">APPLY NOW</a>
<b>Bioprocess Engineer</b>	Will lead an interdisciplinary program in production of bio-based products, primarily from agricultural materials and byproducts, in partnership with on-campus faculty members and with external partners including industry, commodity boards, and state and federal agencies.	<a href="#">APPLY NOW</a>



## Science Literacy Positions

POSITION	DESCRIPTION	APPLY LINK
<b>Teaching and Learning Specialist (4-H)</b>	Will provide leadership for the development of innovative educational strategies for non-formal youth learning environments.	<a href="#">APPLY NOW</a>

## Core Positions

POSITION	DESCRIPTION	APPLY LINK
<b>Gastrointestinal Microbiologist</b>	Will develop an internationally recognized research program relevant to microbial ecology of the intestinal tract and to develop and offer academic courses in food microbiology and microbial ecology.	<a href="#">APPLY NOW</a>
<b>Agricultural and Rural Cooperatives</b>	Will create a nationally recognized research-based educational programs for the Nebraska agricultural cooperative membership and for students at UNL.	<a href="#">APPLY NOW</a>
<b>Insect Toxicologist</b>	Will develop a high-impact research and teaching program that is recognized nationally and internationally in insect toxicology which contributes to organizational missions.	<a href="#">APPLY NOW</a>
<b>Food Protein Chemist</b>	Will maintain and expand research and teaching efforts in food protein chemistry within the Department of Food Science and Technology.	<a href="#">APPLY NOW</a>

## A current interview site – Schedules and links to video

- Center for Biotechnology/PSI monitoring for seminars to advertise
- Reminder link will be added to the (new) IANR News Now

ianr.unl.edu

Join Our Team | Institute of Agriculture and Natural Resources | University of Nebraska-Lincoln

HOME STUDENTS FACULTY & STAFF RESEARCH & EXTENSION ALUMNI, FRIENDS & DONORS CONNECT WITH US

### Get to Know the Candidates

Find out more about potential candidates coming to campus to interview for some of our priority positions. Attending a seminar gives stakeholders a chance to not only meet the candidates but learn more about his or her teaching, extension, and/or research activities.

#### Upcoming Candidate Seminars

POSITION	CANDIDATES, DATES AND TIMES
<i>Quantitative Remote Sensing Scientist</i> (70% Research, 30% Teaching) <i>School of Natural Resources</i>	<b>Jose Chavez</b> - Research, July 13 - 9:30am - 901 HARH <b>John Gamon</b> - Research, August 10 - 9:30am - 901 HARH <b>Bradley Rundquist</b> - TBD
<i>Bioprocess Engineer</i> (75% Research, 25% Teaching) <i>Biological Systems Engineering</i>	<b>Ganti Murthy</b> - August 13, 2015 - 10:30am - Nebraska East Union <b>Vijay Singh</b> - August 27, 2015 - TBD <b>Mark Wilkins</b> - September 9, 2015 - TBD <b>Yebo Li</b> - September 16, 2015 - TBD
<i>Integrated Weed Management Specialist</i> (50% Research, 50% Extension) <i>Agronomy &amp; Horticulture</i>	<b>Rodrigo Werle</b> - Seminar recording located at: <a href="https://connect.unl.edu/p1wev436gvt/">https://connect.unl.edu/p1wev436gvt/</a> - Q&A Session - August 14, 2015 - 2:00pm, 150 Keim <b>Nevin Lawrence</b> - Seminar - August 26, 2015 - 10:00am CST - <a href="https://connect.unl.edu/phweed_interview/">https://connect.unl.edu/phweed_interview/</a> - Q&A Session - August 24, 2015 - 2:00pm, 150 Keim <b>Eric Westra</b> - Seminar - August 24, 2015 - 10:00am CST - <a href="https://connect.unl.edu/phweed_interview/">https://connect.unl.edu/phweed_interview/</a> - Q&A Session - August 26, 2015 - 2:00pm, 150 Keim

# New Faculty Success Network

## *Creating and Fostering a Dynamic Community*

- Entering 3<sup>rd</sup> year of program
- Offered to new faculty - hired within last 3 years
- Monthly luncheons with open discussion – agenda set based on participant input (new content this fall to include interaction with NuTech)
- Monthly faculty-led brownbag discussions





Feedback?

# Team Science

## *An Ongoing Focus for ARD*

- Moving Forward an IANR Discussion of Describing and Assessing Contributions to Research Teams
- Kicking Off a Year of Programming Emphasizing Team Science

## **For Discussion**

### **ASSESSING AND EVALUATING CONTRIBUTIONS TO TEAM SCIENCE AGRICULTURAL RESEARCH DIVISION INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES UNIVERSITY OF NEBRASKA**

There is a critical need for the formation of transdisciplinary teams to achieve the research, and integrated research, teaching and extension outcomes required to meet the great challenges embedded in the broad mission of IANR. The Agricultural Research Division includes a diverse array of disciplines, and the most specific criteria for evaluation of faculty performance and tenure and promotion are developed within the Units, driven by the requirement of well-documented scholarly accomplishments and impacts consistent with the described position of the faculty member. While it is recognized that important impacts may occur through individual endeavors, impacts consistent with the vision and mission of IANR increasingly require transdisciplinary team-based research, often in teams that integrate aspects of teaching and/or extension.

With that need for communicating and evaluating contributions to teams in mind, criteria are presented below in the form of a set of questions that may be useful for drawing out specific descriptions and metrics of an individual's contributions to team efforts. The criteria are presented today as way to move forward the discussion, and potentially provide a framework for faculty to describe their contributions to teams (including through 360<sup>0</sup> feedback from other team members), and Promotion and Tenure Committees to use in thinking about their evaluation of those contributions and feedback to faculty.

