

AWARD REPORT

July 2022

| PI Name | PI College | PI Department | Co-PI(s) | Award Amount | Title | Sponsor Name |
|----------------------|------------|--|---|----------------|--|--|
| William Wilson | AES & EXT | AES Agribusiness & Applied Econ | | \$20,500.00 | Market Development Support | ND Wheat Commission |
| William Wilson | AES & EXT | AES Agribusiness & Applied Econ | | \$22,500.00 | Strategy & Analysis for GM Wheat Collaborations | ND Wheat Commission |
| Gregory Lardy | AES & EXT | AES Agricultural & Biosystems Engineering | John Nowatzki Xin Sun | \$1,299,138.00 | Advanced UAS/UAV Application and Data Management Systems and Bioinformatics Tools Integrate GxExM Data for Precision Agricultural Management | USDA Agricultural Research Service |
| Zachary Carlson | AES & EXT | AES Animal Sciences | Kendall Swanson Colin Tobin | \$35,050.00 | Benefits of soy-based amino acids in forage-based growing diets | ND Soybean Council |
| Miranda Meehan | AES & EXT | AES Animal Sciences | | \$16,598.00 | Evaluating the Impacts of Best Management Practices to Riparian and Watershed Health | EPA / Bowman-Slope Soil Conservation District |
| Alison Ward | AES & EXT | AES Animal Sciences | | \$175,110.00 | Methyl Donor Availability in utero and Programming of Postnatal Performance in Beef Cattle | USDA-NIFA / USDA Agricultural Research Service |
| Gregory Endres | AES & EXT | AES Carrington Research / Extension Center | Leandro Bortolon Shana Forster Michael Ostlie | \$10,660.00 | Selected Factors to Improve Consistency of Durum Seed Yield and Quality | ND Wheat Commission |
| Michael Ostlie | AES & EXT | AES Carrington Research / Extension Center | Dean Steele | \$26,110.00 | Performance of drought-tolerant corn hybrids under varying irrigation strategies | ND Corn Utilization Council |
| Michael Wunsch | AES & EXT | AES Carrington Research / Extension Center | | \$1,591.00 | Improved white mold resistance in dry and snap beans through multi-site screening throughout major production areas | USDA-ARS / Michigan State University |
| Christopher Augustin | AES & EXT | AES Dickinson Research / Extension Center | | \$26,780.00 | Liming Impacts of Hard Red Spring Wheat and Soils in Western North Dakota | ND Wheat Commission |
| Ryan Buetow | AES & EXT | AES Dickinson Research / Extension Center | Christopher Augustin | \$16,695.00 | In-furrow fertilizer amendment comparison for Hard Red Spring Wheat in acidic soil environments | ND Wheat Commission |
| Benjamin Geaumont | AES & EXT | AES Hettinger Research / Extension Center | | \$8,985.00 | Southwestern North Dakota Pheasant Initiative | Pheasants Forever-Cedar Creek Chapter |
| Thomas Baldwin | AES & EXT | AES Plant Pathology | | \$25,000.00 | Management and Innovative Research on Economically Important Barley Diseases | American Malting Barley Association |
| Andrew Friskop | AES & EXT | AES Plant Pathology | | \$4,500.00 | Evaluation of Fungicide Programs and Monitoring Propiconazole Sensitivity in Leaf Spot Pathogens in Wheat | ND Wheat Commission |
| Andrew Friskop | AES & EXT | AES Plant Pathology | | \$25,190.00 | Evaluating Management Tools for Fusarium Head Blight, Ergot and Bacterial Leaf Streak | ND Wheat Commission |
| Andrew Friskop | AES & EXT | AES Plant Pathology | | \$18,090.00 | Field Evaluation of Management Tools for Ergot | ND Wheat Commission |
| Upinder Gill | AES & EXT | AES Plant Pathology | | \$3,521.00 | Developing Durable Rust Resistance in Hard Red Spring Wheat by Pyramiding Non-Race Specific Adult-Plant Resistance Genes | ND Wheat Commission |

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| Upinder Gill | AES & EXT | AES Plant Pathology | | \$7,451.00 | Exploring Novel Sources of Resistance Against Wheat Diseases in Wheat Progenitors and Related Species | ND Wheat Commission |
| Upinder Gill | AES & EXT | AES Plant Pathology | | \$18,000.00 | Characterization of North Dakota Wheat Stripe Rust Populations to Determine Pathogen Aggressiveness at High Temperature | ND Wheat Commission |
| Upinder Gill | AES & EXT | AES Plant Pathology | | \$35,099.00 | Characterization of North Dakota Spring Wheat Germplasm for Stem, Stripe, and Leaf Rust Resistance | ND Wheat Commission |
| Zhaohui Liu | AES & EXT | AES Plant Pathology | Thomas Baldwin | \$5,000.00 | Identification of Bacterial Leaf Streak Susceptibility Genes in Barley using RNA-Seq Technology | American Malting Barley Association |
| Zhaohui Liu | AES & EXT | AES Plant Pathology | | \$7,100.00 | Mining Tan Spot and Bacterial Leaf Streak Resistance Genes in a Global Durum Collection | ND Wheat Commission |
| Zhaohui Liu | AES & EXT | AES Plant Pathology | | \$40,000.00 | Transferring of a Resistance Gene from Triticale to Wheat for Bacterial Leaf Streak | ND Wheat Commission |
| Zhaohui Liu | AES & EXT | AES Plant Pathology | | \$21,480.00 | Development of a Quantitative PCR-Method to Detecting Wheat Bacterial Leaf Streak Pathogen | ND Wheat Commission |
| Shaobin Zhong | AES & EXT | AES Plant Pathology | | \$113,128.00 | Genetic Characterization and Field Evaluation of Fusarium Head Blight (FHB) Resistance in Spring Wheat and Durum Wheat | USDA Agricultural Research Service |
| Shaobin Zhong | AES & EXT | AES Plant Pathology | | \$30,000.00 | FHB Resistance in Wheat | ND Wheat Commission |
| Elias Elias | AES & EXT | AES Plant Sciences | | \$105,000.00 | Expand Durum Breeding Project | ND Wheat Commission |
| Elias Elias | AES & EXT | AES Plant Sciences | | \$18,100.00 | Developing Durum Wheat Germplasm with Low Cadmium Uptake | ND Wheat Commission |
| Andrew Green | AES & EXT | AES Plant Sciences | | \$118,500.00 | Hard Red Spring Wheat Breeding | ND Wheat Commission |
| Richard Horsley | AES & EXT | AES Plant Sciences | | \$78,000.00 | Breeding and Genetics of Two-Rowed Malting Barley | American Malting Barley Association |
| Richard Horsley | AES & EXT | AES Plant Sciences | | \$51,792.00 | End Use Market Development Research for Spring Wheat | ND Wheat Commission |
| Richard Horsley | AES & EXT | AES Plant Sciences | | \$26,100.00 | HRS Quality Research | ND Wheat Commission |
| Richard Horsley | AES & EXT | AES Plant Sciences | | \$18,520.00 | HRW Quality Research Support | ND Wheat Commission |
| Richard Horsley | AES & EXT | AES Plant Sciences | | \$74,080.00 | Specialty Wheat Quality Research - Technician | ND Wheat Commission |
| Richard Horsley | AES & EXT | AES Plant Sciences | | \$45,460.00 | Specialty Wheat Quality Research Support | ND Wheat Commission |
| Shahidul Islam | AES & EXT | AES Plant Sciences | | \$68,059.00 | HRS and Durum Crop Quality Survey | ND Wheat Commission |
| Clair Keene | AES & EXT | AES Plant Sciences | | \$19,500.00 | Response of Newly Released Varieties to High Input Management | ND Wheat Commission |
| Xuehui Li | AES & EXT | AES Plant Sciences | | \$15,000.00 | Implementation of Genomic Selection to Improve Yield and Quality in Durum Wheat | ND Wheat Commission |

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| Xuehui Li | AES & EXT | AES Plant Sciences | | \$35,000.00 | Recurrent Genomic Selection to Accelerate Breeding Population Improvement in Spring Wheat | ND Wheat Commission |
| Xuehui Li | AES & EXT | AES Plant Sciences | | \$3,000.00 | Developing Durum Wheat Germplasm with Improved Grain Yield under Drought Environment in Western North Dakota | ND Wheat Commission |
| Frank Manthey | AES & EXT | AES Plant Sciences | | \$37,800.00 | Impact of Kernel Structure on Milling Quality of Durum Wheat | ND Wheat Commission |
| Frank Manthey | AES & EXT | AES Plant Sciences | | \$47,000.00 | Durum Quality Research Support | ND Wheat Commission |
| Frank Manthey | AES & EXT | AES Plant Sciences | | \$34,800.00 | Developing Novel Dough Tests | ND Wheat Commission |
| Gideon Marais | AES & EXT | AES Plant Sciences | | \$24,000.00 | Hard Winter Wheat Breeding Program for the Northern Plains | ND Wheat Commission |
| Phillip McClean | AES & EXT | AES Plant Sciences | Juan Osorno | \$25,159.00 | White Mold Resistance - QTL: Identification, Interactions, and Fine Mapping in Common Bean | USDA Agricultural Research Service |
| Larry Cihacek | AES & EXT | AES School of Natural Resource Sciences | | \$4,617.00 | Field validation of mineral N cycling from mixed crop residues in long-term no-till systems | ND Wheat Commission |
| Deirdre Voldseth | AES & EXT | AES School of Natural Resource Sciences | Andrew Green | \$8,609.00 | Effectiveness of stem solidity alleles for management of wheat stem sawfly | ND Wheat Commission |
| Audrey Kalil | AES & EXT | AES Williston Research / Extension Center | | \$39,079.00 | Assessment of Soil Health and Nitrogen Economy in Lentil and Pea Cropping Systems | USDA Agricultural Research Service |
| Audrey Kalil | AES & EXT | AES Williston Research / Extension Center | Eric Eriksmoen | \$7,260.00 | DON Testing of HRSW in Western ND | ND Wheat Commission |
| Audrey Kalil | AES & EXT | AES Williston Research / Extension Center | Eric Eriksmoen | \$8,240.00 | DON Testing of Durum in Western ND | ND Wheat Commission |
| Abbey Wick | AES & EXT | Ext School of Natural Resource Sciences | | \$24,945.00 | SHARE Farm Larimore | ND Wheat Commission |
| Diane Hahn | AES & EXT | Extension Center for 4-H Youth Development | | \$280,000.00 | Building Community Capacity and Resilience through 4-H in ND Tribal Nations | USDA National Institute of Food & Agriculture |
| Leigh Skurupey | AES & EXT | Extension Center for 4-H Youth Development | Rebecca Hager | \$87,437.00 | Expanding Opportunities for Tribal Youth and Native Food Systems | USDA National Institute of Food & Agriculture |
| Julie Garden-Robinson | AES & EXT | Extension Food & Nutrition | | \$2,000.00 | 2022-23 Eat Smart with Beef | ND Beef Commission |
| Julie Garden-Robinson | AES & EXT | Extension Food & Nutrition | | \$1,500.00 | 2022 Eat Smart. Play Hard with Canola | Northern Canola Growers Association |
| Julie Garden-Robinson | AES & EXT | Extension Food & Nutrition | | \$1,700.00 | 2022 Eat Smart. Play Hard with Pulse Foods | Northern Pulse Growers Association |
| Andrew Friskop | AES & EXT | Extension Plant Pathology | | \$11,162.00 | Digital Platform for Wheat Disease Information | ND Wheat Commission |
| Janet Knodel | AES & EXT | Extension Plant Pathology | | \$11,000.00 | Orange Wheat Blossom Midge Survey | ND Wheat Commission |
| Raymond March | CAFSNR | Agribusiness and Applied Economics | | \$4,000.00 | Developing History of Economic Thought at North Dakota State University | Acton Institute For The Study of Religion |
| David Boehm | CAFSNR | Northern Crops Institute | | \$45,848.00 | 2022 Crop Year Soybean Quality Survey | ND Soybean Council |

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| Kim Koch | CAFSNR | Northern Crops Institute | | \$44,600.00 | Comparison of Physical and Feed Production Characteristics of U.S., Argentine, Brazilian and Indian Soybean Meals | ND Soybean Council |
| Brian Sorenson | CAFSNR | Northern Crops Institute | | \$3,000.00 | NCI Plant-Based Texturized Protein Course (In-Person) | ND Soybean Council |
| Brian Sorenson | CAFSNR | Northern Crops Institute | | \$7,500.00 | NCI INT-SOY Course (In-Person) | ND Soybean Council |
| Brian Sorenson | CAFSNR | Northern Crops Institute | | \$100,000.00 | General Support for Wheat/Durum Promotion FY23 | ND Wheat Commission |
| Brian Sorenson | CAFSNR | Northern Crops Institute | | \$7,500.00 | NCI-INTSOY Short Course | SD Soybean Research & Promotion Council |
| Nancy Hodur | CAHSS | Center for Social Research | | \$148,625.00 | Pregnancy Risk Assessment Monitoring System, Study of Associated Risks of Stillbirth and Evaluation of Data Management Pilot Program | CDC / ND Department of Health |
| Nancy Hodur | CAHSS | Center for Social Research | | \$63,149.00 | Pregnancy Risk Assessment Monitoring System, Study of Associated Risks of Stillbirth and Evaluation of Data Management Pilot Program 93.946 | CDC / ND Department of Health |
| Nancy Hodur | CAHSS | Center for Social Research | | \$9,697.00 | Pregnancy Risk Assessment Monitoring System, Study of Associated Risks of Stillbirth and Evaluation of Data Management Pilot Program 93.994 | CDC / ND Department of Health |
| Mijia Yang | CENG | Civil & Environmental Engineering | Yao Yu Qifeng Zhang | \$187,201.00 | Harness of Sunlight through Solar Snow Fence: Implementation | MN Department of Transportation |
| Dharmakeerthi Nawarathna | CENG | Electrical & Computer Engineering | | \$44,793.00 | CAREER: Ultrafast molecular separation and integrated near-field light-metal-fluorophore interactions for biomarker detection at point-of care | National Science Foundation |
| Lokesh Narayanan | CENG | Industrial & Manufacturing Engineering | David Grewell | \$8,537.00 | Closed-loop control for strengthening 3D printed (FDM) parts through ultrasonic welding. | Center for Bioplastics and Biocomposites |
| Ali Amiri | CENG | Mechanical Engineering | Chad Ulven | \$8,374.00 | Reducing fogging emission of natural fiber-filled polymers | Center for Bioplastics and Biocomposites |
| Jordi Esteveadeordal | CENG | Mechanical Engineering | | \$10,370.00 | Integrating Advanced Monitoring Techniques to Mitigate Environmental Factors in Storage Systems to Reduce Postharvest Losses | USDA Agricultural Research Service |
| Daniel Friesner | CHP | Deans Office, Health Professions | | \$78,645.00 | Clinical Pharmacy Teaching Program | Sanford Health |
| Kelly Buettner-Schmidt | CHP | Nursing | Amanda Groom Donald Miller Megan Orr Kolby Schaeffer Fraase | \$174,948.00 | Collaborative Tobacco Prevention and Control Activities 2022 - 2023 | ND Department of Health |
| Sanku Mallik | CHP | Pharmaceutical Sciences | Sathish Venkatachalem | \$2,088,884.00 | Center for Diagnostic and Therapeutic Strategies in Pancreatic Cancer | National Institutes of Health |

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| Kristine Steffen | CHP | Pharmaceutical Sciences | | \$117,148.00 | Biobehavioral Factors and their Impact on Stress-Related Eating in Obesity | NIH / Sanford Research North |
| Elizabeth Skoy | CHP | Pharmacy Practice | | \$9,000.00 | Improving the Health of Americans through Prevention and management of Diabetes and Heart Disease and Stroke Grant | ND Pharmacy Service Corporation |
| Ramona Danielson | CHP | Public Health | | \$89,351.00 | NDDoH Promoting Health Equity | CDC / ND Department of Health |
| Ramona Danielson | CHP | Public Health | | \$62,208.00 | NDDoH Promoting Health Equity | ND Department of Health |
| Rick Jansen | CHP | Public Health | | \$36,766.00 | Sanford Research, Center for Biobehavioral Research | Sanford Research North |
| Pamela Johnson | CHP | Public Health | | \$72,930.00 | Sanford Research, Center for Biobehavioral Research | Sanford Research North |
| Jenny Linker Zarak | CHSE | Health, Nutrition & Exercise Sciences | Jeanette Hoffman Amber O'Shea Justin Pieterick | \$118,265.00 | ND DPI Out of School Time Program 2021 Grant - TEAM Leadership Academy | DoED / ND Department of Public Instruction |
| Britt Heidinger | CSM | Biological Sciences | | \$252,771.00 | CAREER: Rapid phenotypic divergence and insulin-like growth factor 1 (IGF-1) signaling in a widespread songbird | National Science Foundation |
| Angela Hodgson | CSM | Biological Sciences | Julia Bowsher Edward Dochtermann Kendra Greenlee Jennifer Momsen | \$1,469,211.00 | Joining the HERD: Partnering with Rural and Low-income Students for Academic Success in the Biological Sciences | National Science Foundation |
| Dean Webster | CSM | Coatings & Polymeric Materials | Mukund Sibi | \$16,372.00 | Exploration of Bio-based Functional Building Blocks for Durable Coatings - Year 2 | Center for Bioplastics and Biocomposites |
| Dean Webster | CSM | Coatings & Polymeric Materials | | \$180,000.00 | Robust coatings with amphiphilic surfaces for control of biofouling | U.S. Navy |
| Benjamin Laabs | CSM | Earth, Environmental, and Geospatial Sciences | | \$72,164.00 | Collaborative Research: a transparent-middle-layer computational and data management infrastructure for synoptic applications of cosmogenic-nuclide geochemistry | National Science Foundation |
| Kelly Rusch | Misc | NDSU EPSCOR | Jean Ostrom-Blonigen | \$85,500.00 | NDSU NASA EPSCoR funding (FY22) | NDUS / University of North Dakota |
| Thomas Claeys | Misc | North Dakota Forest Service | Loretta Forsberg Lezlee Johnson Ryan Melin | \$426,400.00 | FY 22 USDA FS Hazardous Fuels Reduction Grant | Forest Service |
| Kshitij Sharma | UGPTI | Upper Great Plains Transportation Institute | Bradley Wentz | \$6,677.00 | Langdon Walkability Assessment 2022 | CDC / Cavalier County Health District |