



North Central Regional Association of State Agricultural Experiment
Station Directors

214th Meeting

Marriott Suites Old Town, Scottsdale, AZ – Cottonwood Room

March 25-27, 2019

Final AGENDA and [MINUTES](#)

Date/Time	Agenda Item	Topic	Presenter
Monday, March 25 - Scottsdale Room			
2:00-5:00 pm		Multistate Research Committee (MRC) Meeting (for MRC members only, although others are welcome to attend if interested). <ul style="list-style-type: none"> • New/renewal multistate proposals • Midterm reviews • NC Multistate Research Award • NRSP report • Communications Effort Discussion 	Greg Cuomo, MRC Chair 2019
5:30 pm	<i>Dinner on your own; perhaps meet in the lobby to make joint plans</i>		
Tuesday, March 26 – Cottonwood Room			
7:30 am	<i>Breakfast provided in the Cottonwood meeting room</i>		
8:00 am	1.0	Call to Order and Introductions	Joe Colletti, NCRA 2019 Chair
	2.0	Approval of Fall 2018 Minutes: (https://www.ncra-saes.org/agendas-minutes)	
	3.0	Adoption of the Agenda	
	4.0	Interim Actions of the Chair 4.1 NCRA Nominations for ESS Leadership Award 4.2 NCRA FY2020 Office Budget	Joe Colletti Greg Cuomo
8:25 am	5.0	NCRA Office Update 5.1 Activities and Accomplishments 5.2 Updated NCRA Plan 5.3 Other as needed	Jeff Jacobsen, Chris Hamilton
8:45 am	6.0	1994s Discussion Topic	Jeff Jacobsen
9:05 am	7.0	NIFA Update	Parag Chitnis, Tim Conner
9:35am	8.0	ARS Update	Alberto Pantoja
10:00 am	<i>Break</i>		
10:30 am	9.0	NRSP4 Discussion	Jerry Baron
10:50 am	10.0	ESCOPE Chair's Report to NCRA	Deb Hamernik
11:00 am	11.0	Cornerstone Update	Hunt Shipman, via Zoom

11:20 am	12.0	University Industry Consortium (UIC)	George Smith
11:40 am	13.0	NCRCRD Update	John Mann
12:00 pm	<i>Lunch</i>		
1:00 pm	14.0	Re-Imagining Multistate Projects Discussion	George Smith, Deb Hamernik
2:00 pm	15.0	APLU Update	Doug Steele, APLU
2:30 pm	16.0	Communications Session – NC and National	Greg Cuomo, Jeff Jacobsen
3:00 pm	<i>Break, as needed</i>		
3:30 pm	17.0	MRC Report and Recommendations 17.1 New/renewal multistate proposals 17.2 Midterm reviews 17.3 NC Multistate Research Award Nominee 17.4 NRSP-RC Update	Greg Cuomo, 2019 MRC Chair Jeff Jacobsen
3:45 pm	18.0	ESCOP Standing Committee Written Reports 18.1 S&T 18.2 B&L 18.3 DCC 18.4 CMC 18.5 NIDB	NC Reps Joe, Deb Shawn, Dave Bill, Jeff, Chris Deb German, Jeff
4:00 pm	19.0	Strategic Realignment Update and Discussion	Ernie Minton (Zoom)
4:45 pm	20.0	Executive Session	NCRA Directors Only
<i>Meeting Adjourns, Dinner on your own (meeting in lobby to make group plans as desired)</i>			
Wednesday, March 27 – Cottonwood Room			
7:00 am	<i>Breakfast provided in the Cottonwood Room</i>		
8:00 am	21.0	Infinity and Beyond – Generational Differences in the Workplace	Kelly Millenbah, Senior Associate Dean and Director of Academic and Student Affairs, Michigan State University
10:00 am	<i>Break, as needed</i>		
10:30 am	22.0	Institutional Service Fees Discussion	Joe Colletti, Archie Clutter
11:30 am	23.0	Other business • APLU Budget Account for ESS/ARD • NCRA Spring Meeting 2020 location selection	Jeff, Deb Chris, Jeff
12:00 pm	<i>Meeting Adjourned – Lunch Provided</i>		

Future Meetings:

- Joint COPs, Westgate Park City Resort and Spa, Park City, UT, July 23-24, 2019.
- 2019 North Central Regional Association Mini Land-Grant meeting, Bluemont Hotel and K-State Alumni Center, Manhattan, KS July 28-30, 2019.
- Joint ESS/CES-NEDA Meeting, Nashville, TN, September 23-26, 2019
- APLU Annual Meeting, Hilton San Diego Bayfront, November 9-12, 2019.

NCRA Spring Meeting Minutes: 3/25-3/26/2019

Attendees: Greg Cuomo (MN), Jerry Baron (IR-4), Tim Conner (NIFA), German Bollero (IL), George Smith (MI), Bill Barker (WI), Alberto Pantoja (ARS), John Mann (NCRCRD), Shibu Jose (MO), Gary Pierzynski (OH), Dave Benfield (OH), Archie Clutter (NE), Joe Colletti (IA), Jeff Jacobsen (NCRA), Shawn Donkin (IN), Tala Awada (NE), Hector Santiago (NE), Bill Gibbons (SD), Frank Casey (ND), Parag Chitnis (NIFA), Marty Draper (KS), Doug Steele (APLU), Kelly Millenbah (MI), Chris Hamilton (NCRA, recorder)

Item #	Topic and Notes	Actions
1.0	Call to Order and Introductions	Joe Colletti welcomed the group and introductions were made around the room.
2.0	Approval of Fall 2018 Minutes: (https://www.ncra-saes.org/agendas-minutes)	Fall 2018 Minutes Approved.
3.0	Adoption of the Agenda	Agenda Approved.
4.0	Interim Actions of the Chair 4.1 NCRA Nominations for ESS Leadership Award: The NC/ESS Excellence in Leadership award vote and discussion was led by NCRA Chair Elect Greg Cuomo. No other nominations were put forward other than one for Joe Colletti, which had been submitted by Ruth MacDonald of IA State (link here). The NCRA directors unanimously approved Joe as our NC winner of the 2019 ESS Excellence in Leadership Award. Jeff will forward Joe's nomination on to the ESCOP leadership and APLU. Joe will receive formal, national recognition at the 2019 November Annual APLU meeting in San Diego, CA. 4.2 NCRA FY2020 Office Budget: Joe led the discussion on the office budget, focusing on the \$13,000 approximate balance that will remain at the end of FY2020. Some ideas were presented on how to address changes in the annual assessments to meet changes in office expenses, especially related to salary, fringe rates, and service fees at the host institutions.	4.1: Joe Colletti of IA State was unanimously approved as the NC winner of the 2019 ESS Excellence in Leadership Award. 4.2: Discussion will be moved to Executive Session later in the day. More information to come on this item.
5.0	NCRA Office Update: 5.1 Activities and Accomplishments & 5.2 Updated NCRA Plan: Jeff discussed the basis for the plan and its dynamic nature. Jeff and Chris highlighted the routine and special activities from their accomplishments lists over the past year. Archie Clutter suggested	For information and discussion during Executive Session later in the meeting. Any updates or questions from the Plan are welcomed at any time.

	<p>pulling out some outcomes/impacts from the Plan activities over Jeff’s tenure as an agenda item for our summer NCRA meeting. Finally, please note that the NC Boot Camp 2019 will likely be, June 25-27, Kansas City, MO. Encourage your staff to apply to participate when the formal announcement is made.</p>	
6.0	<p>1994s Discussion Topic:</p> <p>Jeff highlighted the wide range of tribal college interactions and activities he’s been involved in over the past year plus and also highlighted the type of funding the 1994s receive. Jeff and George Smith emphasized that long-term relationship building is very critical for working with the 1994s. Being “here to help” can seem condescending, so being a true partner is paramount.</p>	<p>For information. Thoughts on specific future activities are welcomed.</p>
7.0	<p>NIFA Update:</p> <p>Parag reviewed his presented slides, included with the attached presentations at the end of this document. Additional notes:</p> <ul style="list-style-type: none"> • Discussion on the match waiver loss for SCRI also ensued. Parag indicated that waived overhead cannot be included in the 1:1 match. Directors indicated that fewer and smaller proposals will be submitted because of the loss of the waiver. It’s too late to make any changes for FY2019, but there is activity to attempt to make changes for future years. • FY19 RFAs are delayed due to government shutdown. One year ones were released, but AFRI will be released soon since funds do not need to be spent in this year. <p>Tim Conner also reviewed his presented slides. Additional notes:</p> <ul style="list-style-type: none"> • Merit awards not ready yet. • Tim discussed issues with the FY18 Sustainable Ag Systems AFRI (\$10M CAPs; Coordinated Ag Projects) proposals, as well as changes/simplifications for the FY19 RFA. Systems thinking tended to be lacking in the FY18 proposals, so this 	<p>For information.</p>

	<p>issue was addressed. See: http://nifa.usda.gov/program/afri-sas</p>	
8.0	<p>ARS Update:</p> <p>Alberto reviewed his updated report and the many staffing and budget changes that have occurred. The most recent brief is now included.</p>	For information.
9.0	<p>NRSP4 Discussion:</p> <p>Jerry Baron (Rutgers, IR-4 technical lead) reviewed his slides for IR-4 (NRSP4: Facilitating Registration of Pest Management Technology for Specialty Crops and Specialty Uses). NRSP4 is up for renewal next year.</p>	For information.
10.0	<p>ESCOP Chair's Report to NCRA:</p> <p>Not given due to time constraints and Deb being unable to attend the meeting. Please refer to ESCOP webpage here for Deb's site visit notes: http://escop.info/event/ecopescop-dc-visits-feb-2019/</p>	For information.
11.0	<p>Cornerstone Update: Hunt Shipman called in to give the advocacy update. Notes from Hunt's call:</p> <ul style="list-style-type: none"> • The BAC (Budget & Advocacy Committee) has developed their request for FY2020 with a \$125M increase for AFRI and our other 5 priority areas. • President's FY2020 budget proposes many cuts to a number of lines. Budget is now under review with House and Senate appropriations subcommittee. • Appropriations process probably will not be completed on-time this year. The expiration of Murray-Ryan budget agreement that avoided sequestration cuts is one reason, as well as the Disaster Supplement and the political disparity of House and Senate control. Anticipating an October CR (Continuing Resolution). 	For information.

	<ul style="list-style-type: none"> • The current Farm Bill implementation is underway with agency listening sessions occurring now. • Child Nutrition re-authorization discussion happening now as well. • Questions and other topics: <ul style="list-style-type: none"> ○ Will the Disaster Supplement facilitate a legislative fix for match waiver concerns? Probably too soon to tell right now. Conversations are occurring on the waiver issue. ○ Infrastructure language exists in President’s budget. Will that funding survive? Where might this all land? Documents cite APLU’s Sightline’s study, but it’s unclear where the funding might come from at this time. ○ The group also discussed concerns with the higher AFRI numbers (\$5M more) put forward by external groups as compared to APLU’s and how it’s important for ag research groups to be sending consistent messages. 	
12.0	<p>University Industry Consortium (UIC):</p> <p>Discussion led by George Smith. Thoughts on how to improve UIC? What’s working well, what’s not?</p> <ul style="list-style-type: none"> • Generally working well. • Scholarship/student fellowship is underway now. • Heavily concentrated in crops, would be nice to see more balanced topics going forward. • Perhaps have the leaders re-define the mission to better reflect where the group aims to go and what the future objectives should be. 	<p>Action: Shawn and George will reach out to the UIC leadership to address these issues in advance of the next meeting.</p>

	<ul style="list-style-type: none"> • Pre-meeting tours are great, great program content, but very expensive membership fees. • Seems more industry-focused rather than benefitting LGUs as much. Good partnerships have developed, though. 	
13.0	<p>NCRCRD Update:</p> <p>John Mann reviewed and highlighted topics from the prepared NCRCRD agenda brief. He encouraged the group to send possible entrepreneurs his way so he can help them identify ways their innovations might be able to benefit rural communities and allow them to be eligible for the NCRCRD small seed grants.</p>	For information.
14.0	<p>Re-Imagining Multistate Projects:</p> <p>Led by George Smith, refer to attached agenda brief for information on background and summary of recent teleconferences. The group specifically requests input from NCRA directors on:</p> <ul style="list-style-type: none"> • Are NC Directors content with the status quo for Multistate committees? No. • Are NC Directors ready to have a deeper conversation regarding the future of NC Multistate committees (all types—funded NC, CC, and ERA committees)? Yes. George will work with Deb to further lead this. <p>Group Discussion:</p> <ul style="list-style-type: none"> • Perhaps variability in project quality and engagement seems to be related to the amount of funds participants receive, as well as a lack of quality AA leadership. • UNL is beginning to track the ROI for their funded multistate programs. • How can we identify gaps as described by the Roadmap topics? • Having compelling research questions is also a good motivator. • Where should the bar be to measure where projects should be terminated or continued? 	<p>Action: Jeff will update his AA presentation and make it available for directors/AAs to use as a template when they attend committee meetings.</p> <p>Action: Another call will be scheduled with the team to develop metrics for collaborative activities and evaluate the multistate process going forward.</p> <p>Action: Chris will link award winning proposals for users to reference when they access the renewal re-write instructions. Chris will also notify committees of needs only 1-2 times in the future.</p>

	<ul style="list-style-type: none"> • How can we improve AA engagement and committee leadership? They aren't all reading the available training material, so is there a more effective way to share this information? • Help provide training on team science within the committee meetings to better help new faculty succeed and in turn improve the projects. • NIFA feedback: NPLs really look forward to attending and engaging with quality projects. • Much of the expectations for committees and reporting is available on the NCRA Multistate Handbook: https://www.ncra-saes.org/multistate-handbook • Chris reminds committees several times to submit reports, renew, etc. Perhaps this should occur only once to help weed out dysfunctional groups and improve self-motivation. • Perhaps develop a new AA presentation to take to each meeting? Jeff will do this and share online for other AAs to use. • Post example reports and proposals for AAs and committees to use. • Continue to use the MRC review process to evaluate projects for renewal and continuation. • Would it be worthwhile to have an external evaluation of the multistate system and perceptions? 	
15.0	<p>APLU Update, Doug Steele presented.</p> <p>Doug indicated that other regions are also having similar conversations on multistate project quality.</p> <p>Current APLU efforts:</p> <ul style="list-style-type: none"> • Working on AMR (Anti-microbial Resistance) right now, thanks to UNL, IA leadership. Time to find funding partners for this effort. 	For information.

	<ul style="list-style-type: none"> • Strategic Realignment: There have been great efforts to be transparent and solicit a lot of feedback from stakeholders. Ernie Minton has done an excellent job leading the committee. Why engage in this action? To help protect and consolidate smaller line items that are routinely zeroed out each year. Conference call next week to take a recommendation to the Policy Board. Ernie Minton will speak in more detail on this topic later today. • Communications and Marketing Committee: Many changes are coming down the pipeline to help improve the ROI of the program. A subgroup, chaired by Steve Loring, is looking at alternative approaches. • CARET: Attending the summer executive committee at Purdue. CARET wants to be used more for sharing stories with LGU impacts, what their expectations are ?they need to be told about expectations from their Dean?. • International Ag Agenda: What is APLU’s role? Canada and Mexico were added in the last several years. • One-Ask and AFRI – \$130M more than last year. The APLU ask for AFRI was less than other groups, so we need to be better at communicating and work to send common message to more effectively support ag research. • In his role with APLU and with LGUs, Doug is aiming to: provide national leadership, have APLU learn how to set and align strategic priorities, establish an agenda with the greatest credibility, and be as transparent as much as possible. • Doug briefly discussed the NIFA relocation, which has yet to be finalized. 	
16.0	Communications Session – NC and National:	Action taken: Greg made a motion to convene a small group of communicators

	<p>Greg led the discussion for NC efforts only, with less focus on national since these efforts have been described elsewhere in the meeting minutes. Conversation highlights:</p> <ul style="list-style-type: none"> • There is a disconnect between AES efforts and our communications directors sometimes. How can we improve this and share best practices for communication ag research across states? • Perhaps have a subgroup of communication directors (MN, NE, IA, and maybe WI and MI) work together and think about best ways to proceed. • Must be sure to have a few good leaders who understand the interface between communications and technical groups and continue to share the message that we want. Would the NCRA directors be this interface, at least initially? • This effort must also remain mindful and compliment what's already happening with CMC, NIDB, and Impact Reporting. • How effective have existing efforts already been? There is a need for good metrics for success. 	<p>together (MN, NE, IA and also perhaps WI and MI) to initiate an NC AES research communication conversation, then bring the initial communicators' idea(s) to the NCRA Executive Committee. This motion was approved. Jeff will provide Greg a DRAFT summary charge for him to use.</p>
17.0	<p>MRC Report and Recommendations:</p> <p>17.1 New/renewal multistate proposals & 17.2 Midterm reviews</p> <p>17.3 NC Multistate Research Award Nominee</p> <p>17.4 NRSP-RC (NRSP Review Committee) Update: Greg reviewed the NRSP-RC report and initiated discussion on the renewal proposals for NRSP3 and NRSP10. NRSP3's proposal was accepted without concern (\$50,000/yr), while the group recommended NRSP10 (\$2.45M for 5 years) develop a business plan to better articulate how they will transition off the NRSP system within the next 5 years.</p>	<p>17.1 and 17.2 Action: All MRC recommendations for new/renewal projects and midterm actions as listed in the MRC report brief were unanimously approved by the NCRA directors. Chris will contact the committee AAs and leads to share these actions.</p> <p>17.3 Action: The recommendation to approve the NC1201 as the NC regional nomination for the National Excellence in Multistate Research Award was also unanimously approved by the NCRA directors.</p> <p>17.4 Action: Jeff will share the NCRA feedback on NRSP10's renewal with the leadership of the NRSP-RC.</p>

<p>18.0</p>	<p>ESCOP Committee Written Reports:</p> <p>18.1 S&T (Science & Technology): Joe Colletti reviewed the included S&T agenda brief, with a focus on the committee’s efforts and success created with the updated Science Roadmap Briefs, available online at http://escop.info/roadmap.</p> <p>18.2 B&L (Budget & Legislative Committee): Dave Benfield reviewed the B&L brief. The committee is focusing right now on Strategic Realignment and the match waiver issue. Infrastructure support will also likely be addressed going forward.</p> <p>18.3 DCC (Diversity Catalyst Committee): Bill Barker reviewed the DCC report. They have received a few nominations for the Diversity and Inclusion award. The committee is always on the lookout for training opportunities. Jeff Jacobsen was nominated for the NIFA partnership award by the DCC leadership for his work with past DCC chair Karen Plaut to form and lead the initial activities of the committee.</p> <p>18.4 CMC (Communications & Marketing Committee): Jeff gave the CMC report to the group from the agenda brief. The ESCOP Executive Committee voted recently to terminate the kglobal contract. Many changes are likely to occur with the communications effort. Stay tuned for those.</p> <p>18.5 NIDB (National Impact Database): German gave a brief updated based on what is written in the included report.</p>	<p>For information.</p>
<p>19.0</p>	<p>Strategic Realignment Update and Discussion:</p> <p>Ernie Minton joined the meeting via Zoom to give an update on the current state of the Strategic Realignment effort (see included agenda brief materials for background).</p> <ul style="list-style-type: none"> • The committee is in the feedback collection stage from the various 	<p>For information.</p>

	<p>sections and will bring that forward to the Policy Board on April 11.</p> <ul style="list-style-type: none"> • The NCRA has already submitted feedback, based on the March 14 conference call discussion. • Most groups are supportive of the smaller number of lines, but concerned over how the process of increased/decreased funding will be handled, which is beyond the scope of the initial committee. Extension is not happy with the organization of their items. • Haven't yet coordinated with NIFA regarding decreasing line items as mandated by Congress. Parag gave a brief update on the current status of these discussions within NIFA. • The directors thanked Ernie for all his work on the committee. 	
<p>22.0</p>	<p>Institutional Service Fees Discussion:</p> <p>(Send all handouts to the list, UNL, IL, IA, etc.)</p> <p>Group discussion and information sharing, led by Archie, Hector, and Joe, occurred on Fee for Service and F&A rates topic. Please refer to information handouts from meeting and also emailed separately to the NCRA list.</p> <p>IA State tip sheets online: https://www.techtransfer.iastate.edu/for-isu/working-with-isurf/tip-sheets/</p>	
<p>23.0</p>	<p>Other business:</p> <p>23.1 APLU Budget Account for ESS/ARD: Jeff discussed the current status of the ESCOP account held at APLU, which is funded by annual assessments for the CMC mainly. When other sections joined the CMC effort, our assessment went down while the assessment remained the same, so over the past several years, ESCOP has accumulated about a \$600,000 balance. With Doug Steele and Deb this year, Jeff has been working to confirm the accuracy of the account balance and activity. The</p>	<p>For information.</p>

	<p>plan is to make this process and annual budget summary a routine function of ESCOP going forward. At the summer Mini LGU, Jeff will share more details on account status.</p> <p>23.2 NCRA Spring Meeting 2020 location selection: The group decided to strongly consider Scottsdale, AZ again. Chris will work with the hotel to see what dates are available and Jeff will look into what tours might be available to include for that Wednesday.</p>	
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Meeting adjourned at 11:07 am MST (Scottsdale, AZ time)

Item 4.2: NCRA Current and FY2020 Office Budget
Presenters: Joe Colletti, Jeff Jacobsen, Chris Hamilton

Action Requested: Discussion/Vote on FY2020 Assessments to Off-Set Increases in UW-Madison Admin Fees (from 7 to 12%)

NCRA FY2019 Working Budget (with Final FY2018)

INCOME

Description	FY2018	FY2019	FY2020
	Final	Budget	YTD***
State Assessments	425,763	425,763	425,764
Account Carryover (MSU)	43,435	42,910	42,910
TOTAL INCOME	469,198	468,673	468,674

EXPENSE

Description	FY2018	FY2019	FY2020	
	Final	Budget	YTD	
NCRA				
Regional Initiatives*****	5,000	-	-	
	(5,000)	-	-	
NCRA Subtotal	-	-	-	

MICHIGAN STATE				
Executive Director Salary	205,000	213,200	213,200	213,200
Fringe*	48,621	55,219	55,219	55,219
Office Operating	3,242	3,000	3,078	3,000
Travel	30,510	35,000	17,714	35,000
Training	-	-	-	-
MSU Administrative/Service Fees (2% MSU)****	5,830	6,128	6,128	6,128
MSU Subtotal	293,203	312,547	295,339	312,547

U of WISCONSIN				
Assistant Director Salary	79,480	82,659	82,659	82,659
Fringe**	32,351	33,890	33,890	33,890
Office Operating	2,322	3,000	434	3,000
Travel	6,288	12,000	5,021	12,000
Training	320	500	300	500
Meeting Support	(976)	2,000	-	2,000
UW Admin/Service Fees (now 5% CALS, 7% UW)	8,486	9,383	-	16,086
UW Subtotal	128,272	143,433	122,304	150,135

TOTAL EXPENSE	421,475	455,980	417,643	462,682
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BALANCE	47,723	12,693	51,031	13,081
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*MSU FY19 fringe: 25.9%.

