

2017 Water for Food Global Conference Schedule

Plenary sessions from the conference will be streamed live on our website. Videos of all the sessions will be archived on our YouTube channel and available for viewing by April 30.

Conference speakers are listed alphabetically, not necessarily in order of presentations.

MONDAY, APRIL 10

NEBRASKA INNOVATION CAMPUS | CONFERENCE CENTER

8:00 a.m. – 6:00 p.m.

Transportation

Roundtrip van transportation between the Courtyard Marriott (808 R Street) and Nebraska Innovation Campus (2021 Transformation Drive) will be available throughout the day. The hotel loading zone is located at the hotel's main entrance facing "R" Street. The Nebraska Innovation Campus loading zone is located outside the NIC Conference Center entrance, on the east side of the campus. A shuttle will be available at both locations throughout the day. It is approximately five-minutes each way.

Registration

The registration desk is located on the first floor of the Nebraska Innovation Campus Conference Center — to the west of the meeting rooms.

Poster and Photography Competitions

The 2017 Water for Food Global Conference features a juried poster competition for graduate students, posters by faculty and DWFII partners and a photography competition displaying "Water for Food" imagery from around the world. The poster display and photography exhibit are located in the hallway north of the banquet hall on the second floor.

Exhibit Booths

Information and publications from conference sponsors and the Daugherty Water for Food Global Institute are available on the main floor next to the registration desk.

8:00 – 9:00 a.m.

Breakfast (Banquet Hall)

9:00 a.m. – 5:30 p.m.

TECHNICAL WORKSHOPS AND SEMINARS

9:00 a.m. – 5:30 p.m.

By Invitation

AquaCrop-OS Workshop: Predicting a Better Future for Agriculture and Water Productivity (Daugherty Water for Food Global Institute Conference Room, 3rd floor, NIC Commons Building)

This workshop will introduce invited participants to the key concepts of AquaCrop-OS, a new open-source crop-water simulation model developed by researchers at the Daugherty Water for Food Global Institute, the University of Manchester, Food and Agriculture Organization of the United Nations and Imperial College London. Participants will gain hands-on experience using the model through a range of practical exercises.

Speakers:

- Tim Foster, Lecturer in Water-Food Security, University of Manchester; United Kingdom
- Kate Gibson, Program Coordinator, Daugherty Water for Food Global Institute; Lincoln, Nebraska

9:00 a.m. – 12:30 p.m.

By Invitation

Water Application Innovation Consortium: Strategic Collaborative Partnerships Developing New Synergies to Create Innovation in Agriculture and Landscape Water Productivity (Room B1-3 – First Floor)

The Foundation for Food and Agriculture Research (FFAR) will introduce invited participants to a new Irrigation Consortium, a proposed collaboration developed by the Colorado Water Institute, the Irrigation Association and FFAR. Presenters will give an overview of the consortium and discuss its potential role it in supporting research on water availability, agricultural water use and efficiencies, and the need for better understanding of applied science surrounding irrigation. An open forum for discussion will follow.

Speakers:

- LaKisha Odom, Scientific Program Director, Foundation for Food and Agriculture Research; Washington, D.C.
- Stephen Smith, Water Resources Engineer, representing the Colorado Water Institute and the Irrigation Association; Fort Collins, Colorado

11:00 a.m. – 12:30 p.m.

Developing Water Stress Tolerant Crops Through Image-driven Plant Phenotyping
(Room A1 – First Floor)

This technical session will emphasize advancements in the development of new genotypes with improved photosynthetic and water efficiency that can better adapt to climate variability through breeding and molecular transformation, and the role of sensing technologies such as high throughput plant phenotyping, and leaf to field scale measurements in speeding up the selection process and development of new genotypes. Presenters will highlight the genotype by environment by management interactions with an emphasis on drought and other abiotic stresses.

Moderator:

Archie Clutter, Dean Agricultural Research Division, Institute of Agriculture and Natural Resources, University of Nebraska–Lincoln

Panelists:

- Yufeng Ge, Daugherty Water for Food Global Institute Faculty Fellow; Assistant Professor, Biological Systems Engineering, University of Nebraska–Lincoln
- Pat Morgan, Senior Scientist, LI-COR Biosciences; Lincoln, Nebraska
- James Schnable, Daugherty Water for Food Global Institute Faculty Fellow; Assistant Professor, Department of Agronomy and Horticulture, University of Nebraska–Lincoln
- Addie Thompson, Postdoctoral Research Associate, Department of Agronomy, Purdue University; West Lafayette, Indiana
- Harkamal Walia, Daugherty Water for Food Global Institute Faculty Fellow; Associate Professor, Department of Agronomy and Horticulture, University of Nebraska–Lincoln

11:00 a.m. – 12:30 p.m.

