

AWARD REPORT

July 2020

| PI Name | PI Department | PI College | Co-PI(s) | Awarded Amount | Title | Sponsor Name |
|----------------|---|------------|---|----------------|---|--|
| Dean Bangsund | AES Agribusiness & Applied Economics | AES&EXT | Nancy Hodur | \$36,316.00 | Contribution of the Petroleum Industry to the North Dakota Economy | ND Petroleum Council |
| William Wilson | AES Agribusiness & Applied Economics | AES&EXT | | \$20,500.00 | Market Development Support | ND Wheat Commission |
| William Wilson | AES Agribusiness & Applied Economics | AES&EXT | | \$22,500.00 | Strategy & Analysis for GM Wheat Collaborations | ND Wheat Commission |
| Gregory Lardy | AES Agricultural & Biosystems Engineering | AES&EXT | John Nowatzki Xin Sun | \$863,092.00 | Advanced UAS/UAV Application and Data Management Systems and Bioinformatics Tools Integrate GxExM Data for Precision Agricultural Management | USDA Agricultural Research Service |
| Halis Simsek | AES Agricultural & Biosystems Engineering | AES&EXT | | \$18,540.00 | Effects of Different Water Table Depth on Plant Water Consumption, Yield, Quality Parameters and Antioxidant Enzyme Activities in Wheat Plant: A Lysimeter Study. | ND Wheat Commission |
| Gerald Stokka | AES Animal Sciences | AES&EXT | Paul Carson | \$10,000.00 | Are veterinarians and veterinary technicians at increased risk of carriage of enteric pathogens of antimicrobial resistant flora? | CDC / University of Minnesota |
| Gregory Endres | AES Carrington Research / Extension Center | AES&EXT | Bryan Hanson Michael Ostlie | \$15,250.00 | Evaluation of Selected Plant Establishment Factors and Nutrition Inputs in Pinto Bean | Northarvest Bean Growers Association |
| Shana Forster | AES North Central Research / Extension Center | AES&EXT | | \$250,000.00 | NCREC Seed Conditioning Project | Ward County |
| Andrew Friskop | AES Plant Pathology | AES&EXT | Ryan Buetow Joel Ransom John Rickertson | \$8,060.00 | Evaluation of Fungicide Seed Treatments | ND Wheat Commission |
| Andrew Friskop | AES Plant Pathology | AES&EXT | | \$63,624.00 | Integrated Management Strategies and Fungicide Testing for FHB and DON in Small Grains in North Dakota | USDA Agricultural Research Service |
| Andrew Friskop | AES Plant Pathology | AES&EXT | | \$25,190.00 | Evaluating Management Tools for Fusarium Head Blight, Ergot and Bacterial Leaf Streak | ND Wheat Commission |
| Upinder Gill | AES Plant Pathology | AES&EXT | | \$35,099.00 | Characterization of North Dakota Spring Wheat Germplasm for Stem, Stripe, and Leaf Rust Resistance | ND Wheat Commission |
| Upinder Gill | AES Plant Pathology | AES&EXT | | \$18,000.00 | Characterization of North Dakota Wheat Stripe Rust Populations to Determine Pathogen Aggressiveness at High Temperature | ND Wheat Commission |
| Zhaohui Liu | AES Plant Pathology | AES&EXT | | \$30,000.00 | Transferring of a Resistance Gene From Triticale to Wheat For Bacterial Leaf Streak | ND Wheat Commission |
| Zhaohui Liu | AES Plant Pathology | AES&EXT | | \$21,480.00 | Development of a Quantitative PCR-Method to Detect Wheat Bacterial Leaf Steak | ND Wheat Commission |
| Zhaohui Liu | AES Plant Pathology | AES&EXT | | \$6,693.00 | Development and Validation of DNA Markers Linked to Wheat Tan Spot Susceptibility and Resistance Genes | ND Wheat Commission |