**UW FY19 est. fringe: approx 42% (includes est. term leave monthly fee of \$24.80/month).

***Full FY expenditures for salary + fringe + MSU admin fees, YTD actuals, for other categories.

****Still awaiting final MSU FY17 and FY18 close-out admin fees to clear.

*****Bt Corn Video (invoice = expense).

NCRA Accounts at MSU and UW

Account at MSU	FY18	FY19	FY20
MSU Starting Balance	43,435	42,910	tbd
MSU Income	425,763	425,763	475,763
MSU Budgeted Expenses	293,203	312,547	312,547
MSU Budgeted Expenses + UW invoice	425,760	452,467	455,980
Estimated MSU Ending Balance/Carryover	43,438	16,206	tbd
Actual MSU Ending Balance/Carryover**	42,910	tbd	tbd

Account at UW	FY18	FY19	FY20
UW Starting Balance	(773)	3,512	tbd
UW Income	-	-	-
UW Expenses	128,272	143,433	150,135
Actual UW Ending Balance/Carryover		-	
<i>UW Operating Reserve (3 mo)</i>	<i>25,000</i>	<i>25,000</i>	<i>25,000</i>
<i>Estimated UW Invoice to MSU*</i>	<i>129,045</i>	<i>139,920</i>	<i>143,433</i>
<i>Actual UW Invoice to MSU</i>	<i>132,557</i>	<i>tbd</i>	<i>tbd</i>

*UW will invoice MSU mid-quarter for actual expenses (\$34,787 in August 2018; \$34,787 in November 2018; \$34,787 in February 2019, and ??? in May 2019 to cover final 2019 expenses).

**Includes budgeted FY17, 18 , 19 MSU admin fees, which haven't been charged yet.

FY2020 NCRA Assessment Distribution by State

State	60% State Equal Share Assessments	40% Proportional to State's Share of MRF*		FY19 Assessment	FY20 Assessment (+\$50,000) Approved 10/3/2018
Illinois	\$21,288	9.90%	\$16,859	\$38,147	\$42,627
Indiana	\$21,288	8.34%	\$14,208	\$35,497	\$39,665
Iowa	\$21,288	10.20%	\$17,375	\$38,663	\$43,204
Kansas	\$21,288	7.67%	\$13,063	\$34,351	\$38,385
Michigan	\$21,288	8.78%	\$14,961	\$36,249	\$40,506
Minnesota	\$21,288	8.75%	\$14,910	\$36,198	\$40,449
Missouri	\$21,288	7.82%	\$13,319	\$34,608	\$38,672
Nebraska	\$21,288	8.88%	\$15,115	\$36,403	\$40,678
North Dakota	\$21,288	5.89%	\$10,024	\$31,312	\$34,990
Ohio	\$21,288	9.49%	\$16,158	\$37,446	\$41,843
South Dakota	\$21,288	5.94%	\$10,122	\$31,410	\$35,099
Wisconsin	\$21,288	8.33%	\$14,191	\$35,480	\$39,646
TOTAL	\$255,458	100.00%	\$170,305	\$425,763	\$475,763

*Proportion of State share of MRF based upon rolling 3-year actual average (FFY15-17) as provided by NIFA. NRSP and NC off-the-top allocations (IA, MI, NE, WI) not included.

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Item 5.1: NCRA Office Personnel Activities and Accomplishments

Presenters: Jeff and Chris

Action Requested: For information

Jeff Jacobsen, NCRA Executive Director

1. NCRA ACTIVITIES (Chris too)

- Participate in monthly Executive Committee calls. Frequent calls, Zoom meetings and emails with Chris. Monthly reports by the MSU financial staff enable the AD and ED to reconcile the budget across the NCRA accounts. Develop three NCRA meeting agendas and the NCRA FY2019 budget all vetted through the Executive Committee.
- Integrated elements of the NCRA Plan in regular meetings and future activities.
- Participated with the MRC, NCRA multistate research award and NCRA Leadership award. Provided NCRA feedback through the MRC Chair to successful nominations and created a NCRA Certificate Award for our top multistate project. Work with a state-level communications expert to refine the NC multistate research award nomination to be more competitive nationally. NC-1186 Water Management and Quality for Ornamental Crop Production and Health was the 2018 National Award winner!
- Multistate Committees -- NCAC1 Crop and Soil Research, NERA222 Integrated Pest Management, NC1187 The Chemical and Physical Nature of Particulate Matter Affecting, Air Water and Soil Quality, National Multistate Coordinating Committee (NMCC) member and NCRA MRC. NC AES position on the NC Aquaculture Center.
- NRSF1 as NCRA representative and lead AA. Chris Hamilton is the NIMSS lead. Defacto Executive Committee (now) with Steve Loring and Rick Rhodes for Sara Delheimer.
- Maintain regular contact with the North Central Water Network and NCCEA.
- Worked on the NC Boot Camp Planning Committee and subgroups for the 2018 and 2019 trainings. This is a joint AES/CES program. AES participants include: Ernie Minton, George Smith, Steve Slack, Marty Draper and Chris Hamilton. Planning initiated for 2019 session.
- Initiated discussions with NC 1994 LGUs to learn about their teaching, research and Extension programs, past experiences with 1862 institutions and state/federal agencies. Site visits to United Tribes Technical College (ND), Sitting Bull College (ND), Bay Mills Community College (MI), College of Menominee Nation (WI) and Lac Courte Oreilles Ojibwa Community College (WI) with Bill Barker (WI ones); participated in 2018 FALCON conference which created follow up discussions and new connections.
- Participate with MSU Extension Tribal Extension Grant and others – MILES (Michigan Integrated Land-Grant Extension System).
- Facilitate with Greg Cuomo a panel of Native undergraduate and graduate students from U of MN at the 2018 FALCON Conference on their experiences and lessons learned.
- Support the North Central director (Deb Hamernik) as Incoming Chair and ESS Chair, 2018-2019 with Chris Hamilton in all aspects.

2. NATIONAL ACTIVITIES (Chris too)

- Tribal Extension Capacity, Special Emphasis and Research Programs, NIFA Panel Manager (x2 and member). Created new processes, training presentations and built database for future use. Work with new Panel Manager to implement virtual panel processes and procedures.

- With NIFA, jointly created and delivered training workshops at the 2018 FALCON meeting. Direct participation with: the panel review process, Tips for Writing a Successful Application and Q&A, Capacity Building at Institutions of Higher Learning and Finding Partners for Your Ideas – Industry, 1862 and 1890 Universities and 1994s.
- National Research Support Program Review (NRSP) Committee and NRSP Guidelines review.
- On-going exploration and identification of collaboration, partnership and coordination with NRCS at the national, regional and state levels. Culminating in a Leadership Summit in Colorado Fall 2018 with NRCS, ECOP, ESCOP and EDs (research and Extension). Implementation (across themes of Common Goal Setting; Sharing of Technical and Scientific Information; Training and Professional Development; Multistate, Regional and National Coordination; and Resource Issues/Initiatives) will be the focus in 2019. All of this is with Robin Shepard.
- Serve the ESCOP S&T Committee as Executive Vice-chair (with the AD's support and engagement), provide administrative leadership and assistance. Identify and review materials and actions on behalf of ESS and provide narrative for committee recommendations to ESCOP. Facilitate the review and recommendation on the multistate research nomination process. Discussions occur during the monthly calls.
 - 2018 was the culmination of a major project which created the S&T Roadmap briefs as eight (total) one-page documents that provide an ESS overview plus seven Grand Challenges which describe the challenge, research priorities, capacity & resources, and illustrate success stories from NIMSS, MRF Impacts and other sources across the U.S. (individual state sets to be provided).
 - Formal recognition of the Multistate Research Project Award and the ESS Leadership Awards from all five regions are part of the APLU - A Community of Scholars Honoring Excellence program at the APLU annual meeting. In that S&T was the originator of these recognitions and the need for a central and consistent leader, I as Executive Vice-chair, have assumed the role of point for each Award in working with the winners, regions, APLU and NIFA. Implemented the new funding rotation for the Excellence in Multistate Research Award winner.
 - The National IPM Coordinating Committee (NIPMCC) was assigned by ESCOP and ECOP to S&T Committee as a mechanism to formally engage the IPM community. Operating guidelines have been implemented and refined. A fall conference leading to an annual report from the group's effort culminates into a State of IPM. Regular quarterly calls with the NIPMCC Executive Committee are in practice and regular rotations in membership. This is a subcommittee of S&T and the ED supports the group.
 - The Social Sciences Subcommittee (SSSC) is a formal group comprised of ag communication, ag economists, ag education, ag leadership, human sciences and rural sociologists faculties with regional (6) configurations. Supported this effort. This is a subcommittee of S&T.
- Mike Harrington will be retiring as WAAESD ED end of June 2019. His national assignments to ESCOP Budget and Legislative Committee (B&L), PBD Budget and Advocacy (BAC), ESCOP rep to the Committee on Legislation and Policy (CLP) and episodic work with committees (e.g. Strategic Realignment) will become part of my portfolio of national committee assignments. Consequently, with these change in responsibilities, the Interim WAAESD ED will take over all S&T responsibilities. There will be overlap and transition over April-June 2019.

- Support and participate with the Diversity Catalyst Committee chaired by Karen Plaut. Late in 2018, Chair Plaut rotated off with her accession to Dean and Ali Fares assumed the chair position. This also provided an ideal time to rotate the Executive Vice Chair position to Rick Rhodes. Chris and I will remain on DCC, yet in full participatory mode.
 - Currently, facilitating conversations (potentially) leading to a NIFA Conference grant focused on a national convening with 'College of Agriculture' diversity, equity and inclusion professionals for training and, most importantly, developing a multi-year roadmap for diversity professionals. This would also engage all interested professionals and faculties.
- ESCOP website monitoring and nudging to keep current across regional offices and committee assignments.
- For ESCOP with Deb Hamernik as the 2019 Chair, the NCRA office activities have increased with meetings and communications such as the monthly Chairs Advisory Committee (CAC) calls, coordination with the ECOP chair and system-wide communications. This also includes ESCOP and ECOP Chair visits to Washington, DC and associated follow up actions.
- Create and edit materials as needed. For example, ESCOP agenda briefs; feedback and monitoring on NIFA with the Time and Effort reporting; Advocacy efforts with the Single Ask; and the group ED edits on the one-pagers managed by Cornerstone Government Affairs and used by CARET/AHS during their Hill visits.
- Regularly work with the research and Extension EDs throughout the year.

3. PROFESSIONAL DEVELOPMENT AND HONORS

- Michigan State University – Implicit Bias Certification Program and required faculty/staff training.
- NIFA and Others – IDI debrief, NC Bootcamp, Webinars on Strategic Realignment, Time and Effort, NERAOC, and others tbd.
- Conferences, readings and self-study activities as appropriate.
- Nominated for the 2018 ESCOP Diversity and Inclusion Award (rolls into 2019).
- Nominated for a 2019 NIFA Partnership Award for all DCC efforts.

4. TRAVEL

- NIPMCC, Oct 22-24, 2018, Washington, DC. [National, ESCOP]
- FALCON Annual Conference, Nov 3-5, Minneapolis, MN [NCRA]
- TCRAE Panel, Nov 6-8, Washington, DC [NCRA]
- APLU Annual Meeting, Nov 10-13, New Orleans, LA [National, ESCOP]
- NMCC Meeting, Nov 26-28, Orlando, FL [All EDs]
- ESCOP/ECOP Chair Visits, Jan 6-8, 2019 Washington, DC [National]
- NCAC1, Jan 9-11 San Diego, CA [NCRA]
- Ian Maw Retirement, Jan 23, Washington, DC [National, NCRA]
- ESCOP/ECOP Chair Visits, Feb 18-20, Washington, DC [National]
- NCRAC, Feb 22-24, Des Moines, IA [NCRA]
- CARET/AHS & ESCOP/ECOP Chair Visits, Mar 3-7, Washington, DC [National, ESCOP]
- NCERA222 and MU Visits, Mar 11-14, Columbia, MO [NCRA]
- NCRA Spring Meeting, Mar 25-27, Scottsdale, AZ [NCRA]
- NEROAC, Apr 14-17, Denver, CO [National]
- NMCC Meeting & Chair Visits, May 6-8, Washington, DC [All EDs]
- SSSC Meeting, May 14-16, Washington, DC [National, ESCOP]
- NRSP RC, May 28-30, Providence, RI [National]

- Joint COPs, July 21-24, Park City, UT [National, ESCOP]
- Mini Land-grant, July 28-31, Manhattan, KS [NCRA]
- ESS/ARD and CES Annual Meeting, Sept 23-26, Nashville, TN [National, NCRA]
- FALCON Annual Conference, Nov 1-4, Denver, CO [NCRA]
- APLU Annual Meeting, Nov 10-12, San Diego, CA [National, ESCOP]
- NC1187 Meeting, Nov 10-13, San Antonio, TX [NCRA]
- **PENDING** – ESCOP/ECOP Chair visits, NCRA state visits, 1994 Institution visits

Chris Hamilton, NCRA Assistant Director

1. NCRA ACTIVITIES (Jeff, too)

- Manage all aspects of the NCRA office (meetings, financials, website maintenance, etc.), working closely and effectively with UW's CALS business services and MSU (NCRA and ED budget).
- Worked with NCRA ED and Executive Committee on the FY2020 NCRA budget with new implementation options.
- Participate in monthly NCRA Executive Committee calls.
- Partner with Robin Shepard of NCCEA to maintain strong communications between NCRA and NCCEA. I maintain NCCEA.org and the NCCEA Twitter account (@NCCEA) and can coordinate social media activities to maximize our joint regional research and Extension social media impact.
- Create reports and spreadsheets useful to the NC region, as needed and upon request (salary data, AES allocations, facilities inventories, etc.).
- Maintain NCRA and NCCEA Twitter accounts (@NCRegionalAssoc; @NCCEA), posting relevant stories about AES research, news, etc. and leveraging stories to national attention. Twitter account now has 193 followers (up from 162 in 2016, for reference), including several association colleges and universities, national organizations, government partners, industry, and others.
- Continue to host and maintain the www.nc-climate.org website, showcasing NCR climate research, collaborations, and providing a central site for climate researchers contact information.
- Participate on the NC Admin Boot Camp planning committee with AES and EXT directors and our regional EDs. Planning for the 2019 session is underway.
- Participate on the NC Mini Land Grant meeting planning team. Planning for the 2019 summer session is underway, as well.
- Solicit regional nominations and coordinate the selection of the NCRA Leadership and Multistate Research awards. Helped create the NCRA Certificate Award for our top multistate project.
- Provide project assignments and guidance to NCAC AAs for NCRA multistate project reviews. Updated and streamlined the NCAC review process and communications with NCAC AAs.
- Provide high-level technical services to the NCRA and other regions, upon request, and maintain friendly and close working relationships with NC AES staff on NIMSS and other multistate issues. They often contact me first with questions and I either have the answer or direct them to someone who does.
 - Maintain NCRA website (www.ncra-saes.org).
 - Zoom video conferencing and screen shares for conference calls, NIMSS help, and other training as needed.
 - Regular cloud back-ups of all NCRA office files at UW-Madison using local CALS servers and Box.com accounts.
 - File and data sharing through Google Drive and Box.com.
 - Online Qualtrics Survey creation.
 - Manage all NC email lists and NCRA Directories.
- Began serving as a new member to the UW College of Ag Committee on Academic Staff Issues in January 2019. We meet monthly to provide guidance and act on a variety of issues affecting CALS academic staff.

- With Jeff Jacobsen, provide support to current ESCOP Chair, Deb Hamernik, including regular system communications, ESCOP and ESS meeting agenda preparation, meeting minutes, and other activities, as requested.

North Central Region Multistate Research Portfolio

- **Regular Support:** Regularly provide support and technical assistance to users on navigating the NIMSS and interpretation of national and regional multistate guidelines.
- **FY2020 New/Renewing NC Projects:** Facilitated the renewal of 17 NC multistate projects expiring in 2019, 1 new project request, and 26 midterm review evaluations, reminding and assisting AAs and committees with submitting on-time, quality, collaborative reports to NIMSS. Coordinated project assignments and review activities of the NC AAs, NC ACs, and the MRC. See the March 2019 MRC report for details.
- **Reimagining NC Multistate Research:** I serve as a member on this new ad-hoc committee created to evaluate how the NC region might streamline and improve the impact of our multistate research portfolio. In addition, this will have national implications.

2. NATIONAL ACTIVITIES (Jeff, too)

- Provide administrative leadership and assistance to NRSP1. Schedule calls, take minutes, coordinate committee activities, etc. Also, I serve as the NIMSS lead Regional System Admin.
 - NIMSS is the Experiment Station's national workflow database for managing all multistate project activities.
 - I continue to communicate regularly through emails and monthly calls with the Clemson NIMSS development team to solve issues, improve efficiency, and enhance the user experience within the NIMSS database. These efforts us to solve NIMSS issues quickly and efficiently and avoid the need for tedious software versioning issues, since changes are made in real time.
 - This is our fourth year managing NIMSS and the system is running smoothly and effectively, with rapid response to any issues or suggested improvements.
- Provide administrative leadership and assistance to the ESCOP Science and Technology (S&T) Committee. Schedule calls, take minutes, participate, coordinate committee activities, coordinate review and ranking of national multistate research award nominations, etc. In 2018, I participated in the committee's creation of the new Roadmap briefs and marketing postcard. With Mike Harrington's retirement in June, the Interim WAAESD ED will take over all S&T responsibilities and we will begin supporting the ESCOP Budget and Legislative Committee (B&L). There will be overlap and transition over April-June 2019.
- Support and participate with the Diversity Catalyst Committee chaired by Karen Plaut. Late in 2018, Chair Plaut rotated off with her accession to Dean and Ali Fares assumed the chair position. This also provided an ideal time to rotate the Executive Vice Chair position to Rick Rhodes. Jeff and I will remain on DCC, yet in full participatory mode.
- Assist Dave Leibovitz (NERA AD) with updates to the ESCOP website (www.escop.info) and ESCOP email list serves. I also create back-up Wisclist email lists for ESCOP, as needed.
- Provide general NIMSS support to NRSP6 and NRSP3 AAs (Bill Barker and Doug Buhler, respectively) by authorizing annual meetings, uploading reports. I also provided policy guidance and assisted NRSP3 with their renewal process this year.

- Creator and owner of the online NIMSS manual, a living document outlining all functions, tips, and tricks to make using NIMSS easy. Recently relocated the manual to <https://www.ncra-saes.org/nimss-manual>, so that when updates are made, users no longer need to change the file URL.
- Partner with the NIFA multistate research office to coordinate NIMSS project/participant approvals, occasionally serve as the NIMSS liaison for NIMSS/REEport issues, and other regional-USDA administrative tasks, as needed.
- Served as a grant reviewer for The USDA NIFA or NIFA Tribal College Research Area of Expertise (TCRAE) FY2018 panel.
- With Jeff Jacobsen, provide assistance to current ESCOP Chair, Deb Hamernik, including regular system communications and votes as needed, prepare agendas and minutes for monthly CAC calls as well as face-to-face ESCOP Committee, ESCOP Executive Committee, and ESS meetings. Assist with other duties, as requested by the chair.

3. PROFESSIONAL DEVELOPMENT

- In 2018, I attended the following conferences and workshops:
 - UW's Fully Prepared to Lead Series:
 - Time and Self-Management.
 - Personal Resiliency and Accountability.
 - UW's "Plain Language" certificate series (completed 2/3 courses so far, with the final one in May 2019), based on the federally mandated effort described at: www.plainlanguage.gov.
 - 2018 UW Madison Diversity Forum.
 - 2018 UW-Madison's Leadership and Management Development Conference.
 - 2018 UW-Madison Women & Leadership Symposium.
 - UW-Madison CALS Monthly Diversity and Inclusion Lunch & Learns.
- I plan to serve again for the second year as a presentation session observer for the World Food Prize – WI Youth Institute at UW Madison.
- As time allows, I utilize UW's Lynda.com self-paced software training application to stay up-to-date on software applications applicable to my role in the NCRA.
- Attend all required UW Madison staff trainings (travel, p-card, purchasing, etc.)
- Going forward in 2019, I have already or will attend the following professional development opportunities:
 - UW's Fully Prepared to Lead, Modes of Conflict Management.
 - UW's Continuing Education course, Leading at a Distance: Managing Virtual Staff and Teams.
 - UW's Working Better Together: Everything DiSC Workplace.
 - UW's Emotional Intelligence: Putting Your EQ to Work.
 - UW-Madison CALS Monthly Diversity and Inclusion Lunch & Learns (on-going).
 - 2019 Diversity Forum.
 - 2019 UW-Madison's Leadership and Management Development Conference.
 - 2019 UW-Madison Women & Leadership Symposium.
 - Academic Staff Chat, Staying in Touch with Campus When You're Off Campus.
 - UW's "Plain Language" certificate series (Design in Plain Language, the final in the series).

4. TRAVEL

- APLU Annual Meeting, New Orleans, LA, Nov 10-13, 2018 [ESCOP, National]
- Joint CARET/AHS Sessions, Arlington, VA, March 2-5, 2019 [ESCOP, National]

- NCRA Spring Meeting, March 25-27, 2019, Scottsdale, AZ [NCRA]
- NC Mini Land-grant, Manhattan, KS, July 28-30, 2019 [NC, NCRA]
- Joint COPs Meeting, Park City, UT July 21-23, 2019 [ESCOP, National]
- ESS/ARD and CES Annual Meeting, Sept 23-26, Nashville, TN [ESCOP, National, NCRA]

NCRA Plan

XXX Initial NCRA Plan Element
XXX Active NCRA Plan Element
XXX New NCRA Plan Element

1. MULTISTATE RESEARCH COMMITTEE (MRC)

Ensure that multistate projects are linked to priority NC research themes (*NOTE: assumes there are agreed-upon themes*)

- Cross reference (matrix) **NC multistate projects** with Battelle Study, **ESCOP Roadmap**, USDA NIFA priorities, PCAST Report, ECOP Strategic Opportunities, Natural Resources Roadmap, **Breakthroughs 2030**, NCEA, key federal agencies, others. (Also, need to account for NCR faculty participation in other regional committees.)