Keep it Covered: Lessons from Nebraska’s Cover Crop Experience and Global Applications (Room A2-3 – First Floor)

This session reviews ongoing Nebraska cover crop research and extension efforts and potential applications to cropping systems in other countries. While cover crops have the potential to benefit ecosystems, they may also negatively affect crop yields and water balances. Speakers will clarify where cover crops best fit in cropping systems, along with

their potential and differing environmental roles. They will also discuss water requirements when cover crops are added to a system.

Moderator:

Roger W. Elmore, Daugherty Water for Food Global Institute Faculty Fellow; Professor of Agronomy and Extension Cropping Systems Specialist, University of Nebraska–Lincoln

Speakers:

- Burdette Barker, Graduate Student, Biological Systems Engineering, University of Nebraska–Lincoln
- Humberto Blanco, Associate Professor, Agronomy and Horticulture, University of Nebraska–Lincoln
- Cody Creech, Assistant Professor, Agronomy and Horticulture, University of Nebraska–Lincoln
- Derek Heeren, Daugherty Water for Food Global Institute Faculty Fellow; Assistant Professor, Department of Biological Systems Engineering, University of Nebraska–Lincoln
- Daren Redfearn, Associate Professor, Agronomy and Horticulture, University of Nebraska–Lincoln
- Sabrina Ruis, Post-Doctoral Research Associate, Agronomy and Horticulture, University of Nebraska–Lincoln
- Michael Sindelar, Graduate Student, Agronomy, University of Nebraska–Lincoln
- Martha Shulski, Nebraska State Climatologist; Director, Nebraska State Climate Office; Applied Climate Science Mission Area Leader; School of Natural Resources, University of Nebraska–Lincoln

12:30 – 1:30 p.m.

Luncheon and Keynote Speaker (Banquet Hall)

Timothy Prewitt, Chief Executive Officer, iDE; Denver, Colorado

1:00 – 1:50 p.m.

Water and Society Student Showcase (Second Floor Link)

Undergraduate and graduate students from the University of Nebraska–Lincoln, together with DWFI interns, will share their work related to water, food and energy through multimedia displays and guided discussions.

2:00 – 3:30 p.m.

Water Frontiers I: Drought, Water Risk and the Context for Water Markets (Room A1-3 – First Floor)

This workshop, part one in a series funded by the U.S. Department of Agriculture and in partnership with the National Drought Mitigation Center, will outline common elements and decision-making in market-based approaches to improving water use for drought risk management. Presenters in this session will explore the water transaction outlook, water policy trends and the role of public versus private investment in facilitating water markets.

Moderator: Nick Brozovic, Director of Policy, Daugherty Water for Food Global Institute; Lincoln, Nebraska

Speakers:

- Christopher Hartley Deputy Director and Senior Environmental Markets Analyst, Office of Environmental Markets, U.S. Department of Agriculture; Washington, D.C
- Martin Doyle, Director, Water Policy Program, Nicholas Institute for Environmental Policy Solutions, Duke University; Durham, North Carolina
- Richael Young, President, Mammoth Trading; Denver, Colorado

2:00 – 3:30 p.m.

Ethiopia: Lessons Learned in Water and Food Security (Room B1-3 – First Floor)

This session will examine the Ethiopia’s humanitarian crisis in light of the significant international assistance it has received to address water and food insecurity. What lessons have been learned after decades of interventions across a wide variety of sectors, including agriculture, food security and water policy? What projects and interventions have been most successful and why? Given that more than 10 million people in Ethiopia have been affected by acute food insecurity conditions and below-average rainfall, exacerbating political tensions, what can international actors do to prevent violence and enhance food and water security? Panelists will draw attention to the challenges of incorporating local lessons and local voices.

Moderator:

Roberto Lenton, Professor, Biological Systems Engineering, University of Nebraska–Lincoln; Daugherty Water for Food Global Institute Distinguished Fellow

Speakers:

- Peter McCornick, Executive Director, Daugherty Water for Food Global Institute; Lincoln, Nebraska
 - Patrice McMahan, Daugherty Water for Food Global Institute Faculty Fellow; Associate Professor, Department of Political Science, University of Nebraska–Lincoln
 - Tsegaye Tadesse, Daugherty Water for Food Global Institute Faculty Fellow; Associate Professor, Climatologist and Remote Sensing Expert, National Drought Mitigation Center, University of Nebraska–Lincoln
 - Nicole Wall, Research and Outreach Specialist, National Drought Mitigation Center, University of Nebraska–Lincoln
 - Timothy Williams, Director for Africa, International Water Management Institute; Accra; Ghana
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3:30 – 4:00 p.m.

Break with Poster and Photography Viewing

4:00 – 5:30 p.m.

Water Productivity of Agricultural Systems (Room A1 – First Floor)

Panelists will discuss the latest research and technical innovations in monitoring and measuring water productivity through remote sensing and data collection to evaluate water and agricultural productivity gaps.

