

# AWARD REPORT

March 2022

PI Name	PI College	PI Department	Co-PI(s)	Awarded Amount	Project Title	Primary Sponsor Name
Ademola Hammed	AES & EXT	AES Agricultural & Biosystems Engineering	Ademola Ajayi-Banji Niloy Chandra Sarker Ewumbua Monono	\$36,848.00	Waxing of corn starch to produced water proof film for bale-net wrap	ND Corn Utilization Council
Ewumbua Monono	AES & EXT	AES Agricultural & Biosystems Engineering	Valenti Hatterman-Valenti	\$35,462.00	Optimizing the Drying and Storage Conditions of Cannabidiol Hemp Grown in ND (APUC application)	ND Department of Agriculture
Joel Caton	AES & EXT	AES Animal Sciences		\$47,795.00	IPA Appointment: Visiting Scientist on Developmental Leave with USDA-NIFA	USDA National Institute of Food & Agriculture
Colin Tobin	AES & EXT	AES Carrington Research / Extension Center	Zachary Carlson Karl Hoppe Kendall Swanson	\$27,966.00	Evaluation of ground hybrid rye on the efficiency of gain and carcass traits in backgrounding and finishing North Dakota steers	ND Department of Agriculture
Jasper Teboh	AES & EXT	AES Carrington Research / Extension Center		\$17,527.00	Defining optimal nitrogen and sulfur rates for canola on low and high productivity fields	Northern Canola Growers Association
Michael Wunsch	AES & EXT	AES Carrington Research / Extension Center		\$23,940.00	Corteva protocols in chickpea, lentil and field pea	Corteva Agriscience
Michael Wunsch	AES & EXT	AES Carrington Research / Extension Center	John Rickertsen	\$11,780.00	Management of root rots of field peas with crop rotation	Northern Pulse Growers Association
John Rickertsen	AES & EXT	AES Hettinger Research / Extension Center		\$11,380.00	North Dakota Flax Variety Trials	AmeriFlax
Samiran Banerjee	AES & EXT	AES Microbiological Sciences	Caley Gasch	\$33,401.00	Contributions of beneficial soil microbes to corn yield: legacy effect of the previous crop.	ND Corn Utilization Council
Andrew Friskop	AES & EXT	AES Plant Pathology	Michael Ostlie	\$20,095.00	Goss's Wilt Research and Development of Digital Outreach Tool	ND Corn Utilization Council
Guiping Yan	AES & EXT	AES Plant Pathology		\$7,915.00	Genome Sequencing and Assembly of the Root-Lesion Nematode Pratylenchus Scribneri, an Important Nematode Pest of Corn	ND Corn Utilization Council
Janet Knodel	AES & EXT	AES Plant Pathology		\$15,000.00	Evaluating Red Sunflower Seed Weevils for Pyrethroid Susceptibility	National Sunflower Association
Janet Knodel	AES & EXT	AES Plant Pathology	Veronica Calles Torrez	\$26,020.00	Monitoring for European Corn Borers and Corn Rootworms in Corn	ND Corn Utilization Council
Mohamed Khan	AES & EXT	AES Plant Pathology		\$14,000.00	Impact of Crop Sequence and Tillage on Crop Yield and Quality, Soil Nutrients, pH Texture and Microbial Population	ND Corn Utilization Council
Carrie Miranda	AES & EXT	AES Plant Sciences	Paulo Flores	\$49,996.00	SOYGEN 3: Increasing Soybean Genetic Gain for Yield and Seed Composition by Developing Tools, Know-How and Community Among Public Breeders in the NC US	North Central Soybean Research Program / Ohio State University
Joseph Ikley	AES & EXT	AES Plant Sciences	Gregory Endres Michael Ostlie	\$17,284.00	The Effect of Residual Corn Herbicides on In-Crop Cover Crop Establishment	ND Corn Utilization Council
Kalidas Shetty	AES & EXT	AES Plant Sciences	Dipayan Sarkar	\$19,560.00	Improving Abiotic Stress Cross Tolerance in Corn	ND Corn Utilization Council
Marisol Berti	AES & EXT	AES Plant Sciences		\$2,942.00	Testing New High Quality Perennial Cool-Season Forage Grasses with Improved Winter Hardiness and Persistence - Year 3	Midwest Forage Association
Md Rahman	AES & EXT	AES Plant Sciences		\$24,100.00	Increasing Genetic Diversity in Spring Canola (Brassica Napus L.)	Northern Canola Growers Association