ACTION: Align MRC priorities and review processes. Consider all options (**Reimagining effort** -- combine, terminate, create). **Identify research gaps and emerging issues and determine next steps.**

- Future Multistate projects – **Industrial hemp (S1084)**, **Big data or open access data (NRSP proposed, not approved)** and **NC librarians**, **Unmanned aerial systems (S1069)**, viticulture, microbiome, oats (SD, MN), organic systems, local/urban/regional food systems, **Monarch butterfly**, **soil health**, others.

ACTION: Openly consider priority of NC projects and the various committee options.

Create/enhance assessment methods to get stakeholder (groups vary by task/issue) and peer input.

- Do we routinely ask the same (or any) questions of NCAC groups? **Completed. Need to develop questions and provide to the AAs and NCAC members. For example: recent initiatives at the federal level, professional society perspectives on issues and their initiatives).**
- Do we ask anything of the state/regional/national commodity groups or organizations, foundations and other federal agencies?

ACTION: Review the interactions and review contributions from NCAC groups. **Spring 2018 meeting connected with United Soybean Board, National Corn Growers Association, Monsanto, Danforth Center and the 39N Development.**

- Encourage stronger NCAC discussion and input. Discuss existing state mechanisms to receive input and determine if these could (should) be scaled up or consider alternatives. **Reviewed all NCAC projects and discussed with AAs.**

Are MRC funding approaches across the NCR appropriate and adequate? Are there alternative models to be considered?

ACTION: Inventory of use, needs/opportunity. NCRA could discuss implications and alternatives. **Reimagining effort underway.**

Assist in the training of new AAs and resourcing new directors.

- Create and update as needed (**IL, MI, MN, MO, OH, WI, SD**)

2. CATALYZE GROWTH AND QUALITY IN PARTNERSHIPS

Explore new networks across thematic areas with faculty expertise (group, program and facility registry), shared analytical/**service/phenotype and genotype**/clinical facilities, watershed/wetland labs, climate science centers, geospatial technologies and many others. Integrate and optimize the LTARs, LTERs, forest stations and **field station system (e.g. dairy, specialty crops)** investments in regional/national system.

ACTION: Create an inventory template(s) for each state to complete prior to meeting and conduct a 'speed dating' session(s).

What is the strategic relationship between NCRA and NCR Administrative Heads, Extension, CARET and Academic Programs? Is there any type of regional (maybe national) programmatic aspirations to identify and articulate an NCR agenda or enhance key programs (e.g. across climate, water,

health and other themes)? NCCEA is a recognized regional entity with potential priority focus given the NCRA.

ACTION: Directors discuss potential opportunities.

- NC Climate Expertise (AES and CES)
- North Central Water Network collaborations
- NC Boot Camp for new/recently appointed administrators (three times)

Enhance graduate student training and synergies across the NCRA (e.g. graduate student exchange and experiences, recruitment, shared NCR courses).

- Explored a Collaborative Working Space for Graduate Education in Agriculture, Natural Resources and Agbiosciences

Consider strategic discussions, actions and leveraging with regional faculty expertise across NCRA institutions and others.

- USDA ARS, National Animal Disease Center and other national labs.
- Danforth Center and others (NCRA visited).
- Research centers and stations (with faculty and/or staff) and others.
- Existing Centers/Institutes at LGUs and programs in veterinary medicine, biomedical and engineering (NCR Antibiotic Resistance Roundtable).
- Private sector research programs (Protein Highway).

Explore the strategic opportunities for programmatic collaborations.

- Canadian and Mexican universities (given the recent addition into APLU and potential existing linkages as well as proximity to several NCRA States) (APLU has formed a committee, explore invitations to mini Land-grant meeting. In addition, the Joint COPs in 2017/2018 were in those countries).
- Commodity groups (corn, soybeans) in region/nation.
- NRCS (national discussions leading to regional actions), Forest Service, BLM, Conservation Districts and others.
- 1890, 1994 (Tribal College Extension Program -- Capacity and Special Emphasis grant programs; Tribal College Research Program, Tribal College Research Area of Expertise; FALCON 2018 in MN, 2019 in Denver), other institutions.
- Protein Highway or Ag Innovation Corridor (I29-I35 and Highway 75 [US and Canada]) (Greg Cuomo exploring opportunities).
- Sun Grant Advisory Group.
- Strategically engage academic programs and other institutions with the mini-LG
- Regional Governor's Association or State Departments of Ag/Environment/Natural Resource Agencies (consider integrating NASDA, NACO).

Create new and expand stakeholder assessment, consultation and implementation activities.

ACTION: tbd

3. ENHANCE THE NCRA:

Have periodic communication (e.g. conference calls or emails) with Executive Committee.

- Instituted monthly Executive Committee calls either by phone and/or Zoom.
- Conduct as needed with NCCEA or other groups.

Add value to the region and NCRA brand.

- NCRA (and other regions) presence on ESCOP website.
- NCRA Website redone in 2017-18.
- An increasing number of LGUs are declining to host 'allied' websites at their institution. Explore the ramifications for those sites that are part of the NC portfolio. Connections to 'big data' initiatives.

Budget.

- Routine activity

Engage with and build relationships with key groups (USDA NIFA, Cornerstone Government Affairs, APLU)

- CARE Panel Manager (x2), Tribal College Extension Program – Capacity and Special Emphasis Panel Manager (two programs), Tribal College Research Program Panelist
- Interactions with all levels of administrators, NPLs, staff.
- Sightlines National Steering Committee member.
- Tactical Sciences Conversation with UMD and NIFA.
- Attend NERAOC; CARET/AHS and contribute to Congressional one-pagers; Joint COPs; S&T Liaisons, Other efforts as appropriate.
- NIFA webinars; Feedback to NIFA; Preapproval for equipment purchase with capacity funds, Time and Effort reporting.
- APLU with new VP FANR.

Consider professional development for AD and ED.

- UW and MSU as appropriate; Diversity training; NIFA webinars, NERAOC meeting; SSSC annual meeting, FALCON, USDA Agricultural Economic Outlook Forum.
- Develop plan/ideas for on-going experiences.

Promote regional multistate awardees through NCRA action.

- Instituted refinement process (with assistance from North Central state communication/editor staff for NC nomination prior to national submission.
- Provided signed certificate to all members of the NC regional awardee.
- Created letter for MRC Chair to send as feedback to all applicants.
- Improved the national call for multistate project nominations and evaluation criteria for S&T review.

Regional programs.

- Open access data (ESS, NCRA, new NRSP); New LGUs; State and federal budgets; Diversity initiative (NCRA and as ESS initiative); Climate (NC AES/CES discussions and website); Tech transfer faculty feedback experiences (NCRCRD); Unique facilities.
- Provide accountability actions with USDA and others (e.g., NIMSS regional lead); NRSP1 AA.
- Create initiatives (courses, training, joint committees; discussion with graduate program leaders) with graduate students to leverage and grow the NC enterprise; Off-the-top funding mechanisms; Practices and future IP trends with domestic and international markets.
- State visit rotations for ED (consider integrating 1994 connections).
- Other themes – water, soil health, hemp, UAS, organic systems (periodic calls), microbiomes, anti-microbial resistance (NC1206, Antibiotic Resistance Roundtable)
- Best Practice Sessions: P&T, TT or NTT faculty (early); Start-up and retention packages; Program redirection, evolution or elimination; Space renovations and (re)allocation; Succession planning with faculty and administration; Creating educational opportunities for faculty, legislators, state agencies, federal officials, upper administration regarding stations/centers and other aspects of unique operation; Working with millennials, Issues with faculty with businesses (e.g. productivity, time and effort, space and equipment rental, Pre- and Post-award services (grant review, workshops); Building and facility security; Teaching workloads and splits; Split-funded positions (university and grower groups/agencies); Diversity hires and spousal/partner accommodations; Pre- and Post-approval grant award services; Conflict of Interest (COI); Use agreements for university space towards commercialization and business development; F&A conversations

(institutional distribution, sources [federal, regional, state associations/agencies, foundations, industry], NC communication, waivers.

- Funding alternatives with operations, maintenance, renovations or new construction at centers or stations (e.g. timber, gravel, livestock, stone, farmer-owned, foundation/gifts, endowments, development professional focus); **Pros and cons of user fees associated with greenhouses** (postponed), labs, centers/station, equipment.
- Uses of NIFA capacity funds and leveraging to capture competitive funds.
- Professional advancement and best practices exchange for staff and leaders at centers/stations organized as NCCC.
- Provide seed money to regional priorities to leverage with external groups and other institutions (Organic, **Dairy Research Institute (on-going discussion more as CES activity)**, Climate, Water, Big data, Open Access Data, others).
- Several states conduct a Washington, DC visit for new faculty. Should there be an analogous program for existing faculty and/or NCRA directors?
- Organized state visits for NCRA directors.
- Facilitate a service for department/unit reviews (like USDA used to do; recently this has been mentioned as a restart within the agency).

[Back to Top](#)

Item 6.0: 1994s Topic
Presenter: Jeff Jacobsen

See slides below.

TRIBAL COLLEGE DISCUSSION

TRIBAL COLLEGES



TRIBAL COLLEGE ACTIVITIES

- Site Visits (MI, ND, SD, WI)
- Gary Halvorson Liaison + NCRA Meetings
- FALCON Conferences (x2, MN Panel)
 - Business Meeting Reports
- Rejoined APLU (2019)
- **2019 25th for 1994 Tribal College LGUs**
- Regional/National Programs
 - 2017 Mini Land-Grant (IN)
 - 2017 NCRA (MO) ...summary (Agenda Item 7.0)
 - 2018 Mini Land-Grant (ND)
 - 2019 CARET/AHS (DC)
- John Phillips
- AIHEC

TRIBAL COLLEGE ACTIVITIES

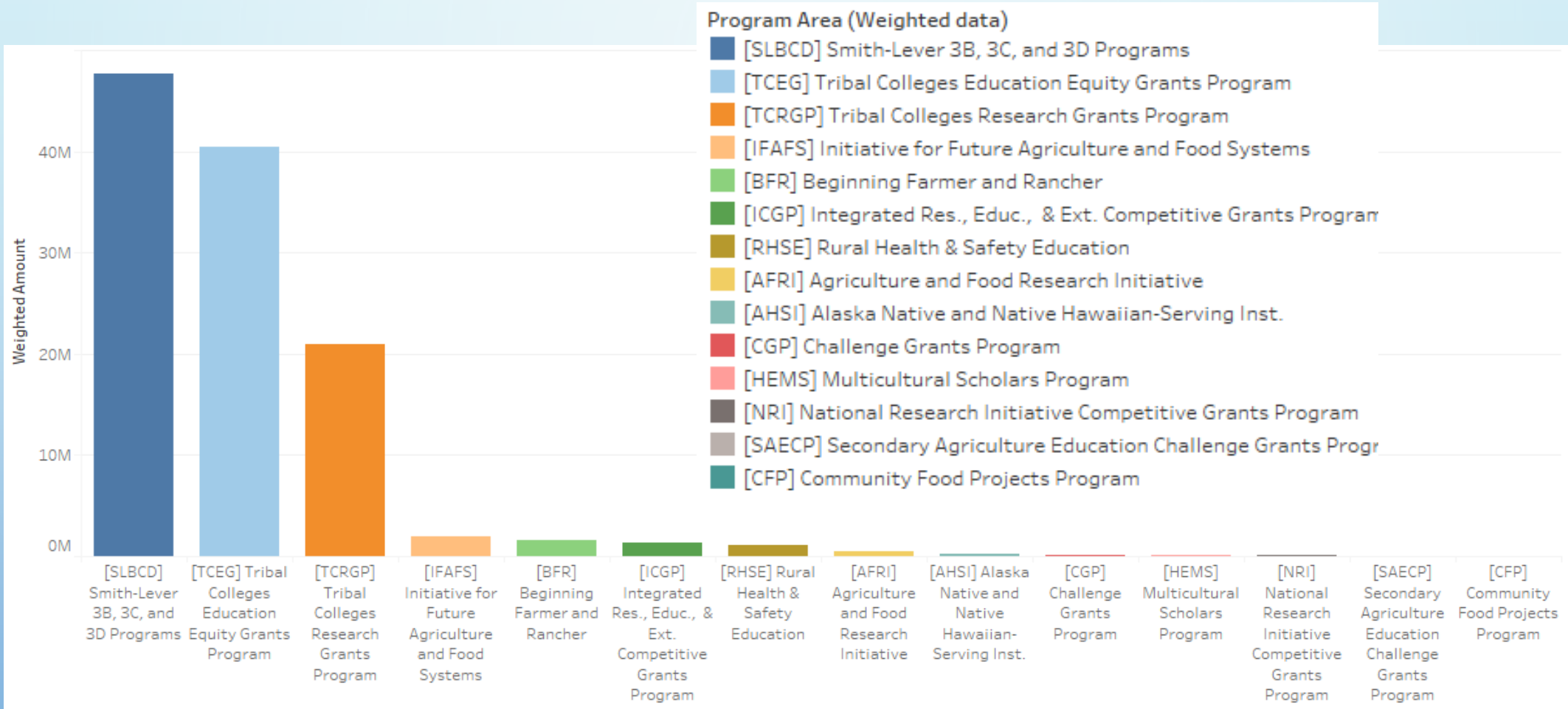
- **NIFA Programs**
 - **Tribal College Extension Program (Capacity)**
 - **Tribal College Special Emphasis**
 - **Tribal College Research Grants Program**
 - **Tribal College Research Area of Expertise**

Partner with 1862, 1890, USDA ARS, non-LGU with Certification and unit M-S Coop Forestry funded

- **2018 FALCON Grant Workshops (NIFA sponsor)**
- **MI Integrated Land-Grant Extension System Grant (MILES)**

DISTRIBUTION OF FUNDING BY TYPE ACROSS TRIBAL COLLEGES*

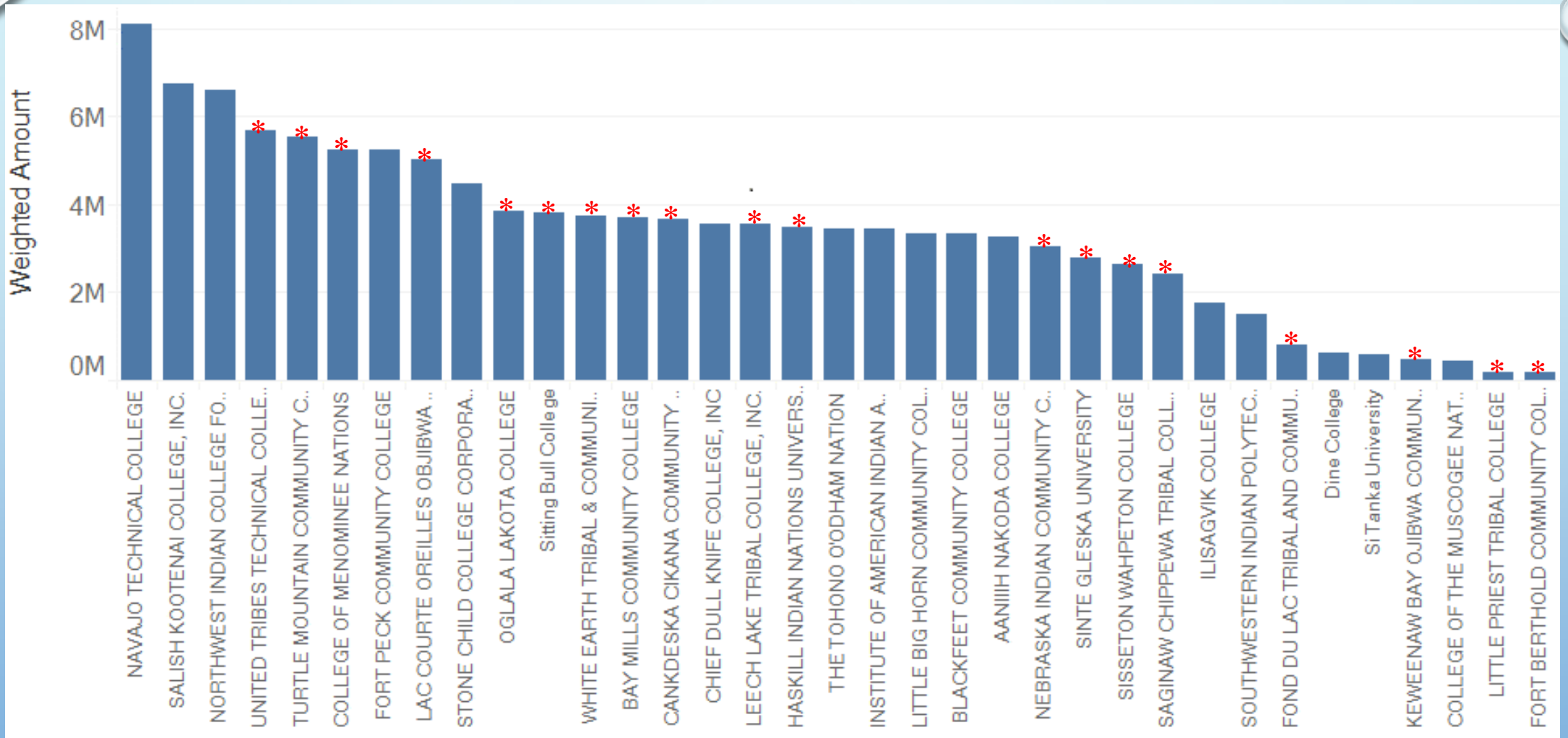
(COURTESY OF DR. MOHAMED AHMEDNA, DEAN NORTH CAROLINA A&T)



* Cumulative 1999-2017



CUMULATIVE FUNDING BY TRIBAL COLLEGES (1999-2017)



DEPTH AND BREADTH OF TRIBAL COLLEGE FUNDING PORTFOLIO



Muscogee Nation
Little Priest
Ft Berthold

FUTURE TRIBAL COLLEGE ACTIVITIES

- ✓ **2019 Mini Land-Grant Session (KS)**
- ✓ **2019 FALCON Conference**
- ✓ **ESS Chair Visit with AIHEC**
- ✓ **NIFA Supports (\$) Tribal Involvement with ESCOP**
- ✓ **Visits to NC Tribal Colleges (MN, ND, SD)**
- ✓ **Stay Connected with NIFA NPL (Erin Riley)**
- ✓ **Deep Dive into NIFA Data for NC Tribal Colleges**

- ✓ **THOUGHTS on Next Steps??**

Item 7.0: NIFA Update

Presenters: Parag Chitnis and Tim Conner

See slides below.

**NIFA Update
for NCRA Spring Meeting**

Parag Chitnis and Tim Connor

National Institute of Food and Agriculture

Staffing Update

Many vacancies.....

Are expected to arrive on April 14

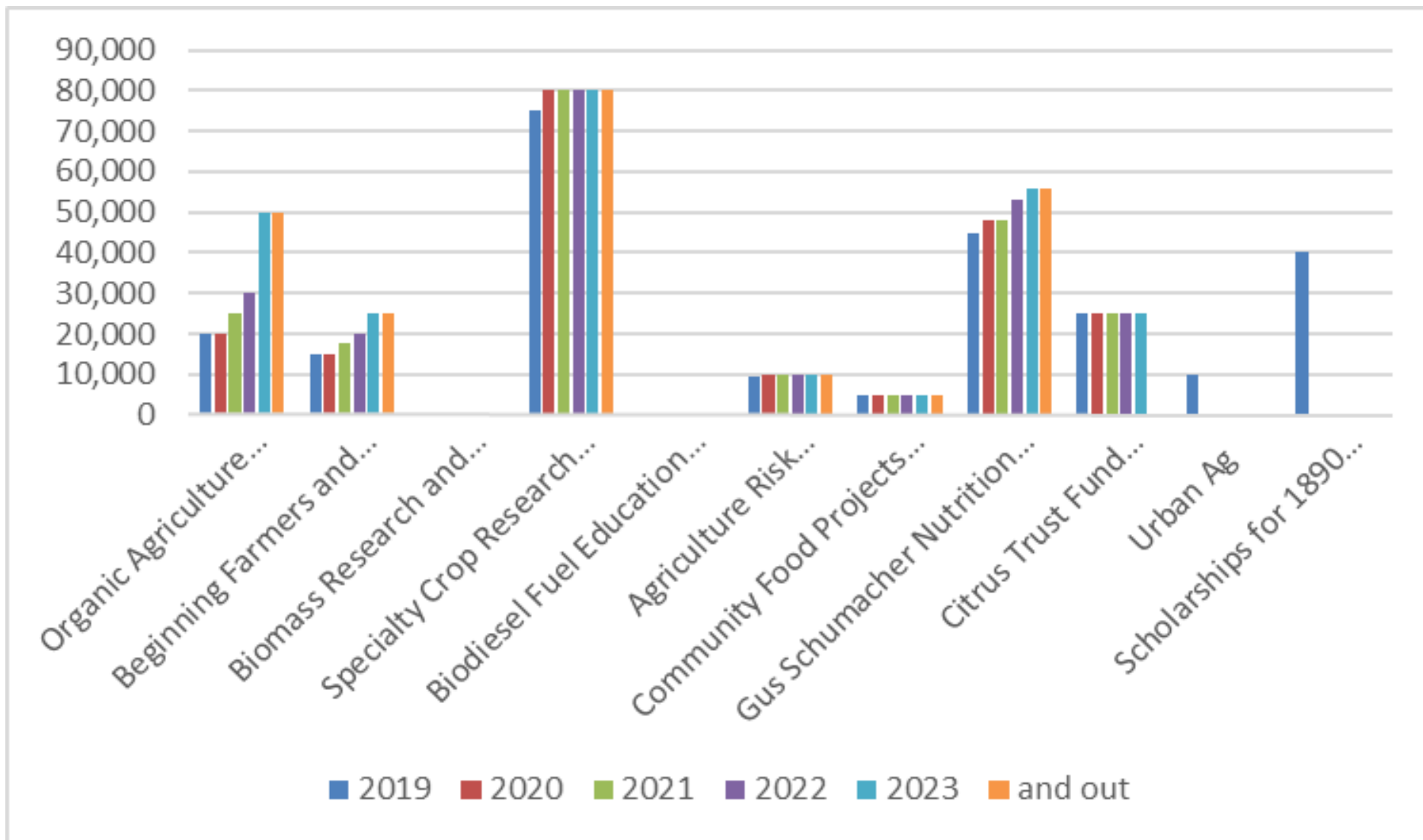
PARS Director

Communications Director

Deputy Assistant CIO

Farm Bill 2018

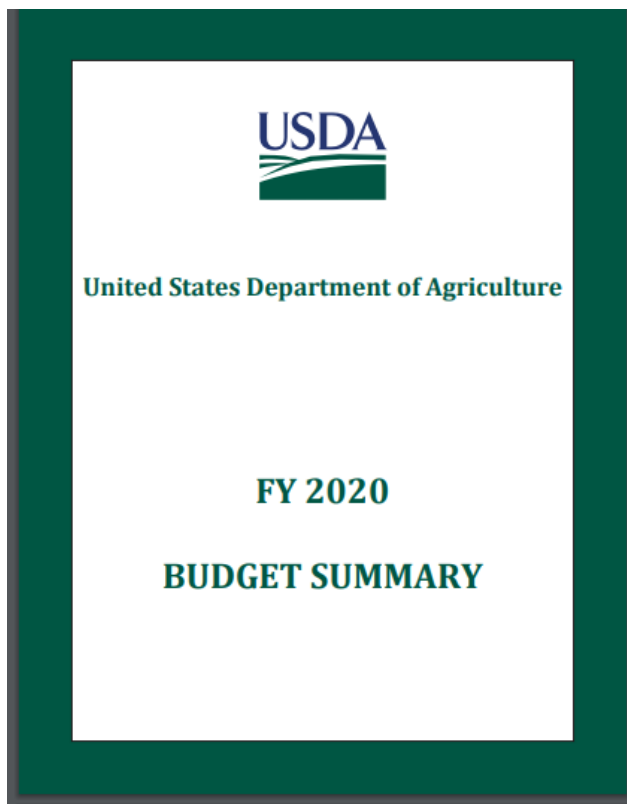
Mandatory Programs



Other authorizations

- » **Agricultural genome to phenome initiative.**
- » **Agricultural biosecurity grant program.**
- » **Centers of excellence at 1890 institution**