Moderator:

Christopher Neale, Director of Research, Daugherty Water for Food Global Institute; Lincoln, Nebraska

Panelists:

- Ivo Zution Goncalves, Postdoctoral Research Associate, Daugherty Water for Food Global Institute, Lincoln, Nebraska
 - Patricio Grassini, Daugherty Water for Food Global Institute Faculty Fellow; Cropping Systems Agronomist, University of Nebraska–Lincoln
 - Mesfin Mergia Mekonnen, Postdoctoral Research Associate, Daugherty Water for Food Global Institute, Lincoln, Nebraska
 - Susanne Scheierling, Senior Irrigation Water Economist, World Bank; Washington, D.C.
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4:00 – 5:30 p.m.

Water Frontiers II: Case Studies of Water Markets 1 (Room A2-3 – First Floor)

This workshop, part two in a series funded by the U.S. Department of Agriculture and in partnership with the National Drought Mitigation Center, will outline common elements and decision-making in market-based approaches to improving water use for drought risk management. Presenters in this session will examine challenges and opportunities in establishing Australia's water markets and riparian water markets in Alabama, and will consider other formal and informal water markets for drought risk management.

Moderator: Christopher Hartley Deputy Director and Senior Environmental Markets Analyst, Office of Environmental Markets, U.S. Department of Agriculture; Washington, D.C

Speakers:

- Colin Chartres, Director of Training and Master Classes, Crawford Fund, Australia; Adjunct Professor, Institute of Applied Ecology, University of Canberra, Australia
- John R. Christy, Distinguished Professor of Atmospheric Science, Director of the Earth System Science Center, Alabama State Climatologist, University of Alabama in Huntsville
- John Tracy, Texas Water Resources Institute, Texas A&M University; College Station, Texas

4:00 – 5:30 p.m.

Food, Energy and Water Education: Research, development, extension and outreach (Room B1-3 – First Floor)

In this structured poster session, we draw from a set of national food, energy and water (FEW) education projects to highlight resources, models and tools (RMTs) being used to cultivate science literacy within and across the FEW-Nexus. The session provides a forum to explore diverse RMTs and how these ideas can advance systemic efforts to support FEW education. The session leverages efforts associated with a newly established Multistate Research Committee – Collaborative for Research on Food Energy and Water Education (NCDC231) – and the Science Literacy Initiative in the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln. Expected outcomes include distillation and identification of themes (challenges, contributions, etc.) in RMTs across the projects and critical next steps to develop RMTs that enhance current and future FEW education efforts.

Moderator:

Cory Forbes, Daugherty Water for Food Global Institute Faculty Fellow; Associate Professor of Science Education, Coordinator, Institute of Agriculture and Natural Resources Science Literacy Initiative, School of Natural Resources, University of Nebraska–Lincoln; Director, Nebraska Collaborative for Food, Energy and Water Education

Panelists:

- Leilani Arthurs, Assistant Professor of Earth & Atmospheric Sciences, University of Nebraska-Lincoln
- Gillian Roehrig, Professor and President, Association for Science Teacher Education, University of Minnesota
- Troy D. Sadler, Professor and Director, ReSTEM Institute: Reimagining & Researching STEM Education, University of Missouri
- Jeyam Subbiah, Kenneth E. Morrison Distinguished Professor of Food Engineering, Biological Systems Engineering and Food Science & Technology, University of Nebraska-Lincoln

SHELDON MUSEUM OF ART | UNIVERSITY OF NEBRASKA–LINCOLN

6:00 – 6:30 p.m.

Transportation

Shuttle transportation from the Courtyard Marriott (808 R Street) to the Sheldon Museum of Art (12th and R Streets). The hotel loading zone is located at the hotel’s main entrance facing “R” Street.

6:30 – 8:30 p.m.

Opening Reception: An Evening at the Sheldon

Enjoy an elegant evening at the Sheldon Museum of Art, founded in 1888. The Sheldon collections comprise more than 12,000 artworks in diverse media. Sample a globally inspired menu of hors d’oeuvres, beer, wine and softdrinks. Acoustic music will be provided by Jarana, a duo blending South American, African and Mediterranean rhythms.

At 7:00 p.m. Daugherty Water for Food Global Institute Executive Director Peter G. McCornick will share his welcome and remarks. Immediately following will be a viewing of “The Idea of a Land Ethic: The Art of Human Connect to the Land” and a Q&A with teacher and artist Amanda Breitbach, the film’s subject.

Experience the multimedia exhibit, “Dreams to Dust: A historical example of a Midwestern American natural catastrophe and its relevance today,” which examines our connection to the land over time through photography and cinematic film. This exhibit

was specifically created for the 2017 Water for Food Global Conference by DWF
Program Associate Morgan Spiels and Undergraduate Intern Madeline Cass.