CRITERIA FOR CONSIDERATION OF CONTRIBUTIONS TO TEAM-BASED RESEARCH AND  
TEAM-BASED RESEARCH INTEGRATED WITH TEACHING AND/OR EXTENSION\*

1. What was the individual's role in driving project(s) forward through delivery of key outcomes?
2. What research or integrated research accomplishments of the team can be attributed to the individual?
3. How was each of the individual's contribution(s) essential for the overall success of the project?
4. Was each contribution original rather than a reproduction of the work of others?
5. How are the specific contributions of the individual to collaborative projects regarded in her/his field of research?
6. How did the individual contribute to a culture of collaboration, teamwork and shared responsibilities?

\*Based on suggested guidelines for the NCI Center for Cancer Research

- Faculty Member's Perspective – drawing out metrics and concise descriptions of contributions to Team outcomes as part of reporting achievements (value of 360° feedback)
- Unit Leaders/P&T Committee Perspective – providing a framework for assessing contributions and providing feedback to Faculty members
- Team Perspective – making these discussions (questions) part of team building and planning can help lead to high-performance of the team

# Team Science

## *An Ongoing Focus for ARD*

### Kicking Off a Year of Programming Emphasizing Team Science

- This afternoon's program on INFEWS and Food for Health
- Working jointly with ORED towards a Research Leaders Program
- Discussions with Company partners about sharing of training/development opportunities in Research Leadership, High-Performing Teams, Project Management
- Joint program development with NuTech (IP management, Private-sector partnerships, Startups, etc.)
- Continue to look for synergisms with CED's development of High-Performing Extension Teams

Tuesday, August 14  
1:00 – 3:00

- Innovations at the Nexus of Food, Energy & Water Systems (**INFEWS**)

NSF: \$75M

USDA NIFA: \$150 M

- **NU** Food for Health

- Ideas Labs

(Innovative Method to Form Interdisciplinary Research Teams)

# Call for White Papers on INFIEWS

- What are the fundamental research questions in FEW?
- What are the research opportunities?
- What are the knowledge and/or technology gaps?
- How would you define the fundamental science and engineering research priorities in FEW systems?
- Has this concept been identified as a high priority or requirement in previous studies or roadmaps?
- How does this concept fit with other national and international plans and activities?

**Deadline: November 27, 2015**

<https://www.soils.org/science-policy/get-involved/infews-white-papers>





# NSF Regional Grants Workshop

- November 2-3, 2015
- Arlington, VA
- Visit NSF & NIFA Program Officers November 4-5
- Contact Deb Hamernik if interested

# **Optimizing and Sustaining Critical Research Infrastructure**

# ARD Research Infrastructure

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- Development of a Five Year Rolling Infrastructure Plan for FY 2016 -2020
- Include all ARD facilities across State
- Identify current and future needs
- Description and Justification of improvements
  - Benefits to current or future research programs
- Prioritization of infrastructure improvements
- Estimate of investment

# Biotechnology Quality Management System

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- Comprehensive review of the program since inception
- Thorough review of program scope and finances
  - Assessment of business plan and service center model
  - Considerable reduction in rate for FY16
  - Significant investment by ARD
- Successfully Completed
  - UNL Internal Audit
  - USDA External Audit
  - Resulting in continuous recognition of the UNL BQMS Program for FY 15

# South Central Agricultural Laboratory (SCAL)

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- Irrigation System Expansion
  - Provide irrigation to 88 additional acres
  - 2 new irrigation wells
  - 2 Linear move irrigation system
  - Total Investment - \$320,727
  - ARD Investment - \$160,727

# Greenhouse Renovations 2014-2015

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## East Campus

- All East Campus Greenhouses
- Added WiFi to all headhouses and selected greenhouses

## AHG3 - Greenhouse E

- Glass Roof Glazing
  - remove all old glazing, clean glass, and reglaze
- Lighting
  - remove old HID lights and install Lumigrow LED lighting
- Remove blackout cloth

# Greenhouse Renovations 2014-2015

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- Interior Partition
  - replace with new product
- Planting Bed & Pit Infill
  - create solid concrete floor
- Add new Aluminum doors with door closures
- Sump Repairs in cooling system
- Remove old planting benches and replace with new ones
- Install new stir fans

# Greenhouse Renovations 2014-2015

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## Greenhouse A

- Glass Roof Glazing
  - remove all old glazing, clean glass, and reglaze
- Lighting
  - remove old HID lights and install Lumigrow LED lighting
- Add new Aluminum doors with door closures
- Sump Repairs in cooling system
- Remove old planting benches and replace with new ones
- Install new stir fans



# Greenhouse Renovations 2014-2015

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## Plant Pathology Greenhouses

### PPG – Greenhouse B1

- currently in progress – just finishing benches
- Remove old wooden benches
- Fill in dirt planting beds with concrete for a new solid concrete floor
- Add remodeled benches removed from AHG3

### PPG – Greenhouse A

- project in conjunction with Facilities – currently in progress
- Replace all old HID lights with LED lights

# Greenhouse Renovations 2014-2015

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## **PPG – Headhouse**

- Removal of old growth chamber (1)
- Installation of new growth chambers (2)
- Ordered and scheduled to arrived by the end of August 2015

## **Beadle Greenhouse**

- Removal of old growth chambers (2)
- Installation of new growth chambers (2)
- Ordered and scheduled to arrive by the end of August 2015