Budget Request FY 2020



2020 USDA EXPLANATORY NOTES--NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

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<https://www.obpa.usda.gov/budsum/fy2020budsum.pdf>

<https://www.obpa.usda.gov/19nifa2020notes.pdf>

AFRI RFAs pg 49-54

Highlights of Budget Request

- » **AFRI Budget at \$500 million**
 - **Investments in AI, New Investigators, and other priorities**

- » **Infrastructure Program at \$50 million**

Budget for FY 2019

FY2019 - AFRI status

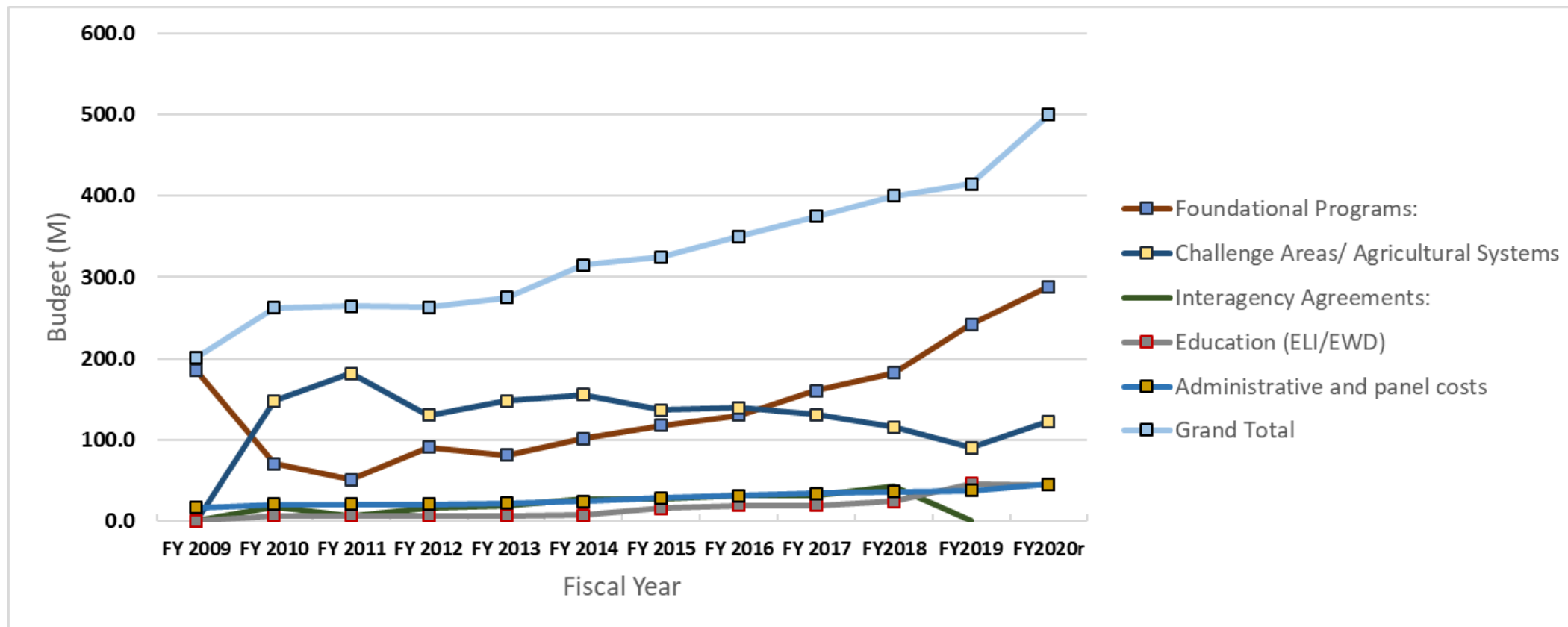
- » **Sustainable Agricultural Systems**
- » **Foundational and Applied Science**
- » **Education and Workforce Development**
- » **Interagency activities**

AFRI- Interagency Activities in 2019

- » **National Robotics Initiative (led by NSF)**
- » **Cyberphysical Systems (led by NSF)**
- » **Plant-Microbe Interactions (with NSF)**
- » **Ecology and Evolution of Infectious Diseases (with NSF, NIH, BBSRC)**
- » **INFEWS (with NSF)**
- » **Dual Purpose Research (with NIH)**
- » **Feedstock genomics (with DOE)**
- » **Big Data (with NSF)**
- » **Sensors in Soils (with NSF)**

- » **Plant and animal health (with Irish agencies)**

AFRI Budget Over Years



AFRI SAS Evolution

Total Factor Productivity Growth

Water and N use efficiency

Environmental Stress and Pests

Biobased chemicals and products

Food Safety

Profitability

Biobased chemicals and products

Food Safety and Nutrition

Labor Challenges

Land Stewardship

Agrosecurity

Rural Bioeconomy

Food Safety and Nutrition

2018

2019

2020



United States
Department of
Agriculture

National Institute
of Food
and Agriculture

www.nifa.usda.gov
[@USDA_NIFA](https://twitter.com/USDA_NIFA)

Sustainable Agricultural Systems



Program Update

NCRA
Scottsdale, AZ

March 25-27, 2019

USDA NIFA

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE



BIOENERGY, CLIMATE,
AND ENVIRONMENT



FOOD PRODUCTION
AND SUSTAINABILITY



YOUTH, FAMILY,
AND COMMUNITY



FOOD SAFETY
AND NUTRITION



INTERNATIONAL
PROGRAMS





Sustainable Agricultural Systems

AFRI

- New RFA for 2018; **planned program continuation for 2019**
- Progression of the Challenge Areas to new multi-disciplinary **systems**-level work
- SAS is soliciting creative and visionary project applications that:
 - solve present and future food and agricultural production **system** challenges
 - use **transdisciplinary** approaches
 - **integrate** research, education, and extension activities
 - promote convergence of science and technology
 - result in societal benefits.
- Coordinated Agricultural Projects and Strengthening CAP Grants





Sustainable Agricultural Systems

- 2018 Applications must address one or more 25-year goals:
 - Increase agricultural total factor productivity growth from the current 1.5 percent to 2 percent per year and agricultural production by 2 percent annually in all U.S. regions, providing models for similar agro-ecological niches;
 - Improve water and nitrogen and phosphorus nutrient use efficiency by 50 percent;
 - Reduce crop losses due to environmental stress and pests, or diseases by 20 percent;
 - Produce 50 billion gallons of biofuels and 50 billion pounds of biobased chemicals and bioproducts; and
 - Reduce food-borne illnesses down to 8.5 cases per 100,000.



2019 anticipated program goals

To catalyze transformational changes throughout US agricultural systems bridging to the SAS18 previous' 25 year goals and expanded to other critical Ag areas :

- Increase profitability in agriculture through reducing inputs, enhancing productivity, and reducing losses due to environmental and biological stresses, including pests and diseases
- Foster economic development and prosperity in rural America by catalyzing production of high – value biobased chemicals and other products using agricultural feedstocks
- Enhance rural prosperity and health through advances in nutritional and human sciences, and ensuring access to affordable, safe and nutritious food to sustain healthy lifestyles



Sustainable Agricultural Systems SUMMARY

- Anticipate opportunity for up to \$10 million per **Systems-level** Coordinated Agricultural Project (CAP) or FASE Strengthening CAP with project periods of up to five years
- \$90 million in funding anticipated FY2019
- Integrated Projects only (must include all three: Research, Education, and Extension)
- Letter of Intent deadline: to be posted
 - **LOI required**
- Application deadline: to be posted
nifa.usda.gov/program/afri-sas





United States
Department of
Agriculture

National Institute
of Food
and Agriculture

INVESTING IN SCIENCE | SECURING OUR FUTURE | WWW.NIFA.USDA.GOV

Thank you



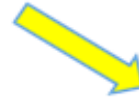
SAS FY 18

SAS FY 19

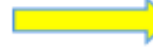
\$80.000

\$90.000

Increase agricultural **total factor productivity growth** from the current 1.5 percent to 2 percent per year and agricultural production by 2 percent annually in all U.S. regions, providing models for similar agro-ecological niches



Improve water and nitrogen use efficiency by 50 percent;



Increase **profitability** in agriculture through reducing inputs, enhancing productivity, and reducing losses due to environmental and biological stresses, including pests and diseases

Reduce crop losses due to environmental stress and pests, or diseases by 20 percent;



Produce 50 billion gallons of biofuels and 50 billion pounds of **biobased chemicals and bioproducts**



Foster economic development and prosperity in rural America by catalyzing production of high-value **biobased chemicals and other products** using agricultural feedstocks

Reduce **food-borne illnesses** down to 8.5 cases per 100,000.



Enhance rural prosperity and health through advances in nutritional and human sciences, and ensuring access to **affordable, safe and nutritious food** to sustain healthy lifestyles

Process is an essential piece of developing highly integrated and multi-systems work.

- Team thinking and conversations reflects what we require in the successful awards
- Real time learning and adjustments to SAS FY 18 feedback
- Simplified and broadened topic areas...
 - 5 goals to 3 goals
 - Eliminated specific 25 year target goals
- Semantics and functional language
- Feedback being used to better communicate Systems and Integration at the appropriate level



Item 8.0: USDA ARS Report to NCRA State Agriculture Experiment Station Directors

Presenter: Alberto Pantoja, Associate Director MWA

Action Requested: For information

USDA Agricultural Research Service (ARS)
Report to NCRA State Agriculture Experiment Station Directors

March 24, 2019

Area Leadership

Plains Area (11 states)

Area Director: Larry Chandler

Associate Area Directors: Bryan Kaphammer; Joseph Rich

Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Wyoming

Midwest Area (9 states)

Area Director: JL Willett

Associate Area Directors: Alberto Pantoja; vacant

Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, Ohio, Wisconsin

Budget Information

FY 2019 Budget for ARS (Consolidated Appropriations Act Feb 15, 2019)

- **Salaries and Expenses:** \$1,303,266,000

Increase of \$100.5 million from the FY 2018 operational level and \$284.3 millions above President Budget Proposal.

- **Increases**

- **Program Increases** **57,600,000**
 - National Bio- and Agro-Defense Facility O&M 42,000,000
 - NBAF Transition Costs (one time) 10,600,000

Expected to be fully operational by Dec 31, 2022

- Increase research on efforts on foreign animal diseases and emerging diseases with high consequence to animal and public health. 5,000,000

- **Buildings and Facilities** **381,200,000**

**FY 2020 President Budget (Released to public March 18, 2019,
Based on presumption of a year-long continuing resolution for FY19;
Subject to review, modification and approval by congress)**

- **Salaries and Expenses:** **\$1,203,000,000**
- **Proposed Increases** **41,100,000**

- NBAF Operation and Maintenance
20,000,000
- NBAF Transition Costs 13,100,000
- Research Programs Enhancements 8,000,000
- **Proposed Decreases** **82,400,000**
 - Proposed Location/Laboratory/Worksite Closures
39,300,000
 - Proposed Project Terminations 43,100,000
 - **Buildings and Facilities** 0

New Leadership and Vacancies

Midwest Area

- **Illinois**
 - Global Change and Photosynthesis Research, Urbana (vacant; Alex Rooney Acting RL)
 - Soybean/Maize Germplasm and Pathogen Genetics Research, Urbana (vacant; Less Domier, Acting RL)
 - National Center for Agricultural Utilization Research, Peoria
 - Center Director (vacant; Sea Liu, Acting CD)
 - Bioenergy Research (vacant; Ron Hector, Acting RL)
 - Bio-oils Research (vacant; Terry Isbell, Acting RL)
 - Renewable Product Technology (vacant; Chris Skory, Acting RL)
- **Iowa**
 - Corn Insects and Crop Genetics Research, Ames (vacant; Tom Sappington, Acting RL)
- **Kentucky**
 - Forage Animal Production Research, Lexington (vacant, Michael Flythe, Acting RL)
- **Minnesota**
 - Soil Management Research, Morris (vacant; Jane Johnson, Acting RL)
- **Missouri**
 - Plant Genetics Research, Columbia (vacant; Bruce Hibbard, Acting RL)
- **Ohio**
 - Applications Technology Research, Wooster (vacant; James Altland, Acting RL)
 - Corn, Soybean, and Wheat Quality Research, Wooster (vacant; Byung-Kee Baik, Acting RL)
- **Wisconsin**
 - US Dairy Research Center, Madison, WI (vacant; Jeff Vallet, Acting CD)
 - Cell Wall Biology and Utilization Research, (vacant, Geoffrey Zanton, Acting RL)
 - Dairy Forage Research Unit, (vacant; Peter Vadas, Acting RL)

Plains Area

- **Kansas**
 - Center for Grain and Animal Health Research (Manhattan)
 - Arthropd-Borne Animal Diseases Research Unit (vacant, Bill Wilson, Acting RL)
- **North Dakota**
 - Insect Genetics and Biochemistry Research Unit (Fargo), (vacant, Joseph Rinehart, Acting RL)
 - Sunflower and Plant Biology Research Unit (Fargo), (vacant, James Anderson Acting RL)
 - Sugar Beet and Potato Research Unit (Fargo), (vacant, Melvin Bolton, Acting RL)
- Grand Forks Human Nutrition Research Center (Grand Forks)
 - Healthy Body Weight Research Unit (vacant, Kate Claycombe, Acting RL)
- **Nebraska**
 - USMARC
 - Center Director, (Mark Boggess, CD)
 - Reproduction Research Unit, (Acting RL, Gary Rohrer)
 - Genetics, Breeding and Animal Health Research Unit, (Acting RL, Larry Kuehn)
- **Colorado**
 - Fort Collins, Center for Agricultural Resources Research (CARR)
 - Soil Management and Sugarbeet Research (Merle Vigil, RL)
 - Water Management Systems Research (Kyle Douglas-Mankin RL)
 - National Laboratory For Genetic Resources Preservation (Fort Collins)
 - Plant and Animal Genetic Resources Preservation and the Plant Germplasm Preservation Research Units were consolidated in to the Agricultural Resources Preservation Research Unit with the CD of CARR, Daren Harmel, as the Research Leader.
- **Texas**
 - Bushland
 - Livestock Nutrient Management Research Unit (vacant, David Brauer, Acting RL)
 - College Station
 - Southern Plains Agricultural Research Center, Crop Germplasm Research Unit, (Joshua Udall, RL)
 - Southern Plains Agricultural Research Center, Insect Control and Cotton Disease Research Unit, Robert Stipanovic retired (vacant, Wayne Ivie, Acting RL)
 - Aerial Application Technology Research Unit (Bradley Fritz, RL)
 - Lubbock
 - Cropping Systems Research Laboratory, Laboratory Director (vacant, Acting LD, Dave Brauer)
 - Temple
 - Grassland, Soil & Water Research Laboratory, (Douglas Smith, RL)

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Item 9.0: NRSP4 Update

Presenter: Jerry Baron

Slides below.

NRSP-4 Update

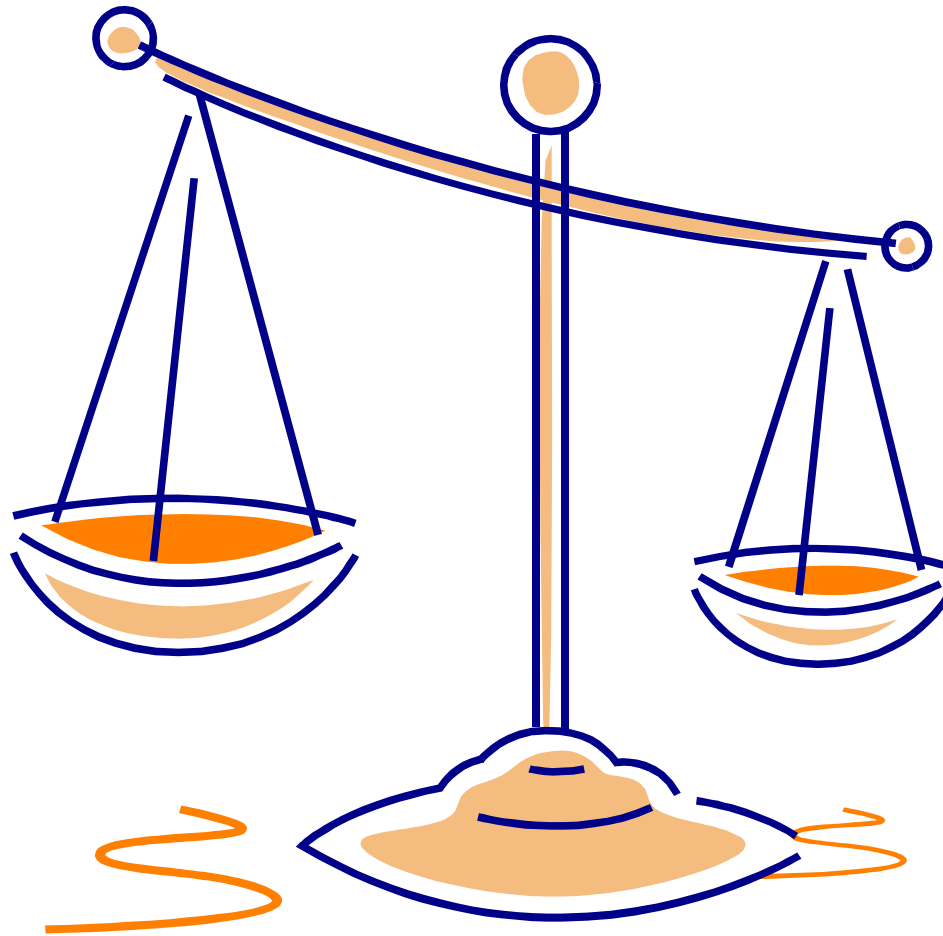
**Jerry Baron
Executive Director
The IR-4 Project**



Benefits of Pest Management

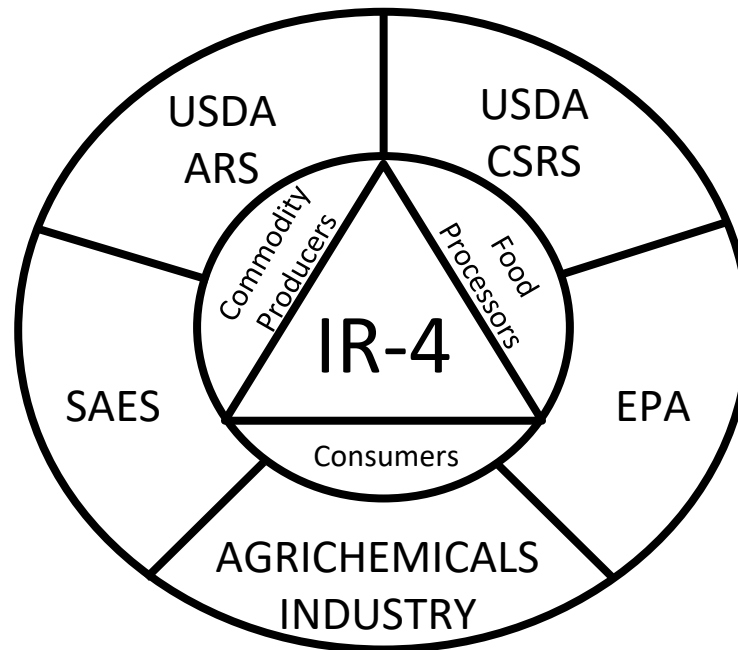


Minor Use Pesticide Problem



IR-4 Mission

Facilitate the regulatory approval of sustainable pest management technology for specialty crops and specialty uses to promote public well-being



IR-4 Project Objectives

- Food Crop Program
- Biopesticide & Organic Support
- Environmental Horticulture Program

Flagship Objective

Food Program w/ Reduced Risk Products
EPA required Magnitude of Residue
trials (19,814 supported uses)



Modern Minor Use Problem

Registrations are plentiful but ability to use approved pest management products can be limited:

- **Export issues**
- **Efficacy data needs**
- **Pest resistance**
- **Use restrictions**
- **Public acceptance**

Integrated Solutions

- 1. Screen conventional products and biopesticides**
- 2. Manage pest resistance**
- 3. Reduce pesticide residue levels to enhance trade**
- 4. Research efforts to address needs for organic production**



Global Harmonization Efforts

- 1. Repurposing old IR-4 Data**
- 2. Data Development**
 - **Global Zoning**
 - **Enhanced Domestic Research**
 - **Joint Research Projects**
- 3. Leadership (GMUS/GMUW)**
- 4. Global Minor Use Foundation**

2014 Farm Bill

INTER-REGIONAL RESEARCH PROJECT NUMBER 4.—Subsection (e) of the Competitive, Special, and Facilities Research Grant Act (7 U.S.C. 450i(e)) is amended in paragraph (4) (E) assist in removing trade barriers caused by residues of pesticides registered for minor agricultural use and for use on domestically grown specialty crops;

Biopesticides

- Focus on both conventional and organic market use
- Support biopesticide registrations
 - Regulatory Support
 - Data development now in Integrated Solutions
- Includes support for biotechnology - Plant Incorporated Protectants



Changes in Biopesticide World

- Many new effective products with registrations
- Products have fit into conventional agriculture systems
- Big companies are established in biopesticide market
- Consumer demand for green products for home and garden
- Biostimulants



Specimen Label



NATURALYTE® INSECT CONTROL

*Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

A Naturalyte® insect control product formulated for control of lepidopterous larvae (worms or caterpillars), leafminers, thrips, and red imported fire ants.