8:15 – 8:45 p.m. Return Transportation to the Courtyard Marriott

Return shuttle transportation will be provided from the Sheldon Museum of Art to the Courtyard Marriott. The loading zone is at the sidewalk at the intersection of 12th and R Streets, just south of the museum.

TUESDAY APRIL 11

NEBRASKA INNOVATION CAMPUS | CONFERENCE CENTER

7:30 a.m. – 5:00 p.m.

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Registration

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Exhibit Booths

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Poster and Photography Competitions

The 2017 Water for Food Global Conference features a juried poster competition for graduate students, posters by faculty and DWF partners and a photography competition highlighting on “Water for Food” imagery from around the world. The poster display and photography exhibit are located in the hallway north of the banquet hall on the second floor.

7:30 – 9:00 a.m.

Breakfast (Banquet Hall)

Hot breakfast with complimentary coffee and espresso drinks from The Mill Coffee & Tea

8:30 – 10:00 a.m.

Plenary Session I (Auditorium)

Introduction and Overview: Water for Food Security: From Local Lessons to Global Impacts

Welcome

Hank Bounds, President, University of Nebraska

Opening Remarks

Peter McCornick, Executive Director, Daugherty Water for Food Global Institute; Lincoln, Nebraska

Overview

Jeff Raikes, Co-founder, Raikes Foundation; Board Chair, Daugherty Water for Food Global Institute; Seattle, Washington

Plenary Speakers:

Robert Bertram, Chief Scientist, Bureau for Food Security, U.S. Agency for International Development; Washington, D.C.

“Role of Water in Food Security Investment Strategies under the Global Food Security Act”

Steven Schonberger, Practice Manager for Middle East and North Africa Region and Global Lead for Water in Agriculture, Water Global Practice, World Bank; Washington, D.C.

“Why the World Bank cares about water for food and what we are doing about it”

10:00 – 10:30 a.m.

Break with Poster and Photography Viewing

10:00 – 10:30 a.m.

Media Conference (Room D – First Floor)

10:30 a.m. – Noon

Plenary Session II (Auditorium)

Plenary Speakers:

Sithembile Mwamakamba, Climate Smart Agriculture Program Manager; Food, Agriculture and Natural Resources Policy Analysis Network; Johannesburg, South Africa

“Water and Irrigation Productivity in Small Scale Communal Irrigation Systems in Africa”

Ann M. Bartuska, Acting Under Secretary for Research, Education and Economics, U.S. Department of Agriculture; Washington, D.C.

“Agriculture in a Water-limited World”

Noon to 1:00 p.m.

Luncheon and Keynote Speaker (Banquet Hall)

Alan Kolok, Daugherty Water for Food Global Institute Faculty Fellow; Professor and Director, Nebraska Watershed Network, University of Nebraska at Omaha

“Developing the worldwide freshwater water quality map”

1:00 – 1:30 p.m. Break with Poster and Photography Viewing; Sponsor Exhibit Booths

CONCURRENT SESSIONS

1:30 – 3:00 p.m.

1:30 – 3:00 p.m.

Upscaling Solutions: Expanding access to irrigation for smallholders in sub-Saharan Africa I (Auditorium)

This session explores how public and private sector investors can support smallholder-irrigated agriculture in sub-Saharan Africa to sustainably and cost-effectively achieve greater yield gains and improve livelihoods. The session outcome will include a whitepaper synthesis of the case studies, panelist and participant input, which will serve as a basis for support to smallholder irrigated agriculture initiatives, further study and incorporation in major events such as Africa Water Week, 2017 World Water Week in Stockholm and the 2018 World Water Forum in Brasilia, Brazil.

Introduction:

Timothy Williams, Director for Africa, International Water Management Institute; Accra; Ghana

Case Study Presenters and Roundtable Leaders:

- Ayembilla Joseph Anyagbilla, Human Development Coordinator, Catholic Diocese of Navrongo-Bolgatanga; Ghana
- Richard D. Berkland, Vice President of Market Development, Global Irrigation Division, Valmont Industries, Inc.; Omaha, Nebraska
- Martin Fisher, Co-founder and Chief Executive Officer, KickStart International; San Francisco, California
- Meredith Giordano, Principal Researcher and U.S. Representative for the International Water Management Institute; Washington, D.C.
- Ruth Meinzen-Dick, Senior Research Fellow, International Food Policy Research Institute; Washington, D.C.
- Sithembile Ndema Mwamakamba, Climate Smart Agriculture Program Manager; Food, Agriculture and Natural Resources Policy Analysis Network; Johannesburg, South Africa
- Timothy Prewitt, Chief Executive Officer, iDE; Denver, Colorado

1:30 – 3:00 p.m.