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Md Rahman	AES & EXT	AES Plant Sciences		\$70,000.00	Canola Breeding for Increasing Oil Yield per Acre	Northern Canola Growers Association
Michael Christoffers	AES & EXT	AES Plant Sciences		\$24,508.00	Transformation of Waterhemp Cell Cultures: Expression of Cas9	ND Corn Utilization Council
Quincy Law	AES & EXT	AES Plant Sciences	Kirk Howatt Joseph Ikley	\$7,559.00	Evaluating Group 15 Herbicide Efficacy on Pigweed Species in Sunflower	National Sunflower Association
Quincy Law	AES & EXT	AES Plant Sciences	Joseph Ikley	\$31,003.00	Corn Yield Interference of Palmer Amaranth and Waterhemp in North Dakota	ND Corn Utilization Council
Thomas Peters	AES & EXT	AES Plant Sciences		\$111,314.00	Weed Control in Sugarbeet	Sugarbeet Research & Education Board of MN & ND
Abbey Wick	AES & EXT	AES School of Natural Resource Sciences	Marisol Berti Aaron Daigh Gregory Endres Caley Gasch Naeem Kalwar	\$32,129.00	Research and Extension Efforts at the Soil Health and Agriculture Research Extension (SHARE) Farm - Logan Center, ND	ND Corn Utilization Council
David Franzen	AES & EXT	AES School of Natural Resource Sciences	Kelly Cooper Clair Keene Jasper Teboh	\$27,725.00	Evaluation of Biological Additives in their Ability to Supplement N to Corn	ND Corn Utilization Council
Justin Jacobs	AES & EXT	AES Williston Research / Extension Center	Jerald Bergman Tyler Tjelde	\$8,000.00	Canola Population and Fertility Under Irrigation	Northern Canola Growers Association
Kristin Harner	AES & EXT	Extension Agricultural Communication		\$11,900.00	2021-23 Ag Mags and Teacher Guides	ND Department of Agriculture
Mohamed Khan	AES & EXT	Extension Plant Pathology		\$96,949.00	Sugarbeet Extension Programs and Program Maintenance	Sugarbeet Research & Education Board of MN & ND
Samuel Markell	AES & EXT	Extension Plant Pathology		\$20,000.00	North Central Integrated Pest Management Center (NCIPMC): A Regional Approach to Pest Management Implementation FY18-FY22	USDA-NIFA / Michigan State University
Shuning Lu	CAHSS	Communication	Zoltan Majdik	\$10,700.00	Summer Institute of Computational Social Science- NDSU partner site 2022	Social Science Research Council
Jeremy Straub	CENG	Computer Science		\$55,000.00	Industry Collaboration for Autonomous Medication Misuse Prevention	OpREMS LLC
Dali Sun	CENG	Electrical & Computer Engineering		\$71,850.00	ExoIPThT, Secondary Structure of Exosomal Protein for Noninvasive Cancer Detection	NIH / University of North Dakota
Omid Beik	CENG	Electrical & Computer Engineering		\$15,000.00	Multiphase MW Generator for Improved Power Density and Increased Reliability by Reduced DC Capacitive Filtering	NASA / University of North Dakota
David Grewell	CENG	Industrial & Manufacturing Engineering	Nita Yodo	\$31,164.00	Multi-functional biodegradable mulch for specialty crop production Round Robin Testing	ND Corn Utilization Council
Lokesh Narayanan	CENG	Industrial & Manufacturing Engineering	David Grewell	\$13,259.00	Closed-loop control for strengthening 3D printed (FDM) parts through ultrasonic welding.	Center for Bioplastic and Biocomposites
Ali Amiri	CENG	Mechanical Engineering	Chad Ulven	\$14,303.50	Reducing fogging emission of natural fiber-filled polymers	Center for Bioplastic and Biocomposites
Yildirim Suzen	CENG	Mechanical Engineering	Yan Zhang	\$5,000.00	2022 AIAA Design/Build/Fly Competition	University of North Dakota