Group	5	INSECTICIDE
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Active Ingredient:

spinosad (a mixture of spinosyn A and spinosyn D)	22.5%
Other Ingredients.....	77.5%
Total	100.0%

Contains 2 lb of active ingredient per gallon.



Listed by the Organic Materials Review Institute (OMRI) for use in organic production.



Precautionary Statements

Personal Protective Equipment (PPE)

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter the treated area until sprays have dried.

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Nonrefillable containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds

Specimen Label



NATURALYTE® INSECT CONTROL

*Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

A Naturalyte® insect control product for control or suppression of lepidopterous larvae (worms, caterpillars and each twig borers), leafminers, and thrips

Group	5	INSECTICIDE
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Active Ingredient:

spinosad (a mixture of spinosyn A and spinosyn D)	22.8%
Other Ingredients.....	77.2%
Total	100.0%

Contains 2 lb of active ingredient per gallon.

EPA Reg. No. 62719-292

EPA Est. _____

Precautionary Statements

Personal Protective Equipment (PPE)

applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Agricultural Use Requirements (Cont.)

It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Nonrefillable containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Offer for recycling if available.

Refillable containers 5 gallons or larger:

Environmental Horticulture

- Predominantly crop safety testing and efficacy, including invasive pests allowing industry to expand registrations (Open Labels)
- Pollinator Protection



SIGNIFICANT Leverage of Funding

<u>GROUP</u>	<u>AMOUNT</u>	<u>PROGRAM(S) SUPPORTED</u>
NRSP-4	\$ 481,182	Food, Ornamental, Biopesticide
USDA-NIFA	\$11,916 000	Food, Ornamental, Biopesticide
USDA-ARS	\$ 3,100,000	Food & Ornamental
USDA-FAS	\$ 450,000	Food (International)
Grants from Industry	<u>\$ 1,000,000</u>	All
TOTAL	\$16,947,182	

*Does not include in-kind contributions that are provided by Rutgers (\$216K) other State Agricultural Experiments Stations (\$2.9 M), Canada (\$450 K), EPA (\$7.6 M), growers and the crop protection industry (\$5.5 M). In-kind contribution valued at over \$16.755 million annually

Funding

- IR-4 funding less today than in 2010; expenses continue to rise → less research
- CLC stepped up their game; “19 in 19”
- At the end of the process; another year of flat funding → Operation 20 in 20
- Eliminated in President’s FY 2020 proposal
- Convert to SCA in FY 2021 → 10% IDC
- Engaged in Strategic Realignment discussions

Benefits/Summary

- Growers
 - Legal access to safe & effective pest management technology.....grow high quality crops
- Food Processors & Food Retailers
 - Consistent supply of raw materials
- Economy
 - ***IR-4 contributes \$9.4 Billion to annual US GDP/supports >95,200 jobs***
- Public
 - Plentiful supply of specialty crops that contribute to a healthy diet & plants that enhance the environment.

Village farms®

Greenhouse Grown



leadership. knowledge. growth.

FFVA
FLORIDA FRUIT & VEGETABLE ASSOCIATION



National Watermelon Association



Founding Member:
MIRC
Mint Industry
Research Council



THE BLUEBERRY PEOPLE®
MBG Marketing



USA Dry Pea & Lentil Council



SOCIETY of AMERICAN FLORISTS
Your Growth is Our Business



THE CRANBERRY INSTITUTE



USA HOPS
HOP GROWERS OF AMERICA



Buurma
FARM
GREENS

SCADSVILLE

Buurma
FARM
GREENS

Thank You



Item 14.0: Reimagining NC Multistate Projects Discussion

Presenters: Deb Hamernik and George Smith

Action Requested: For discussion and identification of potential action items.

Overarching Question:

Are North Central Multistate committees delivering the desired impact, outcomes and return on investment as intended by the 1998 AREERA legislation?

Issues to Consider:

- 1) Collaborative research (as measured by the number of co-authored publications or grants) is variable across Multistate committees.
- 2) For funded NC technical committees, many states use Hatch Multistate funds for faculty salaries and do not provide dollars for collaborative research or support to travel to annual committee meetings.
- 3) Attendance at many Multistate committee annual meetings is dwindling.
- 4) Renewal and writing a new, five-year project is often done by only one or two members.
- 5) Some ERA committees have seen decreased participation by researchers and have become mostly Extension activities.
- 6) Some CC have questionable value.
- 7) Changing faculty demographics, interests, grant environment, resources, technologies, reporting and accountability metrics.

Questions to Consider:

- 1) What do Administrative Advisors (AA; and AES Directors) expect from Multistate committees?
- 2) How should “true” Multistate (collaborative) research be defined and evaluated?
- 3) What is an acceptable level of research performance from Multistate committees?
- 4) Do Multistate committees address priority research topics? If not, how could this be improved?
- 5) Are there too many Multistate committees in the North Central region?
- 6) What is possible, in terms of raising the bar, with existing Multistate committees? Should the AAs and NCACs use a more critical lens to evaluate Multistate committees on an annual basis and before renewal?
- 7) Where are the resources to support multistate research collaborations? Are AES Directors willing to invest in Multistate committees (as intended by the 1998 AREERA legislation)? Should there be an agreed upon base of support from directors for Multistate committee participation?
- 8) Do the outcomes of NC Multistate committees provide meaningful results to states and NIFA?

Request Input from NC Directors:

- 1) Are NC Directors content with the status quo for Multistate committees?
- 2) Are NC Directors ready to have a deeper conversation regarding the future of NC Multistate committees (all types—funded NC, CC, and ERA committees)?

Distribution of NCRA Research Projects by Project Type and by Expiration Year.

Project Type	2019	2020	2021	2022	2023	Percent*
NCDC	1	2				3.2
NCCC	3	4	5	1	2	15.8
NCERA	7	1	8	5	1	23.2
NC	9	7	13	9	7	47.4
Percent*	23.5	16.5	30.6	17.6	11.8	
NC100						n.a.
NRSP	2	3		1	1	n.a.

*NCAC at 10 active groups with no expiration, so included in Project Type distribution (95 Total Projects at 10.5%), not included in expiration year distribution (85 Projects).

NCRA Project Alignment with ESCOP Grand Challenges

Sustainability, competitiveness and profitability of food and agriculture (64.3%)

NC 7, 140, 229, 246, 1029, 1034, 1170, 1177, 1180, 1181, 1182, 1186, 1189, 1192, 1195, 1197, 1198, 1200, 1201, 1202, 1203, 1204, 2040, 2042

NCERA 13, 57, 101, 103, 137, 180, 184, 214, 217, 219, 220, 221, 222, 224, 225

NCCC 9, 31, 42, 52, 65, 134, 167, 211, 212, 215, 216, 307, 308

NCDC 232, 234

(Plant - 28; Animal/Wildlife - 18; Economics – 6)

Adapt to and mitigate the impacts of climate change on food, feed, fiber and fuel systems (1.2%)

NC 1179

Support energy security and the development of the bioeconomy from renewable natural resources (2.4%)

NC 1178, 1183

Play a leadership role in a safe, secure and abundant food supply (9.5%)

NC 213, 1023, 1184, 1194, 1206

NCERA 197

NCCC 170, 210

Improve human health, nutrition and wellness (2.4%)

NC 1196, 3169

Heighten environmental stewardship through sustainable management practices (9.5%)

NC 1173, 1187, 1190, 1205, 1207

NCERA 3, 59

NCDC 233

Strengthen individual, family and community development and resilience (10.7%)

NC 1030, 1100, 1171, 1193, 2172

NCERA 210, 215, 216, 218

Points of Discussion for Reimagining Multistate Committees

Guidelines

- *CCs and ERAs at 10 years renewal
- *NC station financial support (consistent as a baseline, need to be more nimble to create new ones)
- *Take more of a 'grant' or start-up approach to committees which might change the timeline and productivity/performance
- *Should the actual project write-up format be more like the NIFA AFRI grant proposals?
- *Increase the rigor of reviews taking into account various listed items, actively sunset projects and create new ones
- *If the multistate program is to deal with "high-priority" topics, how do we identify these or put us in a position to be more proactive?
- *Be mindful of the 25% AREERA (from 1998) amendment for multistate work as well as the 'integrated' requirement with Extension (check on NIFA, REEport and Uniform Guidance document for relevant info)
- *On page 12 bullet six of the National Guidelines there is mention of peer review....and certified in the state Plan of Work (?) and in bullet seven point 2. (see also page 14 **Annual Evaluations** section). This also suggests that our Guidelines need to be updated at the least if not deeply reviewed.
- *Could Rapid Response and Development Committee be combined into one project type?
- *RR and DC currently have different reporting formats and federal approval processes and, as practiced, receive different support monies. Is this the way that it should be across all of the project types?
- *Could CCs and ERAs be combined into one project type, as there is not much difference in these other that label?
- *Evaluate and change the proposal format, annual reporting metrics, midterm review, Appendix E (project classifications) and so on across all projects by aligning with what we want to collect/gain AND what NIFA needs
- *Should there be a regional designation to each project?
- *Should we require language on data management plans in project write-ups?
- *Why are Appendices I-K optional for midterms (in NC yet not in others, do other regions need to catch up or should the National Guidelines be deeply reviewed?)
- *When NIMSS is mentioned, ensure that the multistate guidelines reflect what the "new" NIMSS actually does
- *Evolve to have director flexibility to provide funding to any type of recognized project
- *With technology, redefine what a 'meeting' is per requirements to reflect current practices

Productivity/Accountability

- *Membership on any committee (numbers, regional/national distribution, recruitment, participation level) needs to be more active and reflective of 'active' priorities
- *Productivity and Impact metrics (actively used or need to be created/defined?) – co-authored publications, collaborations, collaborative grants, sharing of resources
- *Quality industry/commodity involvement/support (where applicable)
- *Diverse content of annual meetings – guest speakers, tours, student involvement
- *Committee structure and function or governance
- *Active discussions and actions on future collaborations

Membership: Barker, Benfield, Conner (NIFA), Draper, Hamernik, Smith, Hamilton, Jacobsen

Past Efforts:

NCAC AA Conversations (2016)

Chris and Jeff conducted phone calls (30-60 minutes) with each of the 10 current NCAC (North Central Advisory Committee) Administrative Advisors (AA) during November 2016. Our conversations were on behalf of MRC and the NCRA directors, as a result of needing feedback on the processes and functions used by the AC for peer review, meeting discussions and other interactions. In addition, we were looking at consistency, quality activities and best practices. We asked a set list of 15 questions during the conversation with some follow-up and joint discussion. Our commitment was to summarize our findings, report back to MRC and NCRA directors, then discuss and affirm recommendations to be conveyed to all NCACs.

General Findings

- AAs were positive and appreciative of the calls and found them thought provoking.
- The improvements to NIMSS were acknowledged.
- AAs were supportive of the responsiveness and instructions provided by Chris.
- Two AAs asked to be relieved of their AA duties.
- No AA recommended discontinuing their NCAC.
- Calling the NCAC AAs was beneficial to the NCRA Office and illustrated the importance of NCAC to the peer review process. The mere contact and subsequent conversation seemed to energize the AA to contribute to the AC process more robustly.
- The NCACs are a productive and efficient means to conduct peer reviews of NC projects. In addition to the support and logistics provided by the NCRA Office, periodic conversations with the AAs is warranted to ensure consistent and quality reviews and encourage peer conversations across the region with this leadership group.
- Improved efforts to connect NCACs with NIFA NPLs should occur given the reestablishment of travel support at NIFA and given the usual turnover of unit chairs/heads and NIFA NPLs.

Specific Findings

- Most AAs felt that the NCAC members understood the importance and responsibilities for the reviews. This was accomplished by the AA, senior members of the AC and former perspective of faculty on multistate projects. Most felt that face-to-face meetings added value to the review process and enabled other peer interactions.
- Electronic communications provide up-to-date instructions (if read). Many current approaches and practices are based on a 'legacy' approach. Several AAs suggested web-based training.
- Most AAs desired to continue these responsibilities. The involvement with NIFA was highly variable, unless the NCAC met in Washington, DC. Consequently, several AAs did not know their NIFA representative or how to determine their identity.

- Processes and roles of NIFA, AA, AC Chair and AC members on project reviews were discussed. AA and sometimes the NCRA Assistant Director does not know the project review status. A wide array of practices and sporadic communications were present across reviews, conference call reviews and finalization of reviews within the AC and between the AA and AC Chair. Most ACs conducted their meetings (and reviews) on the necessary timelines for NCRA business. Leadership identification was formal to informal. Participation compared to participants signed up ranged from 25-80%. Website quality and Chris's availability are good.
- Based upon past practices and the scheduling of the project reviews in concert with other meetings, most ACs had some form of timely and robust topical discussions as a key platform for achieving more success from these meetings. Several AAs identified this as an area where they could encourage more to enhance the overall value and participation in these meetings. Several projects routinely provide NIMSS information, yet several do not and several AAs thought the AC Chair did, yet no information was in NIMSS. Identifying new membership was informal or unknown.

Possible Action Items:

- Provide a one-pager to AAs and Chairs with information on the purpose and value of their peer reviews. In addition, communicate information on committee leadership and responsibilities with agendas, NIMSS reporting and timeliness of reviews. Specifically target new members with this effort. Consider a standing agenda item on these for every year.
- Continue routinely reviewing instructions and related communications. Our experience suggests that web-based training would not be utilized and therefore not helpful.
- One AA was replaced (NCAC1), with a second replacement currently under discussion (NCAC22). NIFA representatives can be contacted by the AA or the NCRA Office to encourage regular communication and participation (phone or otherwise) in the NCAC discussions. Several NCACs had their connection to NIFA representatives revitalized.
- The MRC Chair (via NCRA Office) could provide a courtesy note back to the AAs and AC Chairs thanking them for their reviews and identifying actions that took place at the NCRA Spring meeting. Remind the AAs and AC Chairs to submit a modest report into NIMSS. The NCRA directors could specifically ask the NCACs a select set of relevant questions (e.g. regional/national implications) as feedback from a key stakeholder group. The NCRA ED could also periodically review NIMSS and interact accordingly with the AA and AC Chair. On a regular basis, the NCRA directors would update a listing of NC department or division heads/chairs to facilitate better involvement of these new leaders throughout the NC region to the relevant NCAC. EDs could discuss the use and value of ACs and could encourage national participation, if appropriate.

NCRA Office Actions

- Project Reviews:
 - Simplify the initial call for reviews each year. Keep detailed instructions available, just for reference.
 - Add more direct NIMSS links to projects and required forms. Specifically tie the blank review form to assigned project so reviewers can easily see the required feedback needed.
 - Send reminders to AAs about 1 month out from deadline, if review assignments have not been given.
 - Send reminders to AAs and assigned reviewers about 1 month out.
- Other NCAC activities and meetings

- More interaction with struggling NCACs, provide meeting topics, requests for feedback on issues, etc. Ask what they need to succeed that year. Tie topics back to NCRA meeting BP sessions, when possible. Offer use of phone line, webinar space, etc.
- Involve other regions in NCACs, encourage more joint NC/S activities like NCAC16
- Reporting: NIMSS automatically now requires reports before future meetings can be authorized, so reporting will hopefully be more consistent. Perhaps we can encourage presentation of particular information, such as minutes, reviews conducted that year, meeting accomplishments/value-added activities that occurred, etc.?

Multistate Proposal Size Reduction Request (2013):

Updates to the NC Multistate Proposal formats occurred in 2013, with request to decrease the size of most proposal sections. Please refer to:

https://docs.wixstatic.com/ugd/4081a5_baf8c39b33ea4503a902d5235ff2dc09.pdf, starting with page 26 at Appendix A.

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Item 13.0: NCRCRD Update

Presenter: John Mann

NCRCRD Update for the NCRA

Mark Skidmore and John Mann

The North Central Regional Center for Rural Development had another productive year. Below, we provide a summary of activities beginning with the introduction of new NCRCRD board member, Catherine Austin Fitts. This is followed by an update on the NC1100 project, which is directly supported by the NCRA, and a summary of the Land Grant research university-tribal college matching project. Other notable activities follow. Mark and John are happy to answer any questions by e-mail or during the meeting in Scottsdale, AZ.

New Board Member

The NCRCRD welcomes Ms. Catherine Austin Fitts, former Assistant Secretary of Housing and Urban Development, to the board. Ms. Fitts is currently the proprietor of Solari, Inc., where her vision is to help “as many people as possible to live a free and inspired life.” She has expertise and interest in housing, entrepreneurship, food/health, and building local economies, all of which overlap with NCRCRD priority areas. Catherine has a unique set of experiences and knowledge that complements the expertise of the other board members. Welcome, Catherine!

NC1100 ‘Innovations in Agriculture’

The “Innovations in Agriculture and Rural Development” project has been very productive over the last year. Recently, the series featured a new University of Wisconsin—Madison innovation that uses UV-light to remove nitrates and nitrites from water. The technology has applications in aquaculture and other water treatment efforts, and NCRCRD affiliate Dr. John Mann provided coaching for developers to pursue SBIR funding. Another technology which is under development at Michigan State University will be featured in the spring. This innovation is a mobile and automated prototype that identifies and removes metal debris (e.g., nails) from wood, and the salvaged wood can then be used as an input for new construction materials. The innovation has important applications in both rural and urban areas where removal of dilapidated and abandon properties is very costly. Dr. Mann is working with this team to develop a Phase I SBIR proposal for the USDA Rural and Community Development topic area. In addition, co-authors Dr. Mann and Professor Scott Loveridge (and others) are revising a number of articles for peer-reviewed journals. One is in “revise and resubmit” status for the Journal of Urban Affairs. Two others were recently submitted to the Journal of Regional Science and Economic Development Quarterly. Three other papers that used individual aspects of USDA’s Rural Establishment Innovation Survey are currently being revised for new peer review submissions. This list of articles is the most recent research outputs from the 2016 NIFA/AFRI grant, which was a direct result of the NC1100 collaboration.

1994 Tribal College/1862 Land-Grant Research Institution Matching Program

Small and medium sized land-grant institutions, which include many 1994 and 1890 institutions, are often at a disadvantage relative to larger land-grant universities in terms of networking resources and/or the opportunity to specialize in emerging research. Such obstacles act as deterrents for faculty of these institutions interested in participating in and leading research projects. However, these same faculty can

provide invaluable experience and expertise on important and emerging research topics. Over the past two years, NCRCD affiliate Dr. John Mann and Dr. John Phillips of the American Indian Higher Education Consortium have facilitated new collaborations between researchers at 1994 and 1862 land-grant institutions where the goal is to improve communication and expand existing networks in ways that cut across geographies and university size/type to increase opportunities for these faculty and improve the quality of research produced by the academy. During a recent networking event, faculty from both groups of institutions not only collaborated on new ideas, but also shared solutions to help them manage heavy teaching loads while participating in research.

The overarching project goal has three elements. The first is to establish a peer network of faculty researchers from a diverse group of land-grant universities, including 1994, 1890, and 1862. The second is to effectively engage groups of researchers via information and communication technologies (ICTs) on important research topics. The third is to encourage and facilitate future research collaborations across a broad array of topics and disciplines. This past year, two broad themes were identified from surveys and interviews with 1994 faculty: (1) local foods and food sovereignty; and (2) water resource management and conservation. NCRCD affiliate Dr. Mann established two new groups of 1862 faculty (one for each theme), with the goal to hold virtual “fast-pitch” collaboration sessions, where researchers can learn more about their peers and leading-edge topics. Additionally, Dr. Mann was part of the 2018 NIFA Tribal Colleges and Universities (TCU) panel review that met in July 2018, which helped him better understand the current capacity challenges of the TCUs. As a related outcome, a new collaboration between College of Menominee Nation and Michigan State University researchers, including Drs. Mann and Loveridge as co-PIs, was launched in August 2018. It is focused on businesses and entrepreneurship along the peripherals of tribal lands. The team is making two presentations at the Southern Regional Science Association’s annual meeting this year, and is preparing to submit a new NIFA/AFRI grant in 2019.

NCRCD Helps to Address the Opioid Crisis

Over the past year, the NCRCD has devoted a significant effort to addressing health-related issues and challenges, including the ongoing opioid crisis. A summary of these activities is provided below.

Extension Opioid Crisis Response Workgroup

Overdoses are now the leading cause of death of Americans under the age of 50, the impacts of which are being felt in every region of the country, in both rural and urban places. Most of these fatalities are tied to heroin or prescription painkillers. In addition to loss of life, the societal costs of the crisis in the form of direct healthcare costs, lost productivity, and costs related to criminal justice are estimated to be as high as \$78 billion. In many states, universities within the land-grant system are responding to the crisis. However, the Extension Committee on Organization and Policy (ECOP) believes that a coordinated land-grant effort could provide a more comprehensive and effective strategy to address the ongoing crisis.

ECOP invited Mark Skidmore to serve as Coordinator for the *Extension Opioid Crisis Response Workgroup* (EOCRW). EOCRW was given a charge from the ECOP to identify and assemble resources in order to help Extension play a stronger and more strategic role in addressing the opioid crisis, and more generally, behavioral health challenges that emerge over time. The <http://Opioidresponse.extension.org> website provides useful information to help the land-grant Extension system play a larger role in addressing the crisis. The website provides information about:

- EOCRW
- findings of a nationwide survey of Extension behavioral health programming
- extensive literature review on opioids and substance abuse
- links to potential partners, networks, and grant opportunities
- Extension Opioid Response Strategic Plan Report.

The workgroup completed its task over a nine-month period. Now that the work is complete, we are using the findings to develop a plan of action to build capacity with Extension to play a larger and more systematic role in addressing the crisis.