Water Frontiers III: Case Studies of Water Markets, Part 2 (A1-3 – First Floor)

This workshop, part three in a series funded by the U.S. Department of Agriculture and in partnership with the National Drought Mitigation Center, will outline common elements and decision-making in market-based approaches to improving water use for drought risk management. Presenters in this session will examine the role of transaction costs in water markets and other markets, and will also discuss a variety of water transactions for achieving environmental and other goals.

Moderator: Gregory W. Characklis, Philip C. Singer Distinguished Professor, Director, Center for Watershed Science and Management, Institute for the Environment; University of North Carolina at Chapel Hill, North Carolina

Speakers:

- Kate Zook, Program Analyst, Office of Environmental Markets, U.S. Department of Agriculture; Washington, D.C.
- Michael Brady, Assistant Professor, School of Economic Sciences, Washington State University; Pullman, Washington

- Kristiana Hansen, Assistant Professor, Department of Agricultural and Applied Economics, University of Wyoming; Laramie, Wyoming
 - George Oamek, Economist with Headwaters Corporation, serving as part of Executive Directors Office for Platte River Recovery Implementation Program
 - Kent Miller, General Manager, Twin Platte Natural Resources District, North Platte, Nebraska
 - Mani Rouhi Rad, Post-Doctoral Scholar, Yale School of Forestry and Environmental Studies; New Haven, Connecticut
-

1:30 – 3:00 p.m.

Water Governance and Management in Great River Basins I (Room B1-3 – First Floor)

This session is the first in a two-part series focused on the Great River Basins. Presenters will discuss case studies and projects focusing on water quantity and quality in selected major river basins in the U.S. – the Colorado and Rio Grande Rivers and the Missouri River System – and the Ganges River in India, all with competing interests for freshwater and complex regulation and governance structures.

Moderator:

Christopher Neale, Director of Research, Daugherty Water for Food Global Institute; Lincoln, Nebraska

Speakers:

- Luna Bharati, Principal Researcher-Hydrology and Water Resources, International Water Management Institute; Bonn, Germany
 - Robert B. Jacobson, Supervisory Research Hydrologist, River Studies Branch, Columbia Environmental Research Center, U.S. Geological Survey; Columbia, Missouri
 - John C. (Jack) Schmidt, Professor, Department of Watershed Sciences, Utah State University; Logan, Utah
-

3:00 – 3:30 p.m.

Break with Poster and Photography Viewing

3:15 – 5:00 p.m.

Upscaling Solutions: Expanding access to irrigation for smallholders in sub-Saharan

Africa II (Banquet Hall)

This interactive session includes roundtable topic discussions to develop next steps for expanding irrigation access to smallholder farmers in sub-Saharan Africa. Case study presenters will preside over topic tables. Each table will address one of three discussion questions, in order. Participants will switch tables each 15 minutes, building on the input provided by the previous group. Reporters from each topic table will then share input for discussion with the panelists.

Moderator: Peter G. McCornick, Executive Director, Daugherty Water for Food Global Institute; Lincoln, Nebraska

Introduction: Francois Onimus, Senior Water Resources Specialist, World Bank; Washington, D.C.

Panelists:

- Mbogo Futakamba, Ministry of Water and Irrigation; Tanzania
- Meredith Giordano, Principal Researcher and U. S. Representative for the International Water Management Institute, Washington, D.C.
- Biniam Iyob, Water and Irrigation Advisor, Bureau for Food Security, USAID; Washington, D.C.
- Ruth Meizen-Dick, Senior Research Fellow, International Food Policy Research Institute; Washington, D.C.
- Timothy Williams, Director for Africa, International Water Management Institute; Accra; Ghana

3:30 – 5:00 p.m.

Water Frontiers IV: Future Tools and Directions (Room A1-3 – First Floor)

This workshop, part four in a series funded by the U.S. Department of Agriculture and in partnership with the National Drought Mitigation Center, will outline common elements and decision-making in market-based approaches to improving water use for drought risk management. Presenters in this session will examine the limits of water markets as a risk management tool, the legal outlook for water transactions, as well as the role of new tools and technologies in facilitating water transactions.

Moderator: Kate Zook, Program Analyst, Office of Environmental Markets, U.S. Department of Agriculture; Washington, D.C.

Speakers:

- Gregory W. Characklis, Philip C. Singer Distinguished Professor, Department of Environmental Sciences and Engineering; Director,

Center for Watershed Science and Management, Institute for the Environment, University of North Carolina at Chapel Hill

- Harriett Hageman, Managing Partner, Hageman Law; Cheyenne, Wyoming
- Christopher Hartley Deputy Director and Senior Environmental Markets Analyst, Office of Environmental Markets, U.S. Department of Agriculture; Washington, D.C
- Mike Joliffe, Chief Water Officer, Upstream Tech; Syracuse, New York
- Mark Svoboda, Daugherty Water for Food Global Institute Faculty Fellow; Director, Associate Research Professor, National Drought Mitigation Center, University of Nebraska–Lincoln

3:30 – 5:00 p.m.

