

**NC1100
FY 2016**

Participants

John Mann

Target Audience

There were six different agriculture related groups specifically targeted in the inventor-investing matching program during the October 1, 2015 to September 30, 2016 period. This included: 1) hog production; 2) waste water management; 3) horticulture; 4) broader animal products; 5) poultry producers; and 6) aquaculture producers. Pre- and post- presentation participants included small, medium, and large firms, investors, entrepreneurs, innovation scouts, faculty-entrepreneurs, other faculty and extension professionals, rural community leaders, government agency representatives, NPO support organizations, and university administrators. The interactive presentations included 125 stakeholders, with nearly 2000 post-presentation views and 12,000 viewing minutes.

Presentation Strategy

Stakeholder presentations of new innovations included three parts: 1) problem discussion in scientific and laymen terms; 2) the solution—university developed innovation; and 3) the next step/opportunity for firm collaboration with the innovator. The format encouraged two-way communication between the faculty-entrepreneurs, potential investors, and firm owners and entrepreneurs, as well as post-presentation follow-up where potential firm-faculty connections were made.

Extension Activities

1. Inventor-investor matching program:
 - Jordan Sands (UW) “Antibiotic Free Animal Agriculture:” Dec. 2015, connected researcher to network member Barbara Blakistone at National Fisheries Institute leading to new funding to expand research into technology.
 - Mark Cook (UW) “High-Value Molecules from Animal Production” Mar. 2016.
 - Cheryl R. Boyer (KSU), Lauri Baker (KSU), and Hikaru Peterson (U. of Minnesota) “Center for Rural Enterprise Engagement:” Apr. 2016.
 - Karen Mancl (Ohio State) “Wastewater Treatment Solutions for Rural Meat Processing:” tentative for late spring 2016.
2. Other webinars:
 - Rachel Pool (Michigan State University) “Intermediary Perceptions of Rural Firm Tech Adoption” September, 2016.

A permanent link to the presentation is provided on the NCRCRD webpage, and the new NCRCRD “Innovations in Agriculture and Rural Development” YouTube page.
3. Entrepreneurship training/coaching:
 - Worked with Mike Ladisch (Purdue), Mark Cook (UW), and John Biondi (D2P, UW) to develop new and expansive training concepts for faculty-entrepreneurs. This includes incorporating PD Mann’s recent experiences as reviewer on SBIR panel in Jan. 2016.
4. Additional efforts:

- Mann (MSU) was part of collaboration with other rural development centers and led by Don Albrecht (WRDC) to increase participation in the USDA SBIR program among rural firms especially minority and women owned. Mann also incorporated experience/effort working with the American Farm Bureau Federation's Innovation Challenge into project.

Papers and Conferences:

- Reimer, A., Y. Han, S. Goetz, S. Loveridge, and D. Albrecht. 2016. "Issue Networks in U.S. Rural Policy Discourse." *Applied Economic Perspectives and Policy*. 38(2): 260-275.
- Kenney, M. and J. Zysman. 2016. The Rise of the Platform Economy. *Issues in Science and Technology* 32 (3): 61-69.
- Poole, R. and J. Mann. 2016. "Intermediary Perceptions of Rural Firm Tech Adoption." NCRCRD Policy Brief.
- Mann, John, Scott Loveridge, Steve Miller. "First-time Awardees vs. Mills: Factors Influencing the Historic Impact the SBIR program." Special presentation to SBIR/STTR National Program Leaders, NIFA, USDA, Washington, D.C., October 20, 2015.
- Parker, Jason, John Mann, and Scott Loveridge. "Urban First: USDA Research Impacts on Regional Total Factor Productivity." Paper presentation at the 63rd Annual North American Meetings of the Regional Science Association International, November 9-12, 2016.

Grants:

- Awarded NIFA/AFRI grant: "Launching Innovation from the University Starting Gate." This was borne out of the NC1100 project and includes Mann (MSU), Loveridge (MSU), and Wang (SDSU).

Other Accomplishments

- Through the inventor-investor matching program, we connected University of Wisconsin inventors working on poultry/livestock antibiotic resistance solutions to a Virginia organization interested in applying this solution to aquaculture. The innovation works as follows: (1) a chicken is inoculated; (2) lays eggs; (3) the eggs are added to other livestock food; and (4) the other livestock that eat the eggs are inoculated without receiving actual shots. Thus, the process mitigates the challenge of antibiotic resistance resulting from direct livestock inoculations. The connection made by our program resulting in a new collaboration and funding proposal between the UW research teams and the Virginia organization.
- Other NC1100 highlights from the *Innovations in Agriculture and Rural Development* series included innovations from Kansas State University, University of Minnesota, Ohio State University, Michigan State University, and the University of Illinois. For example, Karen Mancl (Ohio State University) presented cost and job saving technology for rural meat processing plants, and was able to connect to stakeholders in several states where the regulatory environments are different than Ohio. As

another example, Lauri Baker and Cheryl Boyer (Kansas State University) and Hikaru Peterson (University of Minnesota) provided relevant discoveries in new-marketing media of horticulture to a broader range of agricultural industries nationally. In total, webinars had 125 initial participants, with 2000 views and 12,000 viewed minutes after posting to our YouTube page.

- Additionally, NC1100 member Mann was part of the extension and outreach effort to increase participation in the USDA Small Business Innovation Research (SBIR) program, especially by women- and minority-owned firms. The collaboration was led by the Western Rural Development Center and included representatives from all four rural development centers and the USDA SBIR program. Mann's contribution was complimented by serving on the USDA SBIR Rural and Community Development and American Farm Bureau Federation's Innovation Challenge review panels. Finally, a collaboration among NC1100 members Mann (PD), Loveridge (co-PI), and Wang (co-PI), "Launching Innovations from the University Starting Gate" was funded by the USDA/NIFA Agriculture and Food Research Initiative (AFRI) foundational program.

NC1100 meeting:

- Virtual meeting with Mann (MSU), Loveridge (MSU), and Wang (Wang), July 2016.