

AWARD REPORT

June 2022

PI Name	PI College	PI Department	CoPI(s)	Awarded Amount	Title	Sponsor Name
Yu Zhang	AES & EXT	AES Agricultural & Biosystems Engineering		\$ 2,918	Distinguishing herbicide resistant (Glufosinate, Glyphosate, PPO inhibitors and Dicamba) kochia in sugar beet field using deep learning algorithm and hyperspectral technology	Sugarbeet Research & Education Board of MN & ND
Benjamin Geaumont	AES & EXT	AES Hettinger Research / Extension Center		\$ 15,998	Southwestern North Dakota Pheasant Initiative	Pheasants Forever- North Dakota
Barney Geddes	AES & EXT	AES Microbiological Sciences	Thomas Baldwin	\$ 41,062	Microbiome antagonism of Fusarium Head Blight	USDA Agricultural Research Service
Brian Jenks	AES & EXT	AES North Central Research / Extension Center		\$ 7,500	Tame buckwheat tolerance to soil-applied preemergence herbicides (Minn-Dak)	Minn-Dak Growers Ltd
Thomas Baldwin	AES & EXT	AES Plant Pathology		\$ 53,823	Fusarium Head Blight Screening and Molecular Analysis of Barley Resistance	USDA Agricultural Research Service
Luis Del Rio Mendoza	AES & EXT	AES Plant Pathology		\$ 30,000	Improving Resistance of Spring Canola to Sclerotinia Stem Rot	USDA Agricultural Research Service
Andrew Friskop	AES & EXT	AES Plant Pathology	Thomas Baldwin Leandro Bortolon Venkata Chapara Audrey Kalil Clair Keene Tyler Tjelde	\$ 64,927	Field Research for Management of Fusarium Head Blight (FHB) in Small Grains	USDA Agricultural Research Service
Andrew Friskop	AES & EXT	AES Plant Pathology		\$ 8,400	Evaluation of GreenLight Biosciences Products for FHB	GreenLight Biosciences, Inc.
Zhaohui Liu	AES & EXT	AES Plant Pathology		\$ 20,961	Acquisition of Goods and Services	USDA Agricultural Research Service
Julie Pasche	AES & EXT	AES Plant Pathology		\$ 15,120	Efficacy of Adavelt Solo (GF-4536) and in Mixture with Difenoconazole 1:1 (GF-5249) for Control of Early Blight (ALTESO) on Potatoes	Corteva Agriscience
Shaobin Zhong	AES & EXT	AES Plant Pathology		\$ 126,820	Improvement of Barley Resistance to Fusarium Head Blight, Stripe Rust, and Hessian Fly	USDA Agricultural Research Service
Elias Elias	AES & EXT	AES Plant Sciences		\$ 188,120	Breeding Durum Wheat for Fusarium Head Blight Resistance	USDA Agricultural Research Service
Andrew Green	AES & EXT	AES Plant Sciences		\$ 123,957	Wheat Breeding for Enhanced Fusarium Head Blight (FHB) Resistance in North Dakota	USDA Agricultural Research Service
Harlene Hatterman-Valenti	AES & EXT	AES Plant Sciences		\$ 60,000	Grape and Wine Research Grant	ND Department of Agriculture
Harlene Hatterman-Valenti	AES & EXT	AES Plant Sciences		\$ 17,857	Integrated Weed Management in Hemp: A Multistate Effort to Evaluate Practices and Develop Recommendations	USDA-NIFA / Cornell University
Richard Horsley	AES & EXT	AES Plant Sciences		\$ 203,097	Developing Malting Barley with Reduced FHB and DON.	USDA Agricultural Research Service
Richard Horsley	AES & EXT	AES Plant Sciences		\$ 456,280	Deoxynivalenol (DON) in Wheat and Barley	USDA Agricultural Research Service
Richard Horsley	AES & EXT	AES Plant Sciences		\$ 54,384	Acquisition of Goods and Services	USDA Agricultural Research Service
Richard Horsley	AES & EXT	AES Plant Sciences		\$ 96,800	Acquisition of Goods and Services	USDA Agricultural Research Service

