

AWARD REPORT

January 2022

PI Name	PI College	PI Department	Co-PI(s)	Awarded Amount	Sponsor Name	Title
Frayne Olson	AES&EXT	AES Agribusiness & Applied Economics	Prithviraj Lakkakula	\$ 67,064.00	USDA-AMS / ND Department of Agriculture	International Market and Trade Policy Analysis for U.S. Peas and Lentils
Xinhua Jia	AES&EXT	AES Agricultural & Biosystems Engineering	Kelly Cooper Harlene Hatterman-Valenti Thomas Scherer	\$ 104,301.00	USDA-AMS / ND Department of Agriculture	Automated irrigation for commercial production of watermelon, squash, and muskmelon cultivars in Oakes
Xinhua Jia	AES&EXT	AES Agricultural & Biosystems Engineering		\$ 122,808.00	ND Department of Agriculture	Utilizing remote-controlled irrigation for high tunnel tomato and pepper productions in ND
Xinhua Jia	AES&EXT	AES Agricultural & Biosystems Engineering		\$ 52,166.00	Ellingson Companies	Assessing subsurface drainage systems using electromagnetic induction
Michael Ostlie	AES&EXT	AES Carrington Research/Extension Center	Nonoy Bandillo	\$ 184,047.00	USDA-AMS / ND Department of Agriculture	Field pea gene expression response to salt-affected soils
Michael Ostlie	AES&EXT	AES Carrington Research/Extension Center	Kelly Cooper	\$ 167,875.00	Garrison Diversion Conservancy District	Irrigated Crop Production in Central and Southeast North Dakota
Michael Wunsch	AES&EXT	AES Carrington Research/Extension Center	Venkata Chapara	\$ 118,483.00	USDA-AMS / ND Department of Agriculture	Managing Sclerotinia head rot in confection sunflowers with bee-vectored Clonostachys rosea and partially resistant hybrids
Michael Wunsch	AES&EXT	AES Carrington Research/Extension Center	Kelly Cooper	\$ 116,932.00	USDA-AMS / ND Department of Agriculture	Optimizing fungicide spray droplet size for improved white mold management in dry beans
Brian Jenks	AES&EXT	AES North Central Research/Extension Center		\$ 66,611.00	USDA-AMS / ND Department of Agriculture	Green foxtail screening for herbicide resistance and tank mix antagonism
Julie Pasche	AES&EXT	AES Plant Pathology	Andrew Robinson	\$ 223,000.00	USDA-AMS / ND Department of Agriculture	Filling the Pits Caused by Potato Common Scab in North Dakota
Gary Secor	AES&EXT	AES Plant Pathology	Asunta Thompson	\$ 152,437.00	USDA-AMS / ND Department of Agriculture	Managing Silver Scurf Blemish for Improved Marketability of Table Potatoes
Gary Secor	AES&EXT	AES Plant Pathology		\$ 4,950.00	PepsiCo. Inc.	NDSU Storage Rot Disease Screening
Guiping Yan	AES&EXT	AES Plant Pathology		\$ 169,892.00	USDA-AMS / ND Department of Agriculture	Detection of Viruliferous Stubby Root Nematodes in Fields for Managing Corky Ringspot Disease of Potato
Greta Gramig	AES&EXT	AES Plant Sciences	Deirdre Prischmann-Voldseth	\$ 99,483.00	USDA-AMS / ND Department of Agriculture	Biodegradable Mulches for Environmentally Responsible Pest Management in Fruit and Vegetable Crops
Harlene Hatterman-Valenti	AES&EXT	AES Plant Sciences	Dipayan Sarkar Kalidas Shetty	\$ 124,857.00	ND Department of Agriculture	Evaluating Black Currants, Cantaloupes, and Haskaps for Fruit Composition and Superior Health Attributes in ND
Harlene Hatterman-Valenti	AES&EXT	AES Plant Sciences	David Boehm	\$ 166,177.00	USDA-AMS / ND Department of Agriculture	IGenetic Map to Grape Color and Phenolics
Harlene Hatterman-Valenti	AES&EXT	AES Plant Sciences		\$ 106,469.00	USDA-AMS / ND Department of Agriculture	Utilizing Caterpillar Tunnels to Increase Productivity of Warm-Season Vegetables and Small Fruits
Richard Horsley	AES&EXT	AES Plant Sciences		\$ 23,200.00	Montana Wheat & Barley Committee	2022 Hard Red Spring Wheat Regional Quality Survey
Phillip McClean	AES&EXT	AES Plant Sciences	Juan Osorno	\$ 58,828.00	USDA-AMS / ND Department of Agriculture	New Slow Darkening Bean Specialty Market Classes for Improved Seed Quality and Market Expansion
Carrie Miranda	AES&EXT	AES Plant Sciences		\$ 221,992.00	ND Soybean Council	Two Zurn Combines
Mukhlesur Rahman	AES&EXT	AES Plant Sciences		\$ 10,837.00	Agricultural Research Service	Investigating Mutations in Arabidopsis that Increase Deacclimation Resistance
Andrew Robinson	AES&EXT	AES Plant Sciences		\$ 122,384.00	USDA-AMS / ND Department of Agriculture	Predicting Potato Growth in the Red River Valley
Andrew Robinson	AES&EXT	AES Plant Sciences		\$ 246,540.00	USDA-AMS / ND Department of Agriculture	Digging Deeper in Potatoes by Developing an Electronic Potato Production Book