Water Governance and Management in Great River Basins II (Room B1-3 – First Floor)

This session continues the earlier discussion focused on the Great River Basins, exploring the question of whether agriculture must suffer the impacts from water releases in order to maintain in-stream flows.

Moderator:

John (Jack) Schmidt, Professor, Department of Watershed Sciences, Utah State University

Speakers:

- Jerry Kenny, Executive Director, Platte River Recovery Implementation Program; Kearney, Nebraska
- Bradley H. Udall, Senior Water and Climate Scientist and Scholar, Colorado Water Institute, Colorado State University; Fort Collins, Colorado

3:30 – 5:00 p.m.

Growing the World's Largest Agricultural Producer Databases – What's the Yield? (Auditorium)

Undergraduate students in the University of Nebraska-Lincoln's Raikes Design Studio have teamed up with faculty to develop an online database that will house the world's largest field-level producer dataset. The goal is to provide a useful, anonymized

information source that producers, producer groups, researchers and water managers can use to make wise decisions to enhance agricultural productivity. Students will provide a demonstration of the database and its functionality, and will discuss their experiences learning from producers across Nebraska to understand how to make data useful.

Introduction: Jeff Raikes, Co-founder, Raikes Foundation; Board Chair, Daugherty Water for Food Global Institute; Seattle, Washington

Moderator: Kate Gibson, Program Coordinator, Daugherty Water for Food Global Institute, University of Nebraska; Lincoln, Nebraska

Speakers:

- Patricio Grassini, Daugherty Water for Food Global Institute Faculty Fellow; Cropping Systems Agronomist, University of Nebraska–Lincoln
- Ashlyn Lee, Undergraduate Student, Raikes School of Computer Science and Management, University of Nebraska–Lincoln
- Jeremy Suing, Design Studio Project Manager, Raikes School of Computer Science and Management, University of Nebraska–Lincoln
- Fatima-Amor Tenorio, Graduate Student, Agronomy, University of Nebraska–Lincoln
- Austin Wendt, Undergraduate Student, Raikes School of Computer Science and Management, University of Nebraska–Lincoln

5:00 – 6:00 p.m.

Break

6:00 – 6:15 p.m. – **Transportation to Roca Berry Farm**

Note: Please be at the pick-up locations 15 minutes early! The bus will leave NIC at 6:05 p.m. and the Courtyard Marriott at 6:15 p.m.

Motorcoach transportation from Nebraska Innovation Campus, Entrance A, and the Courtyard Marriott (808 R St.) will be provided. Personal vehicles may park in the lot on the north side of NIC.

Roca Berry Farm (16531 South 38th Street) is 10 miles south of Lincoln via Hwy 77, Roca Exit (Hwy 33). If you are driving to the farm in your own vehicle, please follow the signs to the Creekside Barn on the property. *There will be valet parking at the barn. Dinner participants are encouraged to take advantage of the complimentary roundtrip motorcoach transportation.*

6:30 – 7:30 p.m.

Reception and Live Music by the Boomtown Boys

Unwind and enjoy hors d'oeuvres, wine and local craft beer. The Boomtown Boys are strung together from some of Lincoln's most talented musicians: Mike Semrad, guitar; Brian McGovern, mandolin; Nate Morris, percussion; David Morris, bass. They play a mix of original and classic Americana styles including Bluegrass, Country and Rock & Roll. Feel the Boom!

7:30 – 9:315 p.m.

Nebraska Bar-be-que Dinner

Dig in to Nebraska's best bar-be-que, featuring locally sourced beef brisket, chicken sliders and vegetarian delights! The beautiful, 100-year-old Creekside Barn at Roca Berry Farm is the perfect setting to celebrate our global conference and Nebraska's 150th year of statehood. A special presentation, live music and dancing will follow dinner. Casual attire is appropriate.

9:15 – 9:30 p.m. Return Transportation to NIC and the Courtyard Marriott

Note: The motorcoach will begin loading at 9:15 p.m. and will leave promptly at 9:30 p.m.

Return motorcoach to the Courtyard Marriott and NIC will be provided. The loading zone is located directly in front of the Creekside Barn. It is approximately 15 minutes to the hotel and NIC in Lincoln.

WEDNESDAY, APRIL 12

NEBRASKA INNOVATION CAMPUS | CONFERENCE CENTER

7:30 a.m. – 7:30 p.m.

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Exhibit Booths

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Poster and Photography Competitions

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7:30 – 9:30 a.m.

Breakfast (Banquet Hall)

Hot breakfast and complimentary coffee and espresso drinks from The Mill Coffee & Tea

8:30 – 10:00 a.m.