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Clair Keene	AES & EXT	AES Plant Sciences	Venkata Chapara	\$	16,107	Genetic Resistance and Fungicide for FHB Control in Durum	USDA Agricultural Research Service
Xuehui Li	AES & EXT	AES Plant Sciences		\$	39,462	Genetic Dissection and Improvement of Fusarium Head Blight (FHB) Resistance in Durum Wheat	USDA Agricultural Research Service
Gideon Marais	AES & EXT	AES Plant Sciences	Clair Keene	\$	57,655	Breeding Fusarium Head Blight (FHB) resistant hard winter wheat for North Dakota	USDA Agricultural Research Service
Md Rahman	AES & EXT	AES Plant Sciences		\$	26,100	Introgression and Pyramiding of Sclerotinia Stem Rot Disease Resistant Gene(s) into Canola Cultivars	USDA Agricultural Research Service
Jiajia Rao	AES & EXT	AES Plant Sciences	Shaobin Zhong	\$	42,933	Fusarium Mycotoxins Management in Sprouted Cereal Grains	USDA Agricultural Research Service
Mark Boetel	AES & EXT	AES School of Natural Resource Sciences		\$	6,040	Acquisition of Goods and Services	USDA Agricultural Research Service
Daryl Ritchison	AES & EXT	AES School of Natural Resource Sciences		\$	42,537	National Mesonet Program Prime Contract	NOAA / Synoptic Data Corp.
Heidi Pecoraro	AES & EXT	AES Vet Diagnostic Service Department		\$	42,960	Vet-LIRN Cooperative Agreement	Food and Drug Administration
Diane Hahn	AES & EXT	Extension Center for 4-H Youth Development		\$	280,000	Building Community Capacity and Resilience through 4-H in ND Tribal Nations	USDA National Institute of Food & Agriculture
Julie Garden-Robinson	AES & EXT	Extension Food & Nutrition		\$	850	Eat Smart. Play Hard: Kids Baking with North Dakota Products	ND Nutrition Council
Janet Knodel	AES & EXT	Extension Plant Pathology	Patrick Beauzay Andrew Friskop Samuel Markell Esther McGinnis Presley Mosher Andrew Thostenson	\$	227,934	Extension IPM Program of North Dakota	USDA National Institute of Food & Agriculture
David Boehm	CAFSNR	Northern Crops Institute		\$	123,450	Analytics for Isoflavones and Soybean/Tofu Yields for a U.S. Soybean Export Council Soy Foods Database	U.S. Soybean Export Council
Susan Kliman	CAHSS	Architecture & Landscape Architecture		\$	5,689	Scholarship Challenge Grant - Troy Fountain ESG Architecture & Design Memorial Scholarship	NDSU Foundation & Alumni Association
Syeed Iskander	CENG	Civil & Environmental Engineering		\$	7,661	Engineering landfill daily covers with agricultural waste-derived biochar for controlling the movement of Per and Polyfluoroalkyl Substances in leachate	NDSU Foundation & Alumni Association
Jeremy Straub	CENG	Computer Science		\$	20,000	NDDPI Funding to support Bison Cyber Camp in 2022	DoED / ND Department of Public Instruction
Dharmakeerthi Nawarathna	CENG	Electrical & Computer Engineering	Umamaheswara Rao Tida	\$	250,000	PFI-TT: Point-of-care sensor based on electric fields and machine learning for detection of circulating microRNA to identify early pancreatic cancer	National Science Foundation
Danling Wang	CENG	Electrical & Computer Engineering	Qifeng Zhang	\$	83,590	EAGER: Novel MXene nanocomposites based 3D printed flexible sensors for breath analysis	National Science Foundation
David Grewell	CENG	Industrial & Manufacturing Engineering	Alan Kallmeyer Chad Ulven Dean Webster	\$	15,965	IUCRC Phase II at North Dakota State University: Center for Bioplastics and Biocomposites [CB2]	National Science Foundation

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David Grewell	CENG	Industrial & Manufacturing Engineering	Alan Kallmeyer Chad Ulven Dean Webster	\$	22,910	IUCRC Phase II at North Dakota State University: Center for Bioplastics and Biocomposites [CB2]	National Science Foundation
Daniel Friesner	CHP	Deans Office, Health Professions		\$	160,194	Clinical Pharmacy Teaching Program	Lake Region Healthcare Corporation
Daniel Friesner	CHP	Deans Office, Health Professions		\$	80,802	Sanford Health Imagenetics Program	Sanford Health
Daniel Friesner	CHP	Deans Office, Health Professions		\$	73,772	Southpointe Pharmacy Teaching Program	Southpointe Pharmacy
Sanku Mallik	CHP	Pharmaceutical Sciences	Megan Orr Sathish Venkatachalem	\$	96,607	Echogenic polymersomes for triggered contents release	National Institutes of Health
Jagdish Singh	CHP	Pharmaceutical Sciences		\$	190,981	Enhanced APOE2 Expression into Brain for Effective Therapeutic Strategy for Alzheimer's Disease	National Institutes of Health
Sathish Venkatachalem	CHP	Pharmaceutical Sciences		\$	41,206	Kisspeptins in the Airway	National Institutes of Health
Allison Hursman	CHP	Pharmacy Practice		\$	32,950	Hepatitis C Prevention and Care	CDC / ND Department of Health
Ramona Danielson	CHP	Public Health		\$	16,000	Trauma-Focused Equine-Assisted Learning (TF-EAL) Integration into Equine Studies Curricula	USDA-NIFA / Nueta Hidatsa Sahnish College
Stefanie Meyer	CHP	Public Health	Pamela Jo Johnson	\$	32,459	COVID-19 Student Projects/Food and Lodging Project	CDC / ND Department of Health
Stefanie Meyer	CHP	Public Health		\$	10,900	COVID-19 Travel Student Projects	CDC / ND Department of Health
Vanessa Tibbitts	CHP	Public Health		\$	125,000	Pilot Project to Build Sustainable Public Health Capacity in Tribal Nations and Organizations for Covid-19	CDC / National Network of Public Health Institution
Ryan McGrath	CHSE	Health, Nutrition & Exercise Sciences		\$	416,481	GRip Assessment for Protocol Enhancements (GRAPE) in Older Adults	National Institutes of Health
Mari Borr	CHSE	School of Education		\$	12,500	FACS Summer PD 2022	ND Department of Career & Technical Education
Laura Parson	CHSE	School of Education		\$	1,014,905	Air University Quality Enhancement and Improvement Accreditation Support	U.S. Air Force
Timothy Greives	CSM	Biological Sciences	Holland Galante	\$	2,143	Is mitochondrial copy number predictive of whole organismal, metabolic rate and growth rate in the developing House Sparrow (Passer domesticus)?	American Ornithological Society
Marinus Otte	CSM	Biological Sciences	Christine Cornish	\$	12,500	Pesticide Residues in Prairie Pothole Wetlands in North Dakota	ND Department of Agriculture
Wenfang Sun	CSM	Chemistry and Biochemistry		\$	108,434	Collaborative Research: Developing cancer-specific targeting new I photosensitizers for in vitro theranostic photodynamic therapy and photothermal therapy	National Science Foundation
Zhongyu Yang	CSM	Chemistry and Biochemistry	Andriy Voronov	\$	609,189	Collaborative Research: Elucidating the Nanoscale Interaction between Invertible Micellar Assemblies (IMAs) and Biopolymer Cargos under Varied Environments	National Science Foundation
Xiaoning Qi	CSM	Coatings & Polymeric Materials		\$	150,000	Advanced Coatings for Edge Protection	Office of the Secretary of Defense / PPG Industries

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Dean Webster	CSM	Coatings & Polymeric Materials	Shane Stafslie	\$	100,000	Comprehensive Biological Efficacy Testing of Marine Coating	U.S. Navy
Alan Denton	CSM	Physics		\$	72,980	Response of Soft Colloids and Macromolecules to Crowded Environments: Theoretical and Computational Modeling	National Science Foundation
Katherine Duggan	CSM	Psychology		\$	2,279	Increasing the potential for cutting-edge sleep science at North Dakota State University	NDSU Foundation & Alumni Association
Kelly Rusch	Misc	North Dakota EPSCoR		\$	630,000	ND EPSCoR State Office Leveraged FY22-23	ND University System Office
Kelly Rusch	Misc	North Dakota EPSCoR		\$	2,212,875	ND EPSCoR State Office FY22-23	ND University System Office
Stacy Duffield	Misc	Office of Teaching & Learning		\$	200	Teacher Preparation Common Metrics: Partnership with Purdue	Purdue University Northwest
Emily Frazier	Misc	TRIO		\$	297,601	TRIO Upward Bound Proposal	Department of Education
Xinhua Jia	Misc	Water Resources Institute		\$	25,000	2022-2023 NDWRRI Graduate Fellowship Matching Funds	ND Water Commission
Marianne Quittschreiber	Misc	Wellness Center		\$	1,294	NDSU Wellness Center Child Care ND Food Program	ND Department of Public Instruction
Brenda Lantz	UGPTI	Upper Great Plains Transportation Institute		\$	144,248	Automated CMV Evaluation (ACE) - Inspection Demonstrations and Evaluations	Federal Motor Carrier Safety Administration / toXcel
Brenda Lantz	UGPTI	Upper Great Plains Transportation Institute		\$	91,209	Effectiveness of Third-Party Testing for CDL	Federal Motor Carrier Safety Administration / toXcel
Brenda Lantz	UGPTI	Upper Great Plains Transportation Institute		\$	64,914	Investigating the Safety of CMV Operation by Deaf and Hard of Hearing Drivers	Federal Motor Carrier Safety Administration / toXcel
Christopher Padilla	UGPTI	Upper Great Plains Transportation Institute		\$	117,000	2022-2023 Transportation Learning Network Contract 1 of 3.	FHA / ND Department of Transportation
Christopher Padilla	UGPTI	Upper Great Plains Transportation Institute		\$	117,000	2022-2023 Transportation Learning Network Contract 2 of 3.	FHA / ND Department of Transportation
Christopher Padilla	UGPTI	Upper Great Plains Transportation Institute		\$	234,000	2022-2023 Transportation Learning Network Contract 3 of 3.	FHA / ND Department of Transportation