NCAC-024 2022 Annual Meeting

January 7, 2022 – 11:00 AM – 3:00 PM Eastern

Zoom

Agenda

11:00 – 12:00 Business Meeting/ Introductions

Attendees: Matt Raven (Michigan State University) Chair, Brian Myers (University of Florida) Chair-elect, Tracy Rutherford (Virginia Tech) Secretary, George Wardlow (University of Arkansas), Mike Retallick (Iowa State University), Jonathan Velez (Oregon State University), Mark Russell (Purdue University), Becki Lawver (Utah State University), Jon Simonsen (University of Missouri), Jennifer Waldeck (University of Georgia), Christopher Stripling (University of Tennessee), Shannon Washburn (The Ohio State University), Mathew Baker (Texas A&M University), Scott Burris (Texas Tech University), Jason Ellis (Kansas State University), David Rosch (University of Illinois), Michael Newman (Mississippi State University), Carl Igo (Montana State University), John Ewing (Penn State University), Jessica Blythe (West Virginia University), Robert Torres (Arizona State University), Kris Boone (The Ohio State, adviser)

* Review Team for Project Proposal- Renewing an Agriculture of the Middle: Value Chain Design, Policy Approaches, Environmental and Social Impacts, <https://www.nimss.org/projects/18896>

Reviewers: Mark Russell, Mathew Baker, Becki Lawver

* Review NIMSS Membership
  1. Check with your AES Director to make sure you are accurately listed for this committee
* NIMSS Feedback (Kris Boone)
  1. Is this committee interested in organizing some activities? Social science angles on relevant issues
     + NCR -research activity, can provide travel funding, create visibility for projects
     + ERA – Extension Research Activity
     + Need multistate participation (four states from the same region – North Central, North East, Southern, Western), review by regional committee then proposal forwarded to AES directors then assigned a project number, nationwide participation invitation following the project number assignment.
     + Multistate Project Proposals
  2. This committee’s participation in the active review process will move our work into competitive grant RFPs based on visibility.
* Focus of Next Year’s Meeting
  1. Identification of new project ideas
  2. Identifying what projects already exist to understand areas for new work
  3. Methodological expertise that we could be providing as contributors to projects
* Secretary Election
  1. Jennifer Waldeck
* Location/dates for Next Year’s Meeting
  1. Florida – January 4-6, 2023
  2. Kansas City, NIFA –2024 or 2025
* Other Items
  1. Update on Research Agenda – Mike Retallick
     + AAAE Research committee appointed subcommittee to work through development of new research agenda. Reporting to the AAAE Board next week and the membership in May. Agenda can inform the development of NIMSS projects.

12:00 – 12:30 [Dr. Parag Chitnis](https://nifa.usda.gov/staff-contact/parag-r-chitnis) – Associate Director for Programs, Acting Associate Director for Operations, USDA NIFA

[Peter Motavalli](https://nifa.usda.gov/staff-contact/peter-motavalli) – Community and Education division

[Kal Kalavachala](https://nifa.usda.gov/staff-contact/dr-venu-kalavacharla) – Youth, Family and Community Institute

$1.95B budget (FY21) ~74 programs, >2300 annual awards, >300 NIFA staff (more than 2019 before relocation) +~60 in Admn and Financial Mgt Unit of REE (AFM), ~50 National Program Leaders

Four Science Institutes

* Food Production and Sustainability- [Deb Hamernik](https://nifa.usda.gov/staff-contact/debora-hamernik)
* Bioenergy, Climate and Environment – [Kevin Kephart](https://nifa.usda.gov/staff-contact/kevin-kephart)
* Food Safety and Nutrition – [Suzanne Stluka](https://nifa.usda.gov/staff-contact/suzanne-stluka)
* Youth, Family and Community – [Kal Kalavacharla](https://nifa.usda.gov/staff-contact/dr-venu-kalavacharla) (on call)

NIFA Budget broken into Capacity projects, AFRI, Non-AFRI Competitive (stakeholder), COVID-19 Supplement

Influence that NIFA has is in the AFRI component ($453M)

NIFA’s Science Drivers – Congress, Administration, Stakeholders

FY2022 Administration Priorities – can’t move the needle without strong education and extension components