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PI Name	PI College	PI Department	Co-PI(s)	Awarded Amount	Project Title	Primary Sponsor Name
Elisabetta Liverani	CHP	Pharmaceutical Sciences		\$181,250.00	Sex-related variations in the response of anti-platelet drug therapies targeting purinergic signaling pathways in sepsis	Department of Health and Human Services
Kristine Steffen	CHP	Pharmaceutical Sciences	Benjamin Balas Daniel Friesner Clayton Hilmert Leah Irish Jeffrey Johnson Megan Orr Michael Robinson Mukund Sibi	\$415,467.00	Center for Biobehavioral Mechanisms of Eating Behavior (CBMEB)	NIH / Sanford Research North
Sathish Venkatachalem	CHP	Pharmaceutical Sciences		\$370,835.00	Kisspeptins in the Airway	National Institutes of Health
Sathish Venkatachalem	CHP	Pharmaceutical Sciences		\$224,080.00	Dakota Cancer Collaborative on Translational Activity	NIH / University of North Dakota
Vanessa Tibbitts	CHP	Public Health		\$7,491.00	Public Health 101 course focused on the Great Plains Region	Great Plains Tribal Chairmen's Health Board
Andriy Voronov	CSM	Coatings & Polymeric Materials		\$46,582.00	Single-Component Corn-Based Bioplastics for Food Packaging Applications	ND Corn Utilization Council
Dean Webster	CSM	Coatings & Polymeric Materials	Mukund Sibi	\$27,967.50	Exploration of Bio-based Functional Building Blocks for Durable Coatings - Year 2	Center for Bioplastic and Biocomposites
Stacy Duffield	Misc	Office of Teaching and Learning		\$400.00	Teacher Preparation Common Metrics: Partnership with Rochester University	Rochester University
Dale Heglund	UGPTI	Upper Great Plains Transportation Institute		\$396,000.00	2022 NDLTAP	Federal Highway Administration / ND Department of Transportation
Diomo Motuba	UGPTI	Upper Great Plains Transportation Institute	Bradley Wentz	\$4,734.00	Bismarck East Main Ave Corridor Study	Bismarck-Mandan Metro Planning Organization
Diomo Motuba	UGPTI	Upper Great Plains Transportation Institute	Bradley Wentz	\$59,169.00	Travel Demand Model Update for the Fargo Moorhead Metro COG for the 2021 Base Year	FM Metro Council of Governments
Diomo Motuba	UGPTI	Upper Great Plains Transportation Institute	Bradley Wentz	\$9,912.00	FM Metro COG DTA Use To Optimize Transportation Project Staging	FM Metro Council of Governments
Diomo Motuba	UGPTI	Upper Great Plains Transportation Institute	Bradley Wentz	\$7,189.00	FM Metro COG Review and Adjustment to Household and Job Data for the TDM	FM Metro Council of Governments
Kshitij Sharma	UGPTI	Upper Great Plains Transportation Institute		\$37,111.00	FM Metro COG Turning Movement Counts and Traffic Signal Timing Optimization Support for City of Moorhead	FM Metro Council of Governments
MD Hasan	UGPTI	Upper Great Plains Transportation Institute	Bradley Wentz	\$27,970.00	F-M Metro COG Regional ITS Architecture Update	FM Metro Council of Governments
Patrick Nichols	UGPTI	Upper Great Plains Transportation Institute		\$10,601.00	NW Passage Website Maintenance	Department of Transportation / MN Department of Transportation