Combating Opioids Webinar Series

In 2018, the NCRCRD partnered with Purdue University on a successful USDA Rural Health and Education Safety Education grant to help improve knowledge of, and resilience to, the opioid crisis. The role for the NCRCRD was to provide a webinar series entitled “Combating Opioids”, which can be accessed at https://www.canr.msu.edu/ncrcrd/webinars/rural_health_and_safety_education. Perhaps the highlight of the series thus far has been the webinar by Sam Quinones, author of *Dreamland: The True Tale of America’s Opiate Epidemic*. In 2019, additional funding was provided by the Substance Abuse and Mental Health Services Administration (SAMSHA) to host a set of additional webinars this year.

NCRCRD Partners With OSU to Expand CAPE Training

As the USDA/SAMSHA funded project “Community Assessment and Education to Promote Behavioral Health Planning and Evaluation” (CAPE) came to a close, Ohio State University received funding from SAMSHA to address the opioid crisis in Ohio. Ohio State University invited the NCRCRD to provide training to Extension educators and community leaders to help build capacity at the community level to address the crises as they manifest themselves in rural Ohio communities. This year the NCRCRD will use the curriculum developed by CAPE to build capacity to address emerging behavioral health challenges such as the Opioid crisis in Ohio.

NCRCRD Partners With MSU to Develop and Deliver Training on Farm Stress for the USDA Farm Service Agency

Over the past several years farmers have faced increasing financial stress resulting from a number of factors. The primary drivers have been low commodity prices coupled with rising debt levels. This, in turn, has led to reductions in net farm income of more than 50% of its peak in 2013 (USDA, 2018) and to a growing risk of loan default for many farm families. As a result, farmers and their families may face increased difficulty managing the stress and frustration of challenging financial circumstances.

In turn, USDA Farm Service Agency (FSA) personnel face the challenge of working with stressed farmers. FSA field staff have noted that some farmers have expressed their stress through aggressive verbal and physical confrontation. In addition, some farmers have explicitly expressed thoughts of suicide. FSA personnel may not have the skills and knowledge required to work effectively with distressed farmers, which may increase their own stress.

The purpose of this \$500,000-funded project is to develop and deliver training to help FSA personnel effectively identify and assist farmers who are experiencing distress. To achieve this, the NCRCRD, Michigan State University (MSU) and Extension educators from the region are adapting a training developed by MSU Extension called “Communicating with Farmers under Stress”. The training was

originally developed to assist agricultural business personnel working with farmers who are experiencing stress to understand sources of stress. It also covers learning signs of stress, effective communication strategies, warning signs of suicide, reducing the stigma related to mental health concerns, and how to connect farmers to relevant mental health and other resources. We are adapting this curriculum by developing a series of three web-based learning sessions using an online delivery system. The sessions will include:

- Pre-recorded webinars to enable self-paced, on-demand delivery of educational content combined with other learning tools within the AgLearn educational delivery system.
- Small group discussions to bridge learning opportunities with problem-solving of ongoing challenging situations using Zoom distance communications technologies.
- In-person training to provide opportunities for applied learning, including developing skills through role play.

In addition to the trainings, we are also developing a toolkit of materials on mental health and farm assistance resources as well as a training manual for the curriculum.

Post-doc Updates

Alison Brennan

Post-doc Alison Brennan has had a busy and productive year. Her primary service area is the western portion of the North Central region (Kansas, Nebraska, South Dakota, and North Dakota). Her past work includes partnering with Kansas State University and the University of Nebraska on a project that assessed the needs and availability of affordable childcare in Kansas and Nebraska. She also helped to develop the grant proposal “Energizing Entrepreneurs” for the Bush Foundation. In addition, she is building her community development skill set by participating in events on leadership and civic engagement, the nexus between economic development and health, and the North Dakota State University Community Development Professional Network. She is also a key partner in developing training to help USDA Farmer Services Agency personnel to more effectively identify and assist farmers who are experiencing distress.

In addition to these activities, Dr. Brennan was an instrumental member of the Extension Opioid Crisis Response Workgroup, in which she was the primary author of the report “Land Grant Response to the Opioid Crisis: A Review of Research Related to Education and Prevention”. Her contributions to the workgroup were absolutely essential to its success.

Jungmin Lim

Post-doc Jungmin is working in two areas. The first is in the disaster resilience where she recently published an article in the Southern Economic Journal on flood fatalities and the National Flood Insurance Program. She also completing a paper on heatwave fatalities across the nation. She also recently completed two articles on the growth of manufactured housing in rural areas.

NCRCRD Hosts the Rural Health and Economic Development Workshop

In April 2018, the NCRCRD hosted a workshop that brought together experts in the health arena and the economic development arena to explore opportunities for greater collaboration across the fields in order to address rural challenges. The relationship between health and economic activity is bi-directional. Communities lacking economic opportunity tend to have a greater proportion of their population struggle with mental and physical health challenges. Social factors such as living in poverty increase the risk of poor

health, and yet mental and physical health challenges can—and do—affect community life, including economic development. For example, the opioid epidemic and other addiction problems are a growing concern nationwide, making it more difficult for those affected to be fully engaged in employment and other economic activities. The objectives of the workshop were threefold:

1. Identify gaps in knowledge and programming regarding the interconnectedness of health and community economic development.
2. Develop partnerships in the North Central region between health workers and those who work in community/economic development, and between researchers and outreach specialists.
3. Encourage collaborations to target research and programming needs and form interdisciplinary grant teams.

The NCRCD then issued a call for proposals from workshop participants to address challenges identified in the workshop. The end result is the funding of three projects, which are described here:

Rural Economies: Health Insurance Coverage and Access to Care

PI: Carrie Johnson, North Dakota State University (\$18,750)

Co-PI: Elizabeth Kiss, Kansas State University

Those living in rural areas of the country face unique challenges related to health care. Previous research has found that they are less likely to be offered employer-sponsored health insurance plans and medical treatment may be delayed because they need to travel greater distances to access the healthcare system. Little research has focused on those in rural areas since the implementation of the Patient Protection and Affordable Care Act in 2010. This study seeks to conduct in-depth case study research with farm/ranch, rural, and urban residents in two North Central region states to develop a decision-making model that can be used in future studies on this topic. Case study methodology will add a level of detail not currently available in existing literature.

Rural Quality of Life Indicators Project

PI: Russell Medley, University of Illinois Extension (\$19,678)

Co-PIs: Elizabeth Kiss (Kansas State University), Carrie McKillip, Tessa Hobs-Curley and Kristin Bogdonas (University of Illinois), Cheryl Burkhart-Kriesel (University of Nebraska-Lincoln), Kenneth Sherin (South Dakota State University), Michael Wilcox (Purdue University), and Alison Davis (University of Kentucky)

Rural Quality of Life Indicators Project is a plan to prepare a proposal to develop and pilot an instrument that not only scores a community or region on various “quality of life indicators” that include both health and economic determinants, and but goes further to recommend projects/programs/activities to improve the score on each indicator, tied directly to the community in question. This will simulate individual case management, where the individual (in this case community or region) helps to identify their current progress on a particular indicator, through conversation and stage “markers”.

Innovative Models of Mental Health Care for Farmers and Farm Families

PI: Carrie Henning-Smith, University of Minnesota (\$24,683)

Co-Pis: Shoshanah Inwood, Ohio State University and Andrea Bjornestad, SDSU

Farmers and farm families in the North Central region face innumerable threats to their physical and mental well-being, including changing demographics, limited access to health care, strained finances, weather variability, market prices, as well as geographic and social isolation. The impact of these issues is evident throughout the agricultural industry in the poor physical and mental health of farmers and farm families. Ensuring a healthy population and a secure agricultural system requires finding innovative ways to support farmers and farm families. Doing so may mean going beyond the traditional means of delivering care, to using methods that are more acceptable and accessible to farmers and farm families. In this proposal, we are focusing specifically on innovative methods for mental health care delivery for farmers and farm families, in order to provide a solid foundation for expanding to other topics, including physical health and farm worker health, through the collaborative partnership that this project will foster. This proposal has three primary objectives:

- Objective #1: Synthesize available information on current mental health delivery models for farmers and farm families in the North Central region.
- Objective #2: Identify opportunities for innovative rural mental health care delivery systems for farmers and farm families in the North Central region using key informant interviews.
- Objective #3: Foster a strong and sustainable research partnership in order to develop a more extensive grant proposal, responsive to the research results gained from Objectives #1-2.

Our hope is that the workshop opened the door to continued productive collaborations across those in the health and economic development arenas, thereby more effectively addressing challenges faced by rural communities.

2018-2019 NCRCD Small Grant Projects

The following projects are now underway:

Small Grant Principal Investigators, Co-PIs, States, and Project Titles

PI	Co-PIs	Project Title
Gary Taylor, Iowa State University	Lisa Bates and Jon Wolseth, Iowa State University; David Procter, Kansas State University; and Greg Schweser, University of Minnesota	Food Access and Independent Grocers: Strengthening Food Security in Underserved Communities
Amber Letcher, South Dakota State University	Kristine Ramsay-Seaner, South Dakota State University and Meagan Scott, North Dakota State University	STEPping UP: Social-Emotional Learning for Rural Middle School Youth
Linda Niehm, Iowa State University; Jichul Jang, Kansas State University; and MiRan Kim, Michigan State University	SoJung Lee, Iowa State University	The Impact of Volunteers on Sustainable Rural Community Development
Emily Proctor, Michigan State University	Brian Gauthier, Lac du Flambeau Tribal UWEX; Ellen J. Geisler, Annie Jones, and Cathy Techtmann (University of Wisconsin); Bethany Prykucki and Eric Walcott (Michigan State University); and John C. Young, Lac du Flambeau Band of Lake Superior Chippewa	Tribal Nations Lead! Leadership Development in the Great Lakes Region
Roberto Gallardo, Purdue University	Charlotte Narjes and Connie Hancock, University of Nebraska	Expanding the Intelligent Community Extension Program
J. Michael Collins, University of Wisconsin	D. Elizabeth Kiss, Kansas State University; Suzanne Bartholomae, Iowa State University; and Carrie Johnson, North Dakota State University	Integrating and Sustaining Financial Capability Services in Rural Healthcare Delivery

Publications and Research Papers

Publications

Refereed Articles:

Lim, Jungmin and Skidmore, M. 2019. Natural Disasters and Their Impacts on Cities, forthcoming in Oxford Bibliographies.

Lim, J., and Skidmore, M. 2019. Flood Fatalities in the United States: The Roles of Economic Status, Housing, and the National Flood Insurance Program. *Southern Economic Journal*, doi.org/10.1002/soej.12330.

Das, B., and Skidmore, M. 2018. Asymmetry in Municipal Government Responses in Growing and Shrinking Counties with a Focus on Capital Spending. *Journal of Regional Analysis and Policy*, 48(4), 62-75.

Aryal, G., Mann, J., Loveridge, S., & Joshi, S. (2018). Exploring innovation creation across rural and urban firms: Analysis of the National Survey of Business Competitiveness. *Journal of Entrepreneurship and Public Policy*, 7(4), 357-376.

Hodge, T., Ballard, C., and Skidmore, M. 2018. Changes in the Benefits of the Taxable Value Cap When Property Values Are Decreasing: Evidence from Michigan. *Journal of Public Budgeting and Finance*, 18 (3/4), 313-335.

Toya, H. and Skidmore, M. 2018. Cell Phones and Natural Disaster Vulnerability? *Sustainability*, Vol. 10, 2970, 2018.

Kang, S. and Skidmore, M. 2018. The Effects of Natural Disasters on Social Trust: Evidence from South Korea, *Sustainability*, Vol. 10, 2973, 2018.

Other Publications:

Skidmore, M. and Fitts, CA. 2019. Should Economists Care about Secrecy in Financial Reporting? Forthcoming book chapter in *Vet Fiscal Rules*, <https://vetfiscalrules.net/?p=731>.

Dyar, W., Lim, J., and Skidmore, M. 2018. The Role of Manufactured Homes in Meeting Rural Housing Needs. *Rural Connections*.

Kotlikoff, L., and Skidmore, M. 2018. Holding U.S. Treasurys? Beware: Uncle Same Can't Account for \$21 Trillion. *Forbes Magazine*.

Kotlikoff, L. and Skidmore, M. 2018. Is Our Government Intentionally Hiding \$21 Trillion in Spending?" *Forbes Magazine*.

A Review of Research Related to Education and Prevention:

<https://opioidresponse.extension.org/wp-content/uploads/2018/12/OpioidLitReviewFINAL9.25.18.pdf>

Report to the Extension Committee on Organization and Policy from the Extension Opioid Crisis Response Workgroup (with Alison Brennan and Richard Spoth):

<https://opioidresponse.extension.org/wp-content/uploads/2019/02/EOCRW-Report.pdf>

Work in Progress:

Development and Public Finance

Do State Tax Policies Contribute to the Growing Demand for Manufactured Homes?
(Jungmin Lim and Mark Skidmore)

Asymmetry in Local Government Responses in Growing vs. Shrinking Counties: The Case
of Education Finance (Mark Skidmore)

The Ruralization of Detroit: Implications for Economic Redevelopment Policy (Tanner
Connors, Laura Reese and Mark Skidmore)

Health

Anxiety: Measuring US Public Recognition and Stigma with a Cloaked Vignette (Scott
Loveridge, Courtney Cuthbertson, Paula Miller, Stephan Goetz, and Mark Skidmore)

The General Public's Knowledge and Attitudes toward Depression (Scott Loveridge,
Courtney Cuthbertson, Paula Miller, Stephan Goetz and Mark Skidmore)

Recognition and Stigma: Prescription Drug Abuse Disorders and Personal and Community
Determinants (Robert Shupp, Scott Loveridge, Brandn Green, and Don Albrecht and Mark
Skidmore)

Stigma and Behavioral Health Literacy among Individuals with Proximity to Mental Health
or Substance Use Disorder Conditions (Brandn Green, Kristal Jones, Rob Lyerla Mark
Skidmore and William Dyar)

American Life Expectancy: Geographic Inequality and Temporal Change (Elizabeth Dobis,
Stephan Goetz, Mark Skidmore and Heather Stephens)

Weather/Environment

Growing Heat Vulnerability in an Aging Society: The Role of Heat Island Mitigation
Measures (Jungmin Lim, Mark Skidmore and Jeffrey Wooldridge)

Natural Disasters and Entrepreneurship Activity (Christopher Boudreaux, Monica Escaleras
and Mark Skidmore)

Economics of Weather Modification (Scott Knowles and Mark Skidmore)

Rural Innovation

Innovation Creation and the Rural-Urban Divide in the United States (Giri Aryal, John
Mann, Scott Loveridge, and Satish Joshi)

Comparing Patents to Other Measures of US Business Innovation Activities across Places and Sectors (John Mann, and Scott Loveridge)

Firm Behavior across Increasing Levels of Innovation Activity (John Mann, and Scott Loveridge).

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Item 17.0: MRC Report**Presenter: Greg Cuomo, MRC Chair****Summary of MRC 2018 Multistate Project Recommendations:**

(Please refer to MRC Excel sheet for detailed notes/recommendations/revisions)

Item 17.1: New/Renewal Project Recommendations:

MRC Lead Reviewer	Project/Proposal #	Title	Lead's Recommendation
Hector	NC229 (NC_temp229)	Detection and Control of Porcine Reproductive and Respiratory Syndrome Virus and Emerging Viral Diseases of Swine	Defer approval pending revision
Hector	NC1171 (NC_temp1171)	Interactions of individual, family, community, and policy contexts on the mental and physical health of diverse rural low-income families	Defer approval pending revision
Jeff	NC1173 (NC_temp1173)	Sustainable Solutions to Problems Affecting Bee Health	Defer approval pending revision
Bill	NC1177 (NC_temp1177)	Agricultural and Rural Finance Markets in Transition	Approve
German	NC1178 (NC_temp1178)	Impacts of Crop Residue Removal for Biofuel on Soils	Defer approval pending revision
George	NC1180 (NC_temp1180)	Control of Endemic, Emerging and Re-emerging Poultry Respiratory Diseases in the United States	Defer approval pending major revision
German	NC1181 (NC_temp1181)	Optimizing land use for beef cattle production	Defer approval pending revision
Greg	NC1182 (NC_temp1182)	Nitrogen Cycling, Loading, and Use Efficiency in Forage-Based Livestock Production Systems	Defer approval pending revision
Greg	NC_temp1208 (was NCD232)	Biology, Etiology, and Management of Dollar Spot in Turfgrasses	Approve
Bill	NCCC9 (NCCC_temp9)	MWPS: Research and Extension Educational Materials	Approve

George	NCCC42 (NCCC_temp42)	Committee on Swine Nutrition	Approve
Hector	NCCC210 (NCCC_temp210)	Regulation of Adipose Tissue Accretion in Meat-Producing Animals	Defer approval pending revision
Jeff	NCERA3 (NCERA_temp3)	Soil Survey	Defer approval pending major revision
George	NCERA57 (NCERA_temp57)	Swine Reproductive Physiology	Approve
German	NCERA137 (NCERA_temp137)	Soybean Diseases	Approve
Greg	NCERA215 (NCERA_temp215)	Contribution of 4-H Participation to the Development of Social Capital Within Communities	Approve
Jeff	NCERA216 (NCERA_temp216)	Latinos and Immigrants in Midwestern Communities	Defer approval pending revision
Bill	NCERA217 (NCERA_temp217)	Drainage design and management practices to improve water quality	Approve

Item 17.2: Midterm Reviews

Lead MRC Reviewer	Project #	Title	Recommendations
Chris (for all)	NC1029	Applied Animal Behavior and Welfare (NCR131)	Continue with request for more collaborative, impactful reporting
	NC1030	Family Firms and Policy	Continue
	NC1034	Impact Analyses and Decision Strategies for Agricultural Research (NC1003)	Continue
	NC1189	Understanding the Ecological and Social Constraints to Achieving Sustainable Fisheries Resource Policy and Management	Continue, with better authorization of meetings and on-time reporting in NIMSS.
	NC1190	Catalysts for Water Resources Protection and Restoration: Applied Social Science Research	Continue
	NC1192	An integrated approach to control of bovine respiratory diseases	Terminate, at AA's recommendation. Probation, perhaps expire as scheduled.
	NC1193	Assessing and addressing individual and environmental factors that influence eating behavior of young adults	Continue
	NC1194	Nanotechnology and Biosensors	Continue with request for more collaborative, impactful reporting
	NC1195	Enhancing nitrogen utilization in corn based cropping systems to increase yield, improve profitability and minimize environmental impacts	Continue with request for more collaborative, impactful reporting
	NC1196	Food systems, health, and well-being: understanding complex relationships and dynamics of change	Continue with request for more collaborative, impactful reporting
	NC1197	Practical Management of Nematodes on Corn, Soybeans and Other Crops of Regional Importance	Continue

	NC1203	Lipids In Plants: Improving and Developing Sustainability of Crops ("LIPIDS of Crops")	Continue with request for more collaborative, impactful reporting, external funding, and outreach
	NC1204	Advancement of Brassica carinata	Continue with request for more collaborative, impactful reporting
	NCCC65	Indicators of Social Change in the Marketplace: Producers, Retailers and Consumers	Continue
	NCCC167	Corn Breeding Research	Terminate. This committee consistently doesn't authorize meetings or upload reports into NIMSS, nor do they respond at all to the NCRA office's requests. They missed several deadlines to submit previous reports, as well. They don't appear to use the multistate system or NIMSS much at all.
	NCCC170	Research Advances in Agricultural Statistics	Continue, maybe include more activities with Big Data
	NCCC212	Small Fruit and Viticulture Research	Continue with request for more collaborative, impactful reporting
	NCCC216	Understanding weed biology and ecology to address emerging weed management challenges	Terminate, at AA's recommendation
	NCERA13	Soil Testing and Plant Analysis	Continue
	NCERA59	Soil Organic Matter: Formation, Function and Management	Continue with request for more collaborative, impactful reporting
	NCERA101	Controlled Environment Technology and Use	Continue
	NCERA180	Precision Agriculture Technologies for Food, Fiber, and Energy Production	Continue with request for more collaborative, impactful reporting
	NCERA219	Swine Production Management to Enhance Animal Welfare	Continue
	NCERA220	Biological Control of Arthropods and Weeds	Continue
	NCERA221	Turfgrass and the Environment	Continue

	NCERA222	Integrated Pest Management	Continue with request for more collaborative, impactful reporting
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Item 17.3: NC Multistate Award Nominee

Action Requested: Approve MRC Recommendation on Nominee

Nominating Region: North Central

Project Number and Title: NC-1201 - Strategies to Improve Reproductive Efficiency for Sustainable Cattle Production

Nominator and Administrative Advisor: George W. Smith (smithge7@msu.edu)

Technical Committee Chair: Dr. J. Richard Pursley (Pursleyr@msu.edu)

I. The underlying problem: Reproductive inefficiencies cost the U.S. beef and dairy industries over \$1 billion annually. In dairy cattle, failure to conceive or delays in conception increase time when cows do not produce peak milk, resulting in lost revenue and increased production costs. In beef cattle, failure to conceive or delays in conception result in increased production costs and lost revenue due to smaller calf crop and or younger and lighter calves at time of sale. Recent studies have reported that cows are being sold or removed from the herd at alarming rates because of failure to get pregnant. For example, more than 27% of beef cows leave the herd because of reproductive failure or reproductive problems, according to the USDA's National Animal Health Monitoring System (NAHMS). The NAHMS survey concluded that "by optimizing reproductive performance, producers can decrease forced culls" and thus increase profitability.

II. Objectives: This project originated over four decades ago (formerly NC-113, NC-1006, and NC-1038) to develop solutions to reproductive inefficiencies in beef and dairy cattle. *The specific objectives of NC-1201 are:* 1) Increase the efficiency and predictability of sustainable reproductive technologies and management programs for cattle, 2) Evaluate mechanisms that regulate reproductive processes impacting production efficiency in cattle and disseminate reproductive management information to stakeholders to improve sustainability of cattle enterprises.

The NC-1201 team consists of 15 scientists from 12 institutions and USDA ARS. In addition, representatives from private industry and producers from both the beef and dairy industries have been involved and or participated in the research and or outreach activities of this project. NC-1201 participants are world leaders in understanding the biology behind reproductive inefficiency and using this knowledge to develop and test protocols for fixed-time artificial insemination utilized in the U.S. and around the world. NC-1201 scientists (seven have Extension appointments) are also recognized for and have led national efforts in educating the beef and dairy industries on application of protocols developed to increase reproductive efficiency. Technologies developed by NC1201 scientists (described below) have dramatically increased reproductive efficiency and positively impacted profitability of both beef and dairy operations.