Plenary Session III (Auditorium)**Welcome**

Michael Boehm, Harlan Vice Chancellor, Institute of Agriculture and Natural Resources, University of Nebraska–Lincoln; University of Nebraska Vice President for Agriculture and Natural Resources

Plenary Speakers

Brian Richter, Director, Global Freshwater Strategies, Nature Conservancy; President, Sustainable Waters; Crozet, Virginia

“Chasing Water in a Dynamically Changing World”

Chandra Madramootoo, James McGill Professor, Bioresource Engineering Department, Faculty of Agriculture and Environmental Sciences, McGill University; Quebec, Canada

“Irrigation and Value Chain Development”

10:00 – 10:30 a.m.

Break with Poster and Photography Viewing; Sponsor Exhibit Booths

10:30 a.m. – Noon

CONCURRENT SESSIONS

10:30 a.m. – Noon

Groundwater Governance from Field to Global Scales (Auditorium)

This session will examine groundwater governance case studies from around the world, including the western U.S., India, South America and the Middle East and North Africa region. Presenters will share their experiences of how to make governance work, with a variety of perspectives from local to global scales. Cases will include both high productivity and smallholder systems, with a range of management experiences.

Moderator:

Nick Brozovic, Director of Policy, Daugherty Water for Food Global Institute;
Lincoln, Nebraska

Speakers:

- Christina Babbitt, Manager, California Groundwater Program, Environmental Defense Fund; San Francisco, California
 - Mohammed Bazza, Senior Water Resources Officer, Land and Water Division, Food and Agriculture Organization of the United Nations; Italy
 - Jeff Fassett, Director, Nebraska Department of Natural Resources; Lincoln, Nebraska
 - Marcos Heil Costa, Climate Scientist, Universidade Federal de Viçosa; Brazil
 - Ruth Meinzen-Dick, Senior Research Fellow, International Food Policy and Research Institute; Washington, D.C.
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10:30 a.m. to Noon

Climate Change Impacts on Water and Agriculture: Developing Country-level Strategies
(Room A1-3 – First Floor)

Climate change in coming decades will have a significant impact on the quantity and quality of water resources available for agriculture — globally and locally. Understanding the projected changes in climate and dealing with these impacts and their consequences requires interdisciplinary collaboration. This session brings together scholars, technical personnel and policymakers involved in developing solutions to the impacts of climate change on water and agriculture. Presenters will touch on research, teaching, and service components.

Moderator:

Clinton Rowe, Daugherty Water for Food Global Institute Faculty Fellow; Professor, Earth and Atmospheric Sciences, University of Nebraska–Lincoln

Speakers:

- Caspar Ammann, Climate Science and Applications Division, National Center for Atmospheric Research; Boulder, Colorado
- Jayaka Campbell, Department of Physics, University of the West Indies; Kingston, Jamaica
- Alfred Grunwaldt, Climate Change and Sustainable Development Sector, Interamerican Development Bank; Washington, D.C.
- Juan Jose Nieto, Centro Internacional para la Investigación del Fenómeno de El Niño- CIIFEN; Quito, Ecuador
- Robert Oglesby, Daugherty Water for Food Global Institute Faculty Fellow; Professor, Climate Modeling, University of Nebraska–Lincoln
- Tsegaye Tadesse, Daugherty Water for Food Global Institute Faculty Fellow; Professor, School of Natural Resources, University of Nebraska–Lincoln
- Azar Abadi, PhD Student, Department of Earth and Atmospheric Sciences, University of Nebraska–Lincoln

10:30 a.m. to Noon

Empowering the Water Community: Citizen Science in Action (Room B1-3 – First Floor)

This session will give participants a close look at developing a citizen science program — from start to finish. Presenters will outline the steps involved in completing a project focused on water quality monitoring of herbicides and nutrients across Nebraska. Presenters will discuss the process of developing a web-based data management system and selecting analytical tools for reliable and precise water quality measurement. Participants will walk away with an understanding of the power and pitfalls of citizen science and the importance of developing community ties.

Moderator:

Alan Kolok, Daugherty Water for Food Global Institute Faculty Fellow; Professor and Director, Nebraska Watershed Network, University of Nebraska at Omaha

Other speakers:

- Shannon Bartelt-Hunt, Daugherty Water for Food Global Institute Faculty Fellow; Associate Professor, Civil Engineering, University of Nebraska–Lincoln
- Ann Fruhling, Professor and Director, School of Interdisciplinary Informatics, University of Nebraska at Omaha
- Krystal Herrmann, Program Manager, Nebraska Watershed Network, University of Nebraska at Omaha

10:30 a.m. – 12:00 p.m.

Health as a Human Right (Room C – First Floor)

This session will advance our understanding of rural communities in fostering citizens' perceptions of health as a human right. Presenters will discuss the findings from a survey project conducted in Ainsworth, Nebraska that aimed to assess environmental factors that contribute to well-being, such as clean water, nutrition and healthy livestock. Participants will be asked to consider the importance of communities in improving life in rural America. Furthermore, this session deepens our understanding of how one research project can incorporate multiple actors, including rural youth.

Moderator:

Peter Longo, Daugherty Water for Food Global Institute Faculty Fellow; Professor, Political Science Department, University of Nebraska at Kearney

Speakers/Panelists:

- Satoshi Machida, Associate Professor, Political Science Department, University of Nebraska at Kearney
- Chuck Rowling, Assistant Professor, Political Science Department, University of Nebraska at Kearney

Noon – 1:00 p.m.

Luncheon and Award Presentations (Banquet Hall)

8th World Water Forum Presentation

Dale Jacobson, Governor, World Water Council; Omaha, Nebraska

Poster and Photography Competition Award Presentations

Jesse Starita, Education and Outreach Associate, Daugherty Water for Food Global Institute; Lincoln, Nebraska

Amber Poythress, Events Coordinator, Daugherty Water for Food Global Institute; Lincoln, Nebraska

1:00 – 1:30 p.m. Break with Student Showcase and Art Show viewing; Sponsor Exhibit Booths

1:30 – 2:45 p.m.

View from the Field (Auditorium)

Farmers from Nebraska, California and Brazil will share their experiences and discuss water management practices in agriculture, touching on their shared challenges and unique differences.

Moderator:

Ron Yoder, Associate Vice Chancellor, Biological Systems Engineering, University of Nebraska–Lincoln

Speakers:

- Brant Burkey, Owner, Burkey Farms Inc.; Director of Product, IntelliFarm, Inc.; Lincoln, Nebraska
 - Leon Kriesel, Owner, Kriesel Certified Seed; Gurley, Nebraska
 - Danny Merkley, California Farm Bureau; Sacramento, California
 - Celestino Zanella, Pivot Farmer and President of the Association of Farmers and Irrigators of Bahia (AIBA); Brazil
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2:45 – 3:00 p.m. Break with Student Showcase and Art Show viewing (2nd floor Link)

3:00 – 4:00 p.m.

Closing Panel (Auditorium)

Panelists from a variety of disciplines will review and reflect on the conference topics, leading a discussion on the major opportunities, challenges and next steps necessary to address the world's pressing water and food security needs.

Moderator:

Roberto Lenton, Professor, Biological Systems Engineering, University of Nebraska–Lincoln; Daugherty Water for Food Global Institute Distinguished Fellow

Speakers:

- Michael Boehm, Harlan Vice Chancellor, Institute of Agriculture and Natural Resources, University of Nebraska–Lincoln; University of Nebraska Vice President for Agriculture and Natural Resources
- Giovanni Piccinni, Global Production Sustainability Lead, Monsanto Co; St. Louis, Missouri
- Margaret Catley-Carlson, DWF International Advisory Panel member; Vice Chair, Canadian Water Network, Vancouver, Canada
- Bashir Jama, Division Manager, Agriculture and Food Security Division, Islamic Development Bank; Jeddah, Saudi Arabia

4:00 – 4:30 p.m.

Break with Refreshments (2nd floor Link)

Student Showcase and Art Show

Enjoy light snacks and view a diverse selection of art and infographics by local professional artists and University of Nebraska–Lincoln students. Artists and students will be available to discuss their work as it relates to water, food and environmental sustainability.

4:30 – 5:30 p.m.

Closing Plenary and Heuermann Lecture (Auditorium)

Arthur Gen “A.G.” Kawamura, Founding Co-Chair, Solutions from the Land and former California Secretary of Agriculture; Irvine, California

“Whisky is for Drinking. Water is for Living...”

The challenges facing this century's thirsty and hungry world provide us with both threats and opportunities. Our past collective human experience can help us understand where we've been; however, our focus must lie on the new thinking and vision required to embrace the future. Society must not allow “deferred maintenance” or “deferred thinking” to delay the agricultural renaissance ahead. It is time to address the difficult

work ahead through a collaborative and solution-oriented approach to our agricultural endeavors. Kawamura will address how creating abundant water, food and energy systems forms the framework for a thriving world.

5:30 – 7:30 p.m.

Closing Reception: Celebrating Progress and Promise (Banquet Hall)

The 2017 Water for Food Global Conference, “Water for Food Security: From Local Lessons to Global Impacts,” will close with a lively celebration of African culture and flavors, drawing inspiration from the progress and promise of improving water and food security in sub-Saharan Africa. Enjoy African-inspired hors d’oeuvres, beer, wine and softdrinks.

The African Culture Connection (ACC) will share the beauty, complexity and history of African culture through teaching, dancing, drumming and visual arts. Founded in 2008 by Charles Ahovissi, a professional dancer, drummer, choreographer and educator from Benin, West Africa, the Omaha-based performance group works to educate and enrich audiences. The AAC received the 2012 National Arts & Humanities Youth Program Award, presented by former First Lady Michelle Obama.