* Addressing Climate Change via Climate-Smart Ag & Forestry
  + Mitigation
  + Adaptation
  + Equity and Environmental Justice
  + Research and Development
* Advancing Racial Justice Equity and Opportunity
  + Building trust
  + Reducing barriers to access
  + Investing in historically underserved communities
  + Actively looking inward through an equity lens
  + Taking action
* Creating More and Better market opportunities
  + Processing and distribution capacity
  + Open and competitive markets
  + Local and regional food systems
  + Organic and emerging opportunities
  + Markets abroad
  + Safeguarding animal and plant health hand food safety
* Tackling Food and Nutrition Insecurity
  + Nutrition security and healthy food procurement
  + Child nutrition and health
  + Maternal and infant health
  + Program modernization
  + Program integrity
  + Food safety

Opportunities for Ag Ed

* Context of Administration Priorities – can we make impact on the ground?
* Evolution of AFRI
  + Integration projects – increase in expectation for integration of research, education, extension
  + Extension and Education emphasis – including nonformal education
  + Interdisciplinary projects – fundamental understanding for application in society. Need to bring social, foundational, and biological sciences together
  + New Faculty – larger emphasis to create pipeline (includes pos-doc), not as many applications from social science as they would like to see.
* Non-AFRI programs
  + Education and Extension programs
  + Integrated programs

Looking forward

* Administration’s priorities
* Listening to partners and stakeholders
* Communicating the accomplishments of partners

Peter Motavalli – focus on education, workforce development and capacity building. New programs are being developed in alignment with administration priorities. 33 programs, ~$300M, work with MSIs

Questions:

MB: Area of expertise and contribution as team players versus collaborators in teams. What advice can you give us that will encourage our faculty to step up and lead projects in your areas

PC: Problem we have struggled with – looked at Extension leads in capacity building projects. Creating single investigator level projects for education and extension

PM: Food and Ag non-formal education program focused on youth development, youth education in technology areas (biotechnology). We are hoping for more participation in that program.

<https://nifa.usda.gov/announcement/nifa-invests-over-7m-food-and-agricultural-non-formal-education>

KK: REEU grants, Challenge faculty to think outside of the box to bring in investigators from outside expertise but maintain strength of education component. Used DOE for evaluation components, Work with State DOE to identify variety of educators.

PM: Training and retraining of individuals for workforce development, manage new technologies and changing work expectations

TR: Can you talk about our other disciplines’ areas – leadership, communication, community development, sociology

PM: It takes some digging through the website, working with others to supplement the skill set and be part of a team that meet the program needs. Contact the national program directors to understand if you match the program area.

PC: How do we address the communications research? What kind of research is needed? Similar to biotechnology area historically – what words do we use to describe the science? What is the impact on the audience? We hope it gets integrated into the larger project but there is a need for single investigator research. This is an area for the pre and post-doctoral fellowship, this is a way to promote these underrepresented areas of social science.

MB: Common data sources, common agreements on how we are going to measure some of these competencies – such as critical thinking, KAI – instruments that have strong psychometric development. If USDA can help reinforce the use of consistent measures

PC: We have used innovation networks to create a community that has a voice to recognize and create repository of these types of agreed upon measures.

Social Impacts of Technology

PM: Multistate committees can have a big impact on these indices. They can provide national leadership on the common measurements.

SW: How are the FY22 priorities impacting the divisions

PM: teams are formed based on those priorities to discuss how to meet the priorities and new programs. Biggest change you will see soon is in workforce development addressing those priority areas – youth and workforce

KK: Hiring more NIFA staff with extension and social science experience. Trying to be equitable with the disciplines that we have expertise. Across all of NIFA Science institutes, including climate, etc.

BM: Other roles that we play – evaluation emphasis, education and outreach. Not seeing the same level of review of expertise of education or outreach science like we did in evaluation contributions to teams. How can show greater value in the review process for education and outreach science (putting up a website or holding a meeting are not high quality experitse)

PC: Evaluation of educational activities to measure success is being emphasized in the panels. The culture in other parts of NIFA programs takes time to get those areas evaluated seriously.

KK: This takes education and outreach with our stakeholders – talk to research, teaching and extension faculty- about the close-knit collaboration. In the next 8 months I plan to look at all RFAs and talk to NPL that all of these are equally looked at for the intellectual merit and broader impacts.

BM: Do we see a time when grant reviewers are recognizing that an expert in education and outreach must be part of the project – feedback to the grant writers. This is what changed the program evaluation collaboration.

PC: Science behind education and outreach will be important in the area of climate change. We need to be more careful about the type of science and create more knowledge to have more effective approaches to communication, education and outreach.