III. Accomplishments

Outcomes: A foundational goal of this project is generation of statistically valid results applicable to the beef and dairy industries and relevant to farms across the U.S. Major data endpoints collected in cattle breeding trials (pregnancy rates) are binomial and require large sample sizes to test hypotheses (hundreds to thousands of cows depending on specific question). This group has collaborated on numerous projects across states to provide results with increased statistical power across multiple farms. This group also actively collaborates in a similar fashion in development of extension/outreach strategies to enhance industry adoption of breeding programs developed.

Major foundational industry transforming outcomes tied to efforts of this group are development of the Ovsynch protocol and fertility programs utilizing Ovsynch for fixed-time insemination in dairy cattle. These programs both increase the chances of pregnancy and reduce costs of production. Ovsynch and variations (e.g. the Cosynch protocol) used in beef cattle, and more recent modifications to such programs, increase pregnancy rates and reproductive efficiency of beef cattle. In both dairy and beef cattle, such protocols induce reproductive cyclicity and potential for conception in cows that have not resumed reproductive activity by the end of the voluntary waiting period (dairy cows) or at the onset of the breeding season (beef cows). They also reduce days when cows are not pregnant, a major contributor to reproductive inefficiency.

A key study titled “Pregnancy rates per artificial insemination for cows and heifers inseminated at a synchronized ovulation or synchronized estrus” published in the Journal of Dairy Science by six NC-113 members (Pursley, Wiltbank, Stevenson, Garverick, Ottobre and Anderson) has been cited 660 times (Google Scholar) and has led the way to understanding the impact of Ovsynch on reproductive efficiency of dairy cattle versus the traditional method (detection of estrus) previously used. It also provided critical evidence helping convince the dairy industry that Ovsynch could be utilized to effectively manage time to first artificial insemination and reduce non-productive days when cows are not in peak milk production. The impacts of this single achievement have completely changed the way dairy farmers around the world manage dairy cattle reproduction.

Over 70% of dairy farms now utilize fixed-time insemination protocols that utilize Ovsynch. Such protocols have revolutionized reproductive management of dairy cattle. Above mentioned dairy cattle protocols and related programs in beef cattle, effectively reducing the time and labor compared to conventional protocol (estrus detection) prior to breeding by artificial insemination - contributing to widespread industry adoption.

In addition, a number of other large, collaborative studies and invited reviews have subsequently been completed by NC-1201 in dairy and beef cattle reproduction (Stevenson et al., 2008; Chebel et al., 2010; Lamb et al., 2010; Bilby et al., 2011; Stevenson and Lamb, 2016; Lamb et al., 2016; Perry and Cushman, 2016; Larson et al., 2006, 2009; Dahlen et al., 2010; Bridges et al., 2011; Marquezini et al., 2011; Mercadante et al., 2015; Hill et al., 2016a,b; Stevenson and Lamb, 2016; Bishop et al., 2016). The **NC-1201** group has consistently demonstrated the ability to coordinate multi-location experiments to improve reproductive efficiency in dairy and beef cattle and jointly published results, consistent with intended outcomes of the multistate research program.

Outputs: Over the past 5 years, efforts of **NC-1201** scientists have resulted in:

- 54 multi-institution refereed publications; a total of 238 publications
- \$10.8 million in grant funding (federal and industry)
- 227 Extension publications
- 22 MS and 11 PhD students graduated*

*Active graduate student involvement in projects and the annual meeting is highly valued by NC-1201. Since 2013, three of such graduate student participants have obtained faculty positions and are now currently NC-1201 project members.

Impacts:

- Development of protocols for timed artificial insemination in dairy cows made possible

through this project have collectively contributed to most farms transitioning from estrus detection to timed artificial insemination. Conservative estimates of savings of \$80 per cow per year or \$7.2 billion industry wide have been realized since publication of the initial 1997 collaborative study,

- Developments resulting from the **NC-1201** project have directly facilitated use of timed artificial insemination and have contributed to its increased adoption in both U.S. beef and dairy herds. In fact, the quantity of beef cattle semen sold and beef cattle semen frozen by custom collection is at a record high -- approximately double the amount 10 years ago.
- Data from an economic evaluation of artificial insemination in a previous **NC-1201** study (Rodgers et al., 2012) indicates that for every beef cow exposed to a timed insemination protocol a cattle producer will gain an additional \$49 revenue per cow after weaning. Today approximately 2 million cows undergo timed insemination in the U.S. with an estimated annual economic impact of \$98 million for the beef industry.

IV. Synergistic Activities: Extension education is an important part of the **NC-1201** project and industry communication of results of described studies is a key contributor to industry adoption of technologies. Furthermore, committee members have provided leadership in development of two specific organizations to enhance the use of reproduction research by dairy and beef producers nationwide and contribute significantly to programming and activities. In both cases, these organizations work closely with university extension and research communities, the pharmaceutical industry, the artificial insemination industry and the veterinary community to enhance reproductive efficiency of U.S. dairy and beef cattle operations.

The Beef Reproduction Task Force (<http://beefrepro.unl.edu/>) works to:

- recommend methods for managing beef cattle reproduction
- identify the most reliable beef cattle reproduction management strategies
- discuss, evaluate and develop methods for delivery of beef cattle reproduction management strategies into Extension programs.

This group hosts an annual conference that rotates around the U.S. to bring the reproductive technologies directly to beef producers.

The Dairy Cattle Reproduction Council (DCRC) (<http://www.dcrcouncil.org/>) works to:

- raise awareness and long-term interest in issues critical to reproductive performance in dairy cattle
- strives to deliver the latest in technology and resources to the industry through information and communication

This group hosts an annual conference that rotates around the U.S. to bring the reproductive technologies directly to dairy producers.

V. Multi-institutional leveraged funding: Efforts of several members of this multistate project were integral to completion of a previous \$1.9 million USDA grant focused on increased profitability of small and mid-size dairy farms with additional joint grant funding between multiple NC-1201 members of \$713,940 since 2013. Given the applied nature of studies conducted by NC-1201 scientists, additional recent funding for joint projects across NC-1201 members has come from pharmaceutical, genetic and nutritional companies and federal sources. Significant in-kind support from pharmaceutical companies (specific hormones/products used in timed insemination protocols) is also critical to project success and collaboration across states.

Participating Institutions and Units

- Kansas State University – Animal Sciences and Industry
- Michigan State University – Department of Animal Science
- Mississippi State University – Animal and Dairy Sciences
- North Dakota State University – Animal Sciences Department
- South Dakota State University – Animal and Range Sciences
- Texas A&M University – Department of Animal Sciences
- University of Illinois – Dixon Springs Agricultural Center
- University of Missouri – Animal Sciences Department
- University of Nebraska – West Central Research and Extension Center
- University of Wisconsin-Madison – Dairy Science Department
- USDA-ARS – U.S. Meat Animal Research Center
- Virginia Polytechnic Institute and State University– Animal and Poultry Science Department

Item 17.4: NRSP Report from CARET/AHS, March 4, 2019

Presenter: Jeff Jacobsen for Doug Buhler

1. Committee Membership (as of March 4, 2019): See [ESCOP NRSP Review Committee \(NRSP RC\)](#)
2. Meetings:
 - The met face-to-face on May 22, 2018, in Warwick, RI.
3. Accomplishments/Upcoming Plans:
 - Two NRSPs, NRSP3 *National Atmospheric Deposition Program* and NRSP10 *Database Resources for Crop Genomics, Genetics and Breeding Research*, are undergoing review in anticipation of renewal. They've been peer-reviewed and technical teams have responded to peer reviews. The proposals, reviews, and responses to reviews are currently under evaluation by the regional associations.
 - A subcommittee of the NRSP RC is revising the NRSP Guidelines including the review forms. The NRSP RC will consider the revisions and forward recommendations to ESCOP in anticipation of approval at the annual business meeting in September.
 - The NRSP RC will meet face-to-face on May 29, 2019 in Warwick, RI.
4. Action Requested: For information only.
5. Attachments:
 - a. None

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Item 18.1: Science and Technology Update from CARET/AHS ESCOP Meeting

Action Requested: For Information

Committee Members:

Laura Lavine (WAAESD; Chair)
Gene Kelly (WAAESD)
Chris Davies (WAAESD)
Joe Colletti (NCRA)
Deb Hamernik (NCRA)
John Kirby (NERA)
Adel Shirmohammadi (NERA)
Nathan McKinney (SAAESD)
Susan Duncan (SAAESD)
John Yang (ARD)
Alton Thompson (ARD)

Liaisons:

Terry Nelsen (ERS)
Bob Matteri (ARS)
Kristina Hains (SSSC; Social Sci Subc)
Ann Hazelrigg (NIPMCC; Pest Mgmt Subc)
Parag Chitnis (NIFA)
Edwin Price (ICOP)

Jeff Jacobsen (Exec Vice-Chair, NCRA ED)
Chris Hamilton (recorder, NCRA AD)

Committee Webpage: <http://escop.info/committee/scitech/>

S&T Committee

The 2010 Science Roadmap served as the reference for a new, modern, nimble-format, responsive suite of **S&T Roadmap Briefs** across the existing Grand Challenges. For each of the seven Grand Challenges, we provided these sections: Overview, Research Priorities, Capacity & Resources, Success Stories, all with unique visuals that emphasize the Grand Challenge as well as the Success Stories. In addition, a new cover to the existing Roadmap was created and serves as a cover piece for the current **Briefs** to describe who we are and what we do across a nationwide system. We have honored the tremendous efforts that went into the 2010 Roadmap and our Success Stories have provided distinctive impacts from our on-going research across the Grand Challenges. The **Briefs** are available for viewing, referencing or printing at <http://escop.info/roadmap/> either with images or as simple text documents. A fixed number of **Briefs** were also printed with limited distribution (S&T members, regional associations, APLU, ESCOP Executive Committee). Deb Hamernik, 2019 ESCOP Chair, has referenced these in her published Chair priorities document and distributed hard copies to individuals and groups as part of the ESCOP and ECOP Chair February visits to DC. The materials were very well-received. Lastly, as a cost-effective mechanism to inform attendees to the 2019 CARET/AHS session, we included with the registration packets a marketing postcard. Our intent is to have these new **Briefs** provide a modern look that evokes trust and conveys integrity, excellence, and creativity.



The 2019 Call for Excellence in Multistate Research has been released nationally, along with subsequent reminders, too. As a reference, only very minor edits were made to the 2018 Call as the processes and procedures are working well. S&T encourages all AAs to consider nominations to their regions. Regional associations will then have time to improve on their final nominee in advance of the national review cycle to ensure the highest quality and deserving projects are considered. The portfolio of projects is truly remarkable and we need to recognize their accomplishments!

The Northeast Region is charged with identifying the next S&T Committee Chair and additional membership with this leadership rotation at the ESS/ARD Annual Meeting.

Currently, the S&T committee is reviewing currently reviewing reports, recommendations, and planning documents around public/private partnerships and Capacity funding to see if there are any recommendations for presentation or for which to advocate. These include:

- TEconomy Report supporting a 100% Capacity model: <https://nifa.usda.gov/resource/nifa-capacity-funding-review-teconomy-final-report>
- Fourth National Climate Assessment: <https://nca2018.globalchange.gov/>
- National Academy Sciences Science Breakthroughs 2030: A Strategy for Food and Agricultural Research
- <http://nas-sites.org/dels/studies/agricultural-science-breakthroughs/>

National Integrated Pest Management Coordinating Committee (NIPMCC)

The NIPMCC Annual Meeting was held in Washington, DC on October 23-24 with the meeting agenda posted (<http://escop.info/event/nipmcc-meeting-2018/>). Meeting minutes and action items, to include the annual State of IPM Report to ESCOP and ECOP, will be completed and provided when ratified by the Executive Committee. The primary follow up has been the summarization of all activities associated with the Dicamba issue and sharing of best practices.

Social Sciences Subcommittee (SSSC)

The original meeting in early 2019 was cancelled, due to the government shutdown. An alternative meeting time and location has not been confirmed. Past information and the diverse SSSC group can be found at: <http://escop.info/committee/social-sciences-subcommittee-sssc/>.

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Item 18.2: ESCOP Budget and Legislative Committee Agenda Brief from CARET/AHS
For information only

The committee holds regular conference calls on the last Tuesday of each month. These calls have generally been well attended. The current B&L Committee membership is shown below.

<p>Chair: Ernie Minton NCRA</p> <p>Delegates: Bobby Phils (ARD) Alton Thompson (ARD) Shawn Donkin (NCRA) Dave Benfield (NCRA) Sabine O’Hara(NERA) Jon Wraith (NERA) George Hopper (SAAESD) Saied Mostaghimi (SAAESD) Chris Pritsos (WAAESD) Glenda Humiston (WAAESD)</p> <p>Executive Vice- Chair Mike Harrington (WAA)</p>	<p>Liaisons Jon Boren (ECOP Liaison) Bob Holland (NIFA) Paula Geiger (NIFA) Josh Stull (NIFA) Glen Hoffsis (APLU Vet Med) Eddie Gouge (APLU) Doug Steele (APLU) Becky Walth (CARET) Cheryl Achterberg (APLU - BoHS) Jim Richards (Cornerstone) Hunt Shipman (Cornerstone) Vernie Hubert (Cornerstone) Maggi Earle (Cornerstone)</p>
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Recent discussions focused the proposed move of NIFA and ERS. Other discussions included the Sightlines Report on the growing infrastructure needs. Sightlines has mentioned that we were falling behind by \$300 million/year. According to the report, there are some 87,000,000 gross sq. ft (GSF) of space covered in the study. We are spending \$1.82/GSF on average across the system, but should be spending \$4.40/GSF. This calculates to a shortfall of at least \$224,460,000, which adds to the total deferred maintenance figure each year. This suggests that an infrastructure package aimed at meeting College of Ag needs would need to exceed this figure to keep from falling further behind.

Strategic Realignment of small lines: On several occasions, the Committee has discussed the realignment of small lines concept and is in favor of moving this effort forward. The Committee joined the February 26, 2019 discussion of the realignment proposal. Tall webinars and other documents are located at these links”

- [Strategic Realignment Committee Update](#) webinar
- [Appropriations & Strategic Realignment 101](#) webinar
- [Ernie Minton Communique to BAA](#)
- [Charge to Strategic Realignment Committee](#)
- [Current NIFA 2018 Discretionary Accounts](#)
- [Draft Single Top Line Recommendation](#)
- [Strategic Realignment FAQs](#)

All documents related the federal budget are located at the land-grant.org.

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Item 18.3: Diversity Catalyst Committee Report from CARET/AHS, March 4, 2019

Presenters: Bill Barker, Jeff Jacobsen, Chris Hamilton

6. Committee Membership (as of March 3, 2019): See [ESCOP Diversity Catalyst Committee \(DCC\)](#)
7. Meetings:
 - The DCC met by teleconference on January 22, 2019.
8. Accomplishments/Upcoming Plans:
 - The DCC has undergone leadership evolution. Ali Fares has taken the place of Karen Plaut as chair and Rick Rhodes has stepped into Jeff Jacobsen's shoes as the ED serving as Executive Vice Chair.
 - The request for nominations for the National Diversity and Inclusion Award has been widely circulated to the ESS.
 - The DCC is seeking opportunities to provide on-going training for the directors. Training topics might include: Diversity as a Catalyst for Faculty Recruiting and Retention; Dominant Cultures; and the WAMS Program (Women and Minorities in Science, Technology, Engineering, and Mathematics Fields).
 - DCC chair Ali Fares nominated Jeff Jacobsen for a NIFA Partnership Award; the nomination recognizes Jeff's seminal role in the establishment of the DCC.
9. Action Requested: For information only.
10. Attachments:
 - a. None

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Item 18.4: Communications and Marketing Committee (CMC) Report from CARET/AHS, March 4, 2019

Presenter: Deb Hamernik, Jeff Jacobsen

Committee Membership (as of March 3, 2019): See [ESCOP Communications and Marketing \(CMC\)](#)

11. Meetings:

- The CMC met by teleconference on November 29, 2018.
- A CMC subcommittee met by teleconference on February 8, 2019.
- The CMC met face-to-face on March 3, 2019 in Arlington, VA.

12. Accomplishments/Upcoming Plans:

- On November 29th, the CMC accepted the Plan of Work (POW) as presented by the POW committee. The motion to approve the POW also included the convening a working group (referred to as the CMC subcommittee) to be charged with doing a brief retrospective (what's been done/what was accomplished?) and what should/could be done in future communications and marketing projects. The CMC also approved a Scope of Work for the external contractor, kglobal.
- Chair Latimore charged a subcommittee on February 8, 2019. Steve Loring was appointed as subcommittee Chair and other members included Brian Meyer (ISU, communicator), Scott Reed (OSU, CE director), Nancy Cox (UK, AHS director), Gary Thompson (PSU, AES director), Faith Peppers (UGA, communicator) and Rick Rhodes (NERA, ED.) The specific charge included: evaluate past accomplishments of the CMC; assess the needs of the participating sections; develop recommendations on incorporating quantitative and qualitative metrics to gauge success of the communications and marketing project; recommend strategies for engaging directors' system-wide; and explore the right structure of the CMC. Chair Latimore sought a report from the subcommittee by the next CMC teleconference in June.

13. Action Requested: For information only.

14. Attachments:

- a. none

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Item 18.4: National Impacts Database Committee report from CARET/AHS, March 4, 2019
Presenters: German Bollero, Jeff Jacobsen

The NIDB Committee holds conference calls on the second Tuesday of each month. Following is the current committee membership.

Current Membership	
Name	Role
Steve Loring	Co-chair- AES
Karla Trautman	Co-chair- EXT
Debbie Lewis	Admin. Rep- EXT
German Bollero	Admin. Rep- AES
Sara Delheimer	Multistate Research Impacts Initiative Rep
Faith Peppers	Land-grant Communications representative
Johnnie Westbrook	Land-grant Evaluation representative
Adele Turzillo	NIFA representative
Ron Brown	Southern ECOP Executive Director
Eric Young	Southern ESCOP Executive Director
Ex Officio Members	
Scott Cummings	IT- Texas A&M University
Michael Harrington	West Region ESCOP Executive Director
Jeff Jacobsen	NC Region ESCOP Executive Director
Rick Rhodes	NE Region ESCOP Executive Director

1. Update New Web Site

- The new site is ready to launch. Currently entering information for the institutional contacts, editors, and reviewers, and clearing out previous users' information.
- The logo that was chosen for the site and any related materials is:
- All impact statements on the existing site through 2016 are being archived and available through a



“search option” only.

- There are currently 533 impact statements from 2017 and 341 from 2018 on the site.
- There will be two primary links on the new site homepage:
 - A public link that will allow searches by several factors
 - A log-in link to the database for institutional contacts and editors
- The public search page will have a disclaimer that 2017 & 2018 impact statements have not been reviewed.
- The old site went off-line February 15th, this was delayed because the Writing Team needed access to do their work during the first week in February.
- Two training sessions for editors and reviewers have been held.

- Communication with Extension/Experiment Station Directors and Institutional contacts/editors/reviewers was sent regarding these training sessions.
 - Soft launch of the new site was March 1st with a public announcement.
2. Content Writing Group
 - The Writing Group met January 31 – February 3, 2019 in Birmingham, AL.
 - Great working session that produced 20 fact sheets, 20 web stories and 1 animated video
 - Link for access to the materials was sent to Scott Cummings for the web site and to Rick Klemme for use during the CARET/AHS meeting and Hill visit.
 3. Training Sessions
 - After discussion, the committee agreed that one training for both impact editors and reviewers would occur initially. This will make it more transparent and uniform across all involved with producing impact statements. Items specifically for the reviewers was added at the end of the training.
 - Scott and Faith conducted the training webinars
 - The initial training webinar was recorded for use in the future and to allow it to be divided into separate training pieces for editors and/or reviewers as appropriate for future training needs.
 - An email was sent to Institutional Contacts, Impact Editors and Reviewers that will share information about the NIDB database and webinar training sessions.
 - Also, Steve Loring and Karla Trautman send an email to the CES and AES Directors updating them on the NIDB. This email reminded directors about the process, roles of the various appointee's, and reference materials that will be available on the new site.
 4. On-going communication and marketing efforts
 - Information has been sent to all institutions about the live launch of the new site
 - An update on the new site was sent to Rick Klemme to put out on the Monday Morning Message for ECOP
 - An un-veiling webinar of the NIDB will be conducted for the Extension and Experiment Station Directors in 2019.
 - A NIDB newsletter is being considered that will be sent periodically highlighting an impact or content team, the do's and don'ts of successful impact writing, an impact of the month feature, etc.
 - Also considering using social media to highlight and promote the database.
 5. The committee will continue to meet monthly through March, 2019, and then move to quarterly meetings after that.

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Item 19.0: Strategic Realignment Discussion

Presenter: Ernie Minton, via Zoom

Letter sent to Strategic Realignment Committee on behalf of the NCRA Directors (3/18/2019):

Dear Ernie and Mike,

NCRA held a Zoom meeting to discuss the current status and configuration of the Strategic Realignment effort. Below is a high level synthesis of this call. We will also discuss at our upcoming NCRA spring meeting and also acknowledge that there are other calendar milestones to provide additional input. If you have questions, please feel free to contact Joe Colletti, NCRA chair; Jeff Jacobsen, NCRA Executive Director; or Chris Hamilton, NCRA Assistant Director. Thanks for the opportunity to provide some initial reactions.

1. Overall, the NCRA is supportive of the proposed single line Strategic Realignment, which allows for three broad categories of Research/Discovery, Extension/Engagement, and Teaching/Learning.
 - a. Simplifies the advocacy and messaging approaches with Congress.
 - b. Improves the consistency and accuracy of messages.
 - c. Recognizes the distinctiveness of each of the three LGU missions.
2. However, NCRA is concerned about processes, specifically how funds for programs within categories will be affected, if there is a general increase/decrease to the one line or if broader categories are increased/decreased.
 - a) Need to develop overarching principles used to inform clear processes and operational approaches.
 - b) Viably address LGU eligibility as well as the uniqueness of the capacity and competitive funding models.
 - c) Protect the broad categories from other federal agencies, e.g. Teaching/Learning with STEM.
 - d) Strive to have ‘One Voice’ across all affected parties, such as non-LGUs, professional societies, commodity groups, stakeholders, etc.
 - e) Perhaps the use of Blue Ribbon panels, designated input and priority sessions at the ESS/ARD fall meetings or during APLU or in other tbd forums could be used to inform and help prioritize efforts within NIFA.
 - f) With trust between all, programmatic conversations would be the most effective within NIFA, rather than legislative.
3. We will likely have more information to share after our NCRA spring meeting.

Thanks for the opportunity to comment and we acknowledge the extreme effort that the Strategic Realignment committee has put forward over the last several years.