| Berlin Nelson | AES Plant Pathology | AES&EXT | Juan Osorno | \$29,260.00 | Soybean Cyst Nematode Resistance in Dry Bean Cultivars and Breeding Material | Northarvest Bean Growers Association |
| Julie Pasche | AES Plant Pathology | AES&EXT | Gary Secor | \$31,996.00 | 2020 Support of Irrigated Potato Research for North Dakota and Minnesota | Northern Plains Potato Growers Association |

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| Julie Pasche | AES Plant Pathology | AES&EXT | Guiping Yan | \$24,186.00 | Understanding Differences in P. Allius Populations from North Dakota and Washington State, and their Role in TRV Transmission in Potato | USDA Agricultural Research Service |
| Julie Pasche | AES Plant Pathology | AES&EXT | | \$12,902.00 | To Screen Alternaria solani isolates for fungicide sensitivity | Syngenta Crop Protection Inc. |
| Shaobin Zhong | AES Plant Pathology | AES&EXT | | \$30,000.00 | FHB Resistance in Wheat | ND Wheat Commission |
| Nonoy Bandillo | AES Plant Sciences | AES&EXT | | \$25,500.00 | Harnessing Genetic Diversity through Genomic Prediction in the USDA Pea Germplasm Collection | USDA Agricultural Research Service |
| Xiwen Cai | AES Plant Sciences | AES&EXT | | \$34,826.00 | Developing Haploidization System to Accelerate Wheat Breeding | ND Wheat Commission |
| Xiwen Cai | AES Plant Sciences | AES&EXT | | \$35,000.00 | Enriching the Gene Pool for Wheat Improvement | ND Wheat Commission |
| Elias Elias | AES Plant Sciences | AES&EXT | Xuehui Li Frank Manthey Shaobin Zhong | \$173,889.00 | Develop Durum Wheat Resistant to Fusarium Head Blight | USDA Agricultural Research Service |
| Elias Elias | AES Plant Sciences | AES&EXT | | \$105,000.00 | Expand Durum Breeding Project | ND Wheat Commission |
| Elias Elias | AES Plant Sciences | AES&EXT | | \$60,000.00 | Purchase a Small Field Plot Combine | ND Wheat Commission |
| Elias Elias | AES Plant Sciences | AES&EXT | | \$18,100.00 | Developing Durum Wheat Germplasm with Low Cadmium Uptake | ND Wheat Commission |
| Elias Elias | AES Plant Sciences | AES&EXT | | \$8,257.00 | Evaluating Durum Wheat Breeding Lines for Kernel Shape and Size: Towards Breeding for Higher Grain Yield and Semolina Extraction | ND Wheat Commission |
| Andrew Green | AES Plant Sciences | AES&EXT | Shaobin Zhong | \$127,539.00 | Development of Hard Spring Wheat Cultivars Resistant to Fusarium Head Blight | USDA Agricultural Research Service |
| Andrew Green | AES Plant Sciences | AES&EXT | | \$100,750.00 | Hard Red Spring Wheat Breeding | ND Wheat Commission |
| Richard Horsley | AES Plant Sciences | AES&EXT | | \$203,584.00 | Developing 6- and 2- rowed Malting Barley Cultivars with Reduced FHB and DON | USDA Agricultural Research Service |
| Xuehui Li | AES Plant Sciences | AES&EXT | | \$20,000.00 | Recurrent Genomic Selection to Accelerate Breeding Population Improvement in Spring Wheat | ND Wheat Commission |
| Xuehui Li | AES Plant Sciences | AES&EXT | | \$33,000.00 | Implementation of Genomic Selection to Improve Yield and Quality in Durum Wheat | ND Wheat Commission |
| Xuehui Li | AES Plant Sciences | AES&EXT | | \$3,000.00 | Genomics-Assisted Backcross to Improve Grain Yield in Durum Wheat under Drought Environment in Western North Dakota | ND Wheat Commission |
| Frank Manthey | AES Plant Sciences | AES&EXT | | \$30,000.00 | Identifying Genotypic Differences in Kernel Bleaching of Durum Wheat | ND Wheat Commission |