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Asunta Thompson	AES&EXT	AES Plant Sciences	Julie Pasche	\$ 201,619.00	USDA-AMS / ND Department of Agriculture	New Technology to Fight an Old Foe: Characterizing Resistance to Potato Powdery Scab
Todd West	AES&EXT	AES Plant Sciences		\$ 72,205.00	USDA-AMS / ND Department of Agriculture	Marketing NDSU Select Trees and Tree Value Education
Todd West	AES&EXT	AES Plant Sciences		\$ 68,374.00	USDA-AMS / ND Department of Agriculture	Evaluating Maple Cutting Propagation to Eliminate Grafting Issues
Minwei Xu	AES&EXT	AES Plant Sciences	David Boehm Xin Sun	\$ 38,299.00	ND Department of Agriculture	A Novel Soybean Sorting Technology for Producing High-Quality Tofu Products
Darrell Ross	AES&EXT	AES School of Natural Resource Sciences		\$ 5,050.00	Hercon Environmental Inc	Proposal to Field Test Hercon BioBeads MCH
Gautam Pradhan	AES&EXT	AES Williston Research/Extension Center	Jerald Bergman	\$ 97,013.00	USDA-AMS / ND Department of Agriculture	Evaluating the feasibility of growing and cultivating guar and black gram in North Dakota
Jane Strommen	AES&EXT	Extension Child Development & Family Science		\$ 5,000.00	DHHS-ACL / ND Department of Human Services	Evidence-based Disease Prevention & Health Promotion Services - Lifespan Respite Care
Jane Strommen	AES&EXT	Extension Child Development & Family Science		\$ 123,367.00	DHHS-ACL / ND Department of Human Services	Evidence-based Health Promotion Programming
Jane Strommen	AES&EXT	Extension Child Development & Family Science		\$ 103,318.00	DHHS-ACL / ND Department of Human Services	Evidence-based Disease Prevention & Health Promotion Services
Jane Strommen	AES&EXT	Extension Child Development & Family Science		\$ 129,541.00	DHHS-ACL / ND Department of Human Services	Evidence-based Disease Prevention & Health Promotion Services -American Rescue Plan Funds
Julie Garden-Robinson	AES&EXT	Extension Food & Nutrition		\$ 81,540.00	ND Department of Agriculture	Specialty Fruits and Vegetables: Increasing Knowledge, Skills and Consumption Among Youth and Adults
Carrie Miranda	AES&EXT	Extension Plant Sciences		\$ 20,961.00	ND Soybean Council	NDSU Soybean Symposium
Christopher Byrd	CAFSNR	Animal Sciences		\$ 100,299.00	USDA-NIFA / Texas Tech University	Using Virtual Reality to Increase Student Understanding and Interest in Farm Animal Welfare
David Boehm	CAFSNR	Northern Crops Institute		\$ 5,000.00	ND Corn Utilization Council	Determination of milling efficiency use when processing corns from different origins (U.S., Argentina, Brazil and Ukraine), during size reduction and pelleting operations.
Brian Sorenson	CAFSNR	Northern Crops Institute		\$ 38,000.00	Montana Wheat & Barley Committee	General Support for Global Education and Promotion of Wheat and Barley
Mijia Yang	CENG	Civil & Environmental Engineering		\$ 10,008.00	Federal Highway Administration / Longboard Power LLC	Solar snow fence
Changhui Yan	CENG	Computer Science		\$ 24,300.00	Agricultural Research Service	Creating Weed Tolerant Corn
Farhad Shirani Chaharsooghi	CENG	Electrical & Computer Engineering		\$ 15,833.00	NSF / New York University	CIF: Small: An Information Theoretic Framework for Web Privacy
Trung Le	CENG	Industrial & Manufacturing Engineering		\$ 36,989.00	NIH / University of North Dakota	Smart IoT system for Obstructive Sleep Apnea Monitoring and Forecasting in Cancer Patients under Radiotherapy
Lokesh Narayanan	CENG	Industrial & Manufacturing Engineering	David Grewell	\$ 13,615.00	Center for Bioplastic and Biocomposites	Closed-loop control for strengthening 3D printed (FDM) parts through ultrasonic welding
Ali Amiri	CENG	Mechanical Engineering	Chad Ulven	\$ 13,354.00	Center for Bioplastic and Biocomposites	Reducing fogging emission of natural fiber-filled polymers