Sent on behalf of NCRA Directors

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Item 21.0: Infinity and Beyond – Generational Differences in the Workplace
Presenter: Kelly Millenbah

Slides below.

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Infinity and Beyond: Generational Differences in the Workplace

Kelly Millenbah

Senior Associate Dean & Director of Academic and Student Affairs

College of Agriculture and Natural Resources

Michigan State University

millenba@msu.edu

Disclaimer

- Information presented gleaned from many sources including, but not limited to:
 - Howe and Strauss, 2000, Millennials Rising
 - Zemke et al., 2000. Generations at Work: Managing the Clash of Veterans, Boomers, Xers, and Nexters in your Workplace
 - Lancaster and Stillman, 2002, When Generations Collide
 - Howe and Strauss, 2007, Millennials Go to College
 - Tapscott, 2009, Grown up Digital
 - The Tru Report, 2011, Meet the PostGens
 - Millenbah and Wolter, 2014, Understanding Generational Differences in the Workplace
 - Stillman and Stillman. 2017. Gen Z Work: How the Next Generation Is Transforming the Workplace

- Many, many, many websites, talks by others, etc.

MICHIGAN STATE UNIVERSITY

But first...



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Timeline of Generations

Generation	Birth Years	Visual Representation
BABY BOOMERS	(1946-1960)	Illustration of a woman in a white dress and a man in a dark shirt and pants on a green background.
Generation X	(1961-1980)	Illustration of a woman with blonde hair in a pink shirt and a man with brown hair in a colorful patterned shirt on a cyan background.
Millennials	(1981-1995)	Illustration of a woman with brown hair in a blue shirt and a man with blonde hair in a red plaid shirt on a blue background.
GENERATION Z	(Born after 1995)	Illustration of a woman with black hair in a black top and red shorts, and a man with black hair in a dark patterned shirt and tan pants on a purple background.

ARTWORK BY: JOEBIN CADILE

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But first...



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Baby Boomers (~58-72 yrs old)

- Invented the 60 hr work week - Live to work!!
- Job security
- Formative Events
 - Vietnam War, "Swinging Sixties", Moon landings, Woodstock, JFK & MLK Assassinations, Watergate
- Careers are Defined by Employers



Generation X (~38-57 yrs old)

- First to arrive after school to empty house
- Work-life balance
- Formative Events
 - Fall of the Berlin Wall, End of Cold War, Live Aid, Early mobile technology, Divorce rates rise, MTV
- “Portfolio” careers – loyal to the profession, not the employer



Millennials (~23-37 yrs old)

- by 2050 will make up 75% of workplace

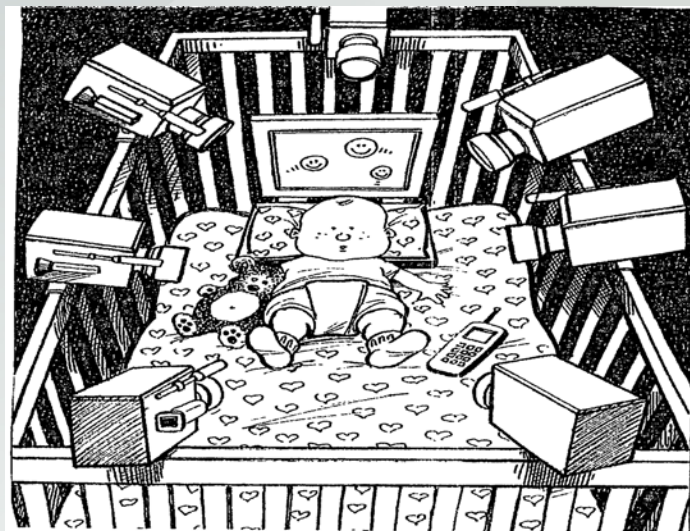


Special

- Everyone “gets a trophy” – regardless of performance
- Sense of entitlement
 - Expect individual attention, extra help, and other resources to help them with difficulties




Sheltered




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Helicopter Parents give rise to...

A cartoon illustration of a blue helicopter with a red stripe on its side. Instead of landing wheels, it has two long, grey skis. The main rotor and tail rotor are shown in motion with curved lines around them. The helicopter is flying towards the left. The background is a light grey with a faint, large watermark of the Michigan State University sunburst logo.

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...Bulldozer Parents!!

A cartoon illustration of a yellow bulldozer with a large white blade. The bulldozer is pushing a large pile of white snow. The bulldozer has a red stripe on its side and is shown from a side profile. The background is a light grey with a faint, large watermark of the Michigan State University sunburst logo.

Confident

- High opinion of academic prowess
 - EX: 70% incoming freshman ranked themselves in top 10% of their class








Pressured



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Team Oriented


- Group think
- Social, tech savvy, group-oriented

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Conventional

- Outwardly revere and respect authority
 - BUT condone breaking the rules as long as they don't get caught
 - Calculating in the risk they are willing to make - carefully weigh the pros and cons of decisions



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Achieving

- Use to achieving success throughout life
- Expect recognition for their achievements even if past generation would consider work normal benchmark

PASSION!!



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Millennials (~23-37 yrs old)

- Freedom & flexibility
- Formative Events
 - 9/11, Social Media, Reality TV, Google Earth, Obama Election, Great Recession
- Digital Entrepreneurs – work “with” organization, not “for” it



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Gen Z (<23 yrs old)



GENERATION Z
The generation after Millennials

AKA Post-Millennials, iGeneration, Founders, Plurals, Homeland Generation

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Less Focused



Better Multi-taskers



Early Starters



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More Entrepreneurial

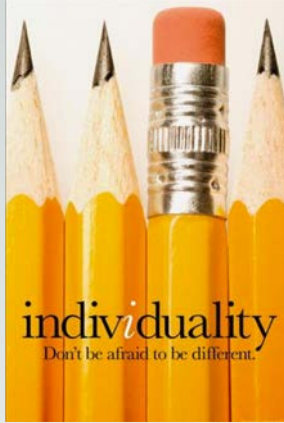
The image is a composite of two photographs. The top-left photograph shows a young boy in a dark suit and red tie, smiling and giving two thumbs up. He is seated at a desk with an American flag to his left and a blue curtain with a seal behind him. The bottom-right photograph shows a sunlit forest with tall, thin trees and sunlight streaming through the canopy, creating a warm, golden glow.

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Higher Expectations

The image shows the silhouettes of three people standing on a dark, rocky mountain peak. They are all raising their arms in a celebratory gesture. The background features a dramatic landscape with snow-capped mountains and a bright, hazy sky, suggesting a sunrise or sunset.

Individuality



More Global



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Phigital



A cartoon illustration featuring three characters. On the left, a woman with red hair in a green shirt holds a red octagonal sign with the word "STOP" in white. In the center, a man with grey hair and glasses in a dark suit holds a large gold sign with the word "WORD" in black. On the right, a woman with brown hair in a grey shirt is laughing, with the word "giggle" written in yellow, bubbly letters next to her. The background is a light grey with a faint circular pattern.

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Hyper-Custom



A collage of images illustrating hyper-customization. On the left, a blue book cover features a golden retriever and the text "myUp" and "myUp is for you. It's just for the world." In the center, a golden retriever is shown smiling. On the right, a green football jersey with yellow and white stripes on the sleeves is displayed, with the text "YOUR NAME" and "00" on the back.

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Realistic



SET
REALISTIC
GOALS

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FOMO



So many choices
So little time!

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Weconomists

VRBO®
Part of the HomeAway Family

airbnb

lyft


UBER

Power of WE!!



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DIY



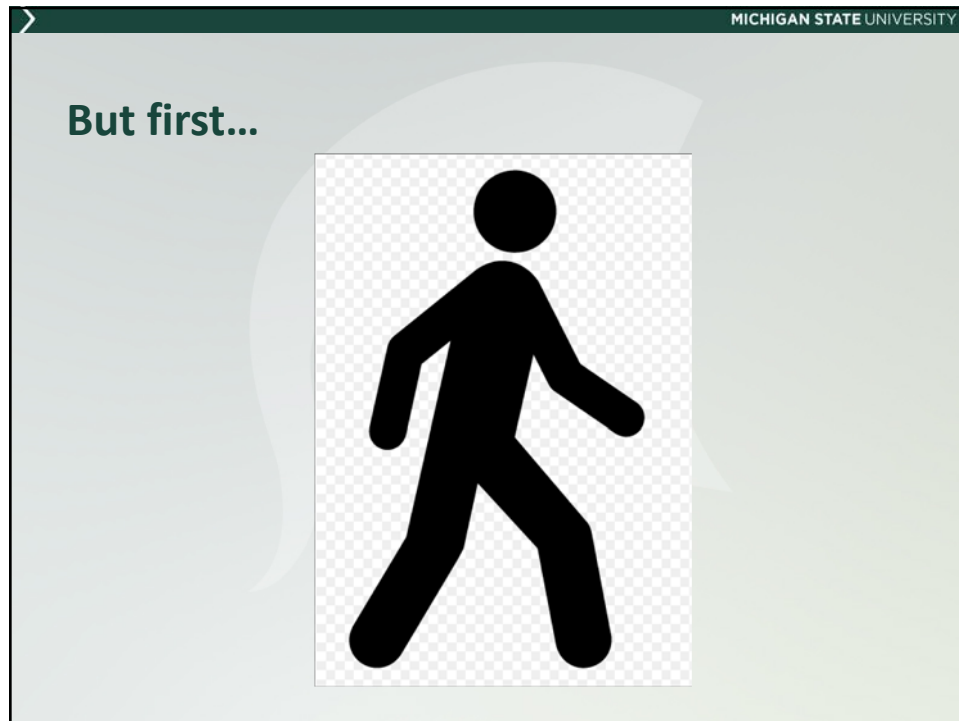
Driven



Gen Z (<23 yrs old)

- Security & Stability
- Formative Events
 - Economic downturn, Global warming, Mobile devices, Cloud computing, Wiki-leaks, Global terrorism
- Multi-taskers – will move seamlessly between organization and “pop-up” businesses





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Baby Boomers

- Personal connections important.
- Make good leaders.
- Boomers can be judgmental of others whom they perceive as not being equally dedicated.
- Strongly believe that one earns privileges rather than having a right to them.

Gen Xers

- Impatient with traditional processes.
- Short bursts and flexible schedules.
- Prefer communications that are succinct and to the point.
- Hierarchy and protocol is not overly important.
- Value feedback, not afraid to offer feedback in return.
- Offended if they are left out of important decisions or feel uninformed.

Millennials

- Want to make a difference while also having fun.
- Willing to give up a larger paycheck to work in areas that connect with their passion.
- Digital natives.
- Demand flexible work atmospheres.
- Diverse workplace.
- Feedback!

Gen Z

- Digital tools as a way of staying connected – not disconnected.
- Customized job descriptions and titles.
- College is not the answer for everyone.
 - Career path and skill building.
- Results focused!
 - But must balance competitive drive with being team players.
- Put their entrepreneurial spirit to work for the good of the organization – or risk losing them.
- Will need new ways to capture their attention.
 - Jobs will need to be broken down into manageable tasks.
 - Risk-takers!

Do we have anything in common?

- Work is a vehicle for personal fulfillment and satisfaction, not just a paycheck.
- Workplace culture is important.
- Being trusted to get the job done is the number-one factor that defines job satisfaction.
- Everyone needs to feel valued by his or her employer to be happy on the job.
- Flexibility in the workplace is valued.
- Career development is the most valued form of recognition, even more so than pay raises and enhanced titles.

Key Take Home Points

- Each generation has its own experiences that influence the way its members think, act, & interact.
- **Be aware of your own** generational expectations, opinions, and experiences, & recognize that **they might not be the same** as other generations.

“In case you're worried about what's going to become of the younger generation, it's going to grow up and start worrying about the younger generation. ”

Roger Allen, contemporary American writer

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THANK YOU!

millenba@msu.edu

A large, faint watermark of the Michigan State University Spartan helmet logo is centered in the background of the slide.

Item 22.0: Institutional Service Fees Discussion
Led by Joe Colletti and Archie Clutter

Action Requested: None, for information and discussion

Background and discussion prompt: LGUs continually review fee-for-service models at the institutional level and at a college or department or faculty level. Overall, direct and indirect costs must be incorporated into various situations. Specific examples of fee-for-service models will be presented for centers such as a Biotech or Plant Phenomics core facility. College/department/faculty level centers must be in alignment with institutional level parameters, yet these more local centers have different deliverables, support needs (e.g. compliance, legal) and may be conducted at an outlying station for various trials or at a local unit on campus (e.g. variety, products, food, feed). NCRA directors typically would have more involvement with these later types of situations within their units and faculties. We will focus our discussion on local fee-for-service centers and associated processes and best practices.

UNL and IL slides below.

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Assessing an F&A Rate Based on Industry Funding Type

Industry-Sponsored Activities Overview

UNL has a strong and long history of collaboration with the private sector to maximize opportunities that advance industry. Industry projects provide access to talented UNL scientists (faculty and students) and to state-of-the-art research infrastructure, technology development and outreach efforts. The University understands that the expectations and requirements that come with support from industry can be very different than those that come from governmental funding agencies. These differences are palpable in the contracting process and in the issues surrounding research intellectual property ownership.

The most typical industry-sponsored research and activities fall into the following categories, depending on the type of work to be conducted and the funding mechanism. The funding classification will affect, among other things, the way UNL accounts for the funds, calculates and applies indirect (F&A) costs, and reports on the use of the funds to the sponsor or donor.

Sponsored Research	Gift or Donation	Fee-for-Service
<p>Externally-supported funds provided to sponsor a research project, typically in response to a request for a proposal.</p> <p>A sponsored project occurs when UNL or an employee of UNL submits a bid, offer, proposal or the like or responds to a request, announcement, call for proposals or the like, that results in the issuance of an award – i.e. a grant, contract, cooperative agreement or any of a variety of other agreement formats. A sponsored project may be thought of as a transaction in which there is a specified statement of work with a related, reciprocal transfer of something of value.</p>	<p>Funding provided for general or unrestricted support for research, public service, instruction, fellowships, traineeships or other activities.</p> <p>Gifts or donations given directly to the University may be for general purposes (e.g. endowment, capital projects, a line of research, faculty support, department support, library or arts support).</p> <p>Gifts require no deliverables, obligations or agreements to share data, intellectual property or other rights. They do not require return of unexpended funds or impose a time period for expenditure of the funds. No reporting is required, other than general stewardship and communications as a courtesy to the donor.</p>	<p>Monetary compensation in exchange for a specific service provided by the university.</p> <p>Fee-for-service projects include evaluation of a product, compound or service for a private sector entity that owns or has financial interests in the data resulting from the evaluation.</p> <p>Work does not require original, creative or scholarly analyses or non-standard interpretation of data sets.</p> <p>External client requests a specific deliverable generated using known practical applications of standard procedures based on established theories and/or methods using special or unique UNL capabilities.</p> <p>External client may provide a detailed protocol and/or specific supplies for the project. Results of such work are of proprietary interest to the client and would still constitute a deliverable to the client rather than creative work by UNL.</p> <p>Pricing should take into account existing service center rates, if applicable, as well as any direct costs associated with performing the contracted services.</p>

Facilities and Administrative Cost Rates

Federally negotiated facilities and administrative (F&A) costs, also known as indirect costs, are charged against modified total direct costs (MTDC). Modified total direct costs exclude equipment, capital expenditures, charges for patient care and tuition remission, rental costs of off-site facilities, scholarships and fellowships as well as the portion of each subgrant/subcontract in excess of \$25,000.

Date of [Rate Agreement](#): February 17, 2019. All rates in the agreement are based on MTDC

Federally Negotiated Facilities and Administrative (F&A) Rates

Organized Research	55.5%
Ag Research Division	48.5%
Instruction	52.0%
Other Sponsored Activity	44.0%
Cooperative Extension Services	33.5%
Off Campus Activity (all programs)	26.0%

F&A Waivers

The Vice Chancellor for Research & Economic Development (VCRED) retains authority for waivers of F&A costs on proposals and awards. Because F&A costs represent true costs of a project, waiver requests should be limited only to those rare circumstances where the benefit to the university outweighs the monetary loss to the university. Some circumstances under which a waiver will be considered include: 1) the sponsoring agency has **published** policies limiting or prohibiting the payment of full F&A or indirect costs; 2) the project requires significant cost sharing that cannot be met by other sources; or 3) there are extenuating circumstances that support such a waiver. Because corporate sponsors are expected to benefit financially from the sponsored research, they are expected to pay UNL's full F&A Rate.

Any request for a reduction of full F&A must be thoroughly justified and signed by the cognizant department chair and dean, prior to submission to the Office of Sponsored Programs for consideration and **submitted well in advance of the proposal due date**. The Vice Chancellor for Research and Economic Development makes the final determination for all waiver requests. You will be notified via email of the final determination.

The VCRED grants Deans the authorization to voluntarily waive F&A on fee-for-service projects only to a minimum of 20% for projects within their college. Any voluntary F&A waivers to a rate less than 20% still require approval by the Vice Chancellor. F&A earned on projects with voluntarily waived F&A rates up to and including 26%, will be held centrally to offset the compliance and business support costs of doing sponsored activity. For rates that exceed 26%, amounts above 26% will be distributed in accordance with the F&A Distribution policy.

If a master service agreement (MSA) exists with the company sponsoring the project, the lesser of the F&A rate outlined in the MSA or a 5% deduction from the federally negotiated F&A rate will be applied.

For federal, state, and foundation proposals, if a sponsor's published policy exists limiting our full F&A rate, a copy of the published policy (or a website where it can be found) is sufficient for justification. This request does not require approval by the department chair and dean.

Does this Seem to Be a Sponsored Project?

Does the sponsor require deliverables? (e.g. equipment, records, detailed research results, study data, etc.)?

Does the sponsor request ownership of intellectual property? (e.g. licenses, copyrights, royalties, etc.)?

Does the sponsor request control of publications?

Yes to any

No to all

Does the Company have a Master Services Agreement (MSA) with UNL with a defined negotiated F&A rate?

A Master Services Agreement (MSA) is an umbrella contract between the industry sponsor and the University in which most of the terms (including F&A) will govern future transactions.

[Go to Fee-for-Service](#)

Yes

No

MSA F&A Rate Applies

UNL Federally Negotiated F&A Rate Applies

Does this Seem to Be a Fee-for-Service Project¹?

Does the type of work to be conducted involve the sale of a good or service from UNL to an external entity?

Does the type of work to be conducted fall into one of the following categories: testing, analysis, equipment use, specific training etc.?

Is any intellectual property expected to result from the project? (e.g. patentable discovery, copyrights, trade secret, etc.)?

Do all publishing rights rest with the donor/sponsor, with no publications anticipated by UNL personnel?

Yes to any

No to all

Does the Company have a Master Services Agreement (MSA) with UNL with a defined negotiated F&A rate?

A Master Services Agreement (MSA) is an umbrella contract between the industry sponsor and the University in which most of the terms (including F&A) will govern future transactions.

[Go to Gifts and Donations](#)

Yes

No

¹MSA F&A Rate Applies

Does the project require any of the following?

- A Services Agreement for the work to be conducted
- Compliance (IACUC, EHS, CI, IRB, BSC)
- A customized Non-disclosure Agreement
- A customized Material Transfer Agreement
- A detailed report required by the sponsor to include an analysis, interpretation and/or recommendations of the data/findings

Yes

No

¹ UNL Federally Negotiated F&A Rate Applies

Service Center Model
Standard Non-Funded Agreements: MTA, NDA; 5% Administrative Fee Applies

¹All Fee for Service agreements with Industry Partners should be negotiated as Fixed Price Contracts with embedded (burdened) F&A included. A Fixed Price Contract is an agreement by which UNL agrees to perform an agreed-upon set of specified deliverables in exchange for a set (fixed) amount of compensation. Under a fixed price agreement, it is important to include all costs of the work performed, as the deliverables must be provided regardless of any cost overruns. Upon fulfillment of the agreement, residual balances will be transferred to a revolving reserve account and be subject to the UNL 5% administrative fee. These amounts are subject to Unrelated Business Income Tax and may be subject to additional assessments to cover any assessed taxes. At no time will an external customer be charged less than UNL departments, grants or related parties for the same service.

Does This Seem to Be a Gift or Donation?

Does the sponsor require the university to provide any goods or services?
Does the sponsor require any fiscal or technical reports?

No to all

Yes to any

A gift or donation is processed using the UNL *Form for Reporting Monetary Donations* (Donation form). The Office of Sponsored Programs sends acknowledgement letters to confirm the donation.

[Go to Sponsored Project](#)

Institutional Service Fee

University of Illinois establishes Service Centers to provide services or products for services or products that are not readily available from external sources or cannot be obtained conveniently and efficiently.

Three types:

1. 3E Service Centers: (internal and external customers)
 - a. Provide a good/service or groups of goods/services on a recurring basis.
 - b. Provide goods/services primarily to internal customers within the University of Illinois System. (Source of funds within the UI i.e. sponsored programs).
 - c. Recover the costs of providing the good/service through charges or fees to users.
 - d. Add value such as assigned staff and supplies necessary to provide the good/service.
 - e. Examples: Feed Mill (Animal Sciences), Soil Sampling (CROPS, Villamil), Water Quality Analysis Lab (CROPS, Christianson), Plant Care Facility
2. 3J and 3M Auxiliaries which primarily serve students, faculty, and staff.
 - a. Examples: Field trip accounts, class fees
3. 3Q Departmental activity accounts established for services provided to non-system users.
 - a. Examples: Agricultural farms, PSEP, Plant Clinic, Variety Testing, Meat Sales, Animal Sciences Farms

3E Service Center

University Level: Roy J. Carver Biotechnology Center (<https://biotech.illinois.edu/>)

College Level: Plant Care Facility (<https://pcf.aces.illinois.edu/>)

Department Level: Feed Mill (Animal Sciences), Soil Sampling (Crop Sciences)

3E Service Centers receiving income

- Internal transfers to research faculty awards and/or department accounts
- External Technical Testing Agreements:
 - A TTA would be established for research related service centers for external customers. Examples would include a TTA with Danforth Center and Biotechnology Center for DNA testing services
 - TTA's are also established for one time protocol testing. Faculty can be involved in these agreements and a budget is developed for salary, materials and supplies and miscellaneous expenses associated with fulfilling the protocol. Data is not analyzed and not owned by the faculty member. All data generated is given to the company. Graduate students cannot be paid from these types of TTAs.
- External Facility Use Agreements
 - A FUA is established for use of the facility and charged according to the rate structure. A FUA can charge an indirect cost rate.

3E Future Service Centers

- Precision planting services at the agricultural farms.