| Frank Manthey | AES Plant Sciences | AES&EXT | | \$10,000.00 | Vibe QM3 Seed and Grain Analyzer | ND Wheat Commission |
| Frank Manthey | AES Plant Sciences | AES&EXT | | \$45,000.00 | Durum Quality Research Support | ND Wheat Commission |
| Frank Manthey | AES Plant Sciences | AES&EXT | | \$33,000.00 | Replacement for Mixograph | ND Wheat Commission |
| Francois Marais | AES Plant Sciences | AES&EXT | | \$24,000.00 | Hard Winter Wheat Breeding Program for the Northern Plains | ND Wheat Commission |
| Md Mukhlesur Rahman | AES Plant Sciences | AES&EXT | | \$15,000.00 | Flax Breeding For Increasing Yield and Oil Per Acre | AmeriFlax |

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| Joel Ransom | AES Plant Sciences | AES&EXT | | \$19,500.00 | Response of Newly Released Varieties to High Input Management | ND Wheat Commission |
| Jiajia Rao | AES Plant Sciences | AES&EXT | Paul Schwarz Shaobin Zhong | \$58,749.00 | Essential Oil Nanoemulsion to Control of Mycotoxin Production in Cereals | Agricultural Research Service |
| Andrew Robinson | AES Plant Sciences | AES&EXT | | \$5,000.00 | Measuring Nitrogen Uptake in Russet Burbank | Northern Plains Potato Growers Association |
| Andrew Robinson | AES Plant Sciences | AES&EXT | | \$12,000.00 | Evaluation of Fresh Potato Cultivars in the Field and Storage | Northern Plains Potato Growers Association |
| Andrew Robinson | AES Plant Sciences | AES&EXT | | \$12,500.00 | Operational Needs for the Potato Extension Specialist | Northern Plains Potato Growers Association |
| Andrew Robinson | AES Plant Sciences | AES&EXT | | \$12,500.00 | Operational Needs for the Potato Extension Specialist | MN Area II Potato Growers |
| Andrew Robinson | AES Plant Sciences | AES&EXT | | \$17,640.00 | Simplot Innate Test | J.R. Simplot Company |
| Andrew Robinson | AES Plant Sciences | AES&EXT | | \$15,000.00 | Measuring Nitrogen Uptake in Russet Burbank | MN Area II Potato Growers |
| Senay Simsek | AES Plant Sciences | AES&EXT | | \$30,000.00 | HRW Quality Research Support | ND Wheat Commission |
| Senay Simsek | AES Plant Sciences | AES&EXT | | \$60,000.00 | HRS and Durum Crop Quality Survey | ND Wheat Commission |
| Senay Simsek | AES Plant Sciences | AES&EXT | | \$58,000.00 | Specialty Wheat Quality Research - Technician | ND Wheat Commission |
| Senay Simsek | AES Plant Sciences | AES&EXT | | \$50,000.00 | End Use Market Development Research for Spring Wheat | ND Wheat Commission |
| Senay Simsek | AES Plant Sciences | AES&EXT | | \$40,000.00 | HRS Quality Research | ND Wheat Commission |
| Senay Simsek | AES Plant Sciences | AES&EXT | | \$47,000.00 | Specialty Wheat Quality Research Support | ND Wheat Commission |
| Senay Simsek | AES Plant Sciences | AES&EXT | | \$58,000.00 | Technical and Information Services | ND Wheat Commission |
| Senay Simsek | AES Plant Sciences | AES&EXT | | \$5,000.00 | Tempering HRS Wheat with Chlorinated Water: Effect on End-Use Quality | ND Wheat Commission |
| Asunta Thompson | AES Plant Sciences | AES&EXT | | \$80,000.00 | Breeding, Selection, and Development of Improved Potato Cultivars for the Northern Plains | Northern Plains Potato Growers Association |
| Devan McGranahan | AES School of Natural Resource Sciences | AES&EXT | Benjamin Geaumont Jessica Jensen | \$50,000.00 | Human dimensions of wildland fire | Forest Service |