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Long Jiang	CENG	Mechanical Engineering		\$ 126,697.00	DOE / Washington State University	Upcycling of CFRP Waste: Viable Eco-friendly Chemical Recycling and Manufacturing of Novel Repairable and Recyclable Composites
Nilesh Ambhore	CHP	Pharmaceutical Sciences		\$ 149,088.00	American Heart Association	Sex-steroids differentially skew leptin/adiponectin signaling in obesity-associated asthmatic airway
Estelle Leclerc	CHP	Pharmaceutical Sciences		\$ 159,999.00	NIH / University of North Dakota	Effects of RAGE inhibition during melanoma chemotherapy in a patient-oriented study
Rebecca Brynjulson	CHP	Pharmacy Practice		\$ 30,300.00	HRSA / University of North Dakota	Geriatrics Workforce Enhancement Program
Gretchen Dobervich	CHP	Public Health		\$ 8,000.00	CDC / University of North Dakota	North Dakota Alzheimer's Disease State Plan Year 2
Xiaoning Qi	CSM	Coatings & Polymeric Materials		\$ 26,208.00	DoD / PPG Industries	High Temperature Coating Systems
Mohiuddin Quadir	CSM	Coatings & Polymeric Materials		\$ 139,428.00	University of North Dakota	Chemotherapy delivery via engineered 'Nano-missiles' for halting Progression of Pancreatic Cancer
Dean Webster	CSM	Coatings & Polymeric Materials	Andrew Croll Bakhtiyor Rasulev Wenjie Xia	\$ 4,726,763.00	U.S. Navy	Understanding the Principles of Solid Shedding Surfaces - Phase II
Dean Webster	CSM	Coatings & Polymeric Materials	Mukund Sibi	\$ 26,110.00	Center for Bioplastic and Biocomposites	Exploration of Bio-based Functional Building Blocks for Durable Coatings - Year 2
Dean Webster	CSM	Coatings & Polymeric Materials		\$ 45,267.00	United Soybean Board	Expanded Use of Soy-Based Oil Pretreatment of Recycled Rubber Crumb in Automotive Parts
Andrew Croll	CSM	Physics	Wenjie Xia	\$ 85,000.00	U.S. Army	Guided Energy Absorption in Crumpled Polymer Sheets
Sylvio May	CSM	Physics		\$ 162,482.00	National Science Foundation	Intergovernmental Personnel Act (IPA) assignment to the National Science Foundation
Susanne Caro	Misc	Library		\$ 651.00	American Library Association	Developing an improved tool for monitoring vinegar syndrome in cellulose acetate formats
Marianne Quittschreiber	Misc	Wellness Center		\$ 834.56	ND Department of Public Instruction	NDSU Wellness Center Child Care ND Food Program
Bradley Wentz	UGPTI	Upper Great Plains Transportation Institute		\$ 304,520.00	DOT / ND Department of Transportation	2022 Advanced Traffic Analysis Center (ATAC)