1:00 – 1:15 Break

1:20 – 2:20 [Dr. Bradley Barker](https://www.nsf.gov/staff/staff_bio.jsp?lan=bsbarker&org=DRL&from_org=DRL), Program Director Education and Human Resources Directorate, Division of Research on Learning in Formal and Informal Settings, National Science Foundation

https://www.nsf.gov/funding/programs.jsp?org=EHR

* Rotator with NSF – from UNL, Professor in Youth Development and Extension
* Mission: To develop a diverse and well-prepared U.S. STEM workforce and STEM literate public by supporting excellent research and development in STEM education.
  + STEM Learning and learning environments
* EHR numbers - $1.287M request, 28% success rate (21,00+ proposal reviews), 714 institutions with 1,300 awards
* Vexing problems in STEM education
  + Disparities and persistent inequities
  + Grappling with AI and other advanced technologies
  + Aligning curriculum
  + Impact of remote instruction on all learners
* DRL – invest in improvement of STEM learning for people of all ages by promoting innovative research, development and evaluation of learning and teaching
  + Advancing informal STEM learning k-gray (AISL) – really trying to expand new program
    - Media (TV, Radio)
    - Science Center, Museum
    - Science Communication
    - Out-of-school & afterschool programs
    - Outdoor experiences
    - Science outreach
  + National AI Research Institute
  + Computer Science for All
  + Discovery Research PreK-12 (DRK-12) (Michael Steele)
    - Innovation and curriculum development
    - Can bridge K-12 to undergrad
  + Innovative Technology experiences for students and teachers (iTEST)(workforce development)
    - Technology rich
    - Career and career development
    - Enhanced use of technology
    - Innovative PD experiences
    - Advanced STEM workforce
  + Research on Emerging Technologies for Teaching and Learning (RETTL)
* HRD – Human Resource Development
* DUE – Division of Undergrad Education: Strengthen STEM education by improving curricula, facilities and diversity of students
* DGE -Division for Graduate Education
* Racial Equity in STEM Education – new program
  + Fundamental, applied and practice

MB: What is your academic preparation background

BB: instructional technology Masters, PhD at UNL; interactive media professional

CI: Can we get a copy of your presentation?

BB: Yes, I will send to Dr. Raven

MR: Examples that fit in this space?

BB: Program most likely a fit for extension – iTEST; struggle to get technology and high-tech programs to rural populations. Need to be on cutting edge of these programs. Have a problem that you want to solve that will move the field forward. Job creation in rural communities – high tech manufacturing to improve livelihood of communities.

MB: Definition of workforce, how high-tech is high tech enough?

BB: post high school through PhD. Megatronics, ATE; maker movement

BM: How do we address our context of agriculture and natural resources?

BB: Not true that ag isn’t funded (health care is not funded). Purpose is to fund innovation. Where is the innovation in learning that you are trying to convey? Sound research design with strong literature background. Clear mapping between objectives, results, and measurements. Science doesn’t matter as long as you have the right components in place. How to activities match objectives?

Best way to learn about NSF is to serve on a panel. I will share my contact information.

2:30 – 3:00 [Dr. LaKisha Odom](https://foundationfar.org/about/people/lakisha-odom/), Scientific Program Director for Soil Health, Foundation for Food and Agriculture Research

Next generation of scientists – workforce development focus

New Innovator Awards

<https://foundationfar.org/what-we-do/>

How to engage – participate in review, advisory council, participating consortia

Tell us, then tell us again – answer all the questions in the proposal

Consider the reviewer and the review process – assume they have taught class all day and are reading your work at 10 pm as part of several proposals.

MR: Can existing partnerships be leveraged in a FAR proposal

LO: Yes, but they can not be expended funds. Urban Food Systems area receives the fewest proposals.

Action Items:

1. Create shared spreadsheet identifying current NIMSS projects – Tracy Rutherford, Mike Retallick
   1. Carl Igo –W Region
   2. Mark Russell – NC Region
2. Increase impact – not increase activity
   1. Small departments may not be able to lead some of these bigger projects (infrastructure) that have great innovative ideas.
   2. Create cohesive plan to work together
   3. Generate input for future RFPs from NCAC24 – Shannon Washburn reach out to Kal Kalavachala about doing this activity.

Next meeting: May 16 2022 @ AAAE National meeting, Oklahoma City, OK

8:30-10:30

3:07 Adjournment