| Kevin Sedivec | AES School of Natural Resource Sciences | AES&EXT | | \$30,000.00 | Monitoring Data Collection of the Vegetation of the McKenzie District of the Dakota Prairie National Grasslands - Pastures 8 and 9 | McKenzie County Grazing Association |
| Deirdre Voldseth | AES School of Natural Resource Sciences | AES&EXT | Andrew Green Janet Knodel | \$6,914.00 | Plant Resistance to Wheat Stem Sawfly | ND Wheat Commission |
| Deirdre Voldseth | AES School of Natural Resource Sciences | AES&EXT | Marion Harris | \$30,000.00 | ND FY20 PPA Grape | USDA Animal and Plant Health Inspection Service |
| Abbey Wick | AES School of Natural Resource Sciences | AES&EXT | | \$48,535.00 | 2-Row Barley Project | ND Barley Council |
| Brett Webb | AES Vet Diagnostic Service Department | AES&EXT | | \$131,000.00 | FY 20 NAHLN Infrastructure Agreement | USDA |
| Audrey Kalil | AES Williston Research / Extension Center | AES&EXT | Eric Eriksmoen Cameron Wahlstrom | \$7,080.00 | Deoxynivalenol (DON) Testing For Evaluation of Hard Red Spring Wheat Varieties in Western North Dakota | ND Wheat Commission |
| Audrey Kalil | AES Williston Research / Extension Center | AES&EXT | Eric Eriksmoen Cameron Wahlstrom | \$7,080.00 | Deoxynivalenol (DON) Testing For Evaluation of Durum Varieties in Western North Dakota | ND Wheat Commission |

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| Audrey Kalil | AES Williston Research / Extension Center | AES&EXT | | \$12,285.00 | Lentil Anthracnose Fungicide Trials | Corteva Agriscience |
| Jodi Bruns | Ext Center for Community Vitality | AES&EXT | | \$6,635.00 | Support Our Stores: Initiating Multi-State Response to Rural Grocery Store Crisis | USDA-NIFA / University of Minnesota |
| Megan Ditterick | Ext Food & Nutrition | AES&EXT | Ramona Danielson Mary Larson | \$568,750.00 | Promoting Healthy Outcomes through Indigenous Food Systems | Centers for Disease Control |
| Megan Ditterick | Ext Food & Nutrition | AES&EXT | Susan Finneseth | \$1,377.00 | North Dakota Family Nutrition Program | USDA-FNS / ND Department of Human Services |
| Julie Garden-Robinson | Ext Food & Nutrition | AES&EXT | | \$1,000.00 | Eat Smart, Play Hard | ND Wheat Commission |
| Julie Garden-Robinson | Ext Food & Nutrition | AES&EXT | | \$500.00 | Eat Smart, Play Hard | Northern Plains Potato Growers Association |
| Julie Garden-Robinson | Ext Food & Nutrition | AES&EXT | | \$2,500.00 | Eat Smart, Play Hard 2020-21 | ND Department of Public Instruction |
| Julie Garden-Robinson | Ext Food & Nutrition | AES&EXT | | \$1,000.00 | Eat Smart, Play Hard | Midwest Dairy Association |
| Nicole Johnson | Ext Food & Nutrition | AES&EXT | | \$135,221.00 | National Diabetes Prevention Program | CDC / ND Department of Health |
| Janet Knodel | Ext Plant Pathology | AES&EXT | | \$10,000.00 | Orange Wheat Blossom Midge Survey | ND Wheat Commission |
| Ryan Yonk | Agribusiness and Applied Economics | CAFSNR | | \$22,500.00 | Reason Foundation Sponsorship of Mancur Olson Fellows Research | Reason Foundation |
| David Boehm | Northern Crops Institute | CAFSNR | | \$42,650.00 | 2021 Soybean Quality Survey | ND Soybean Council |
| Angela Smith | History, Philosophy & Religious Studies | CAHSS | | \$14,200.00 | Historical and Cultural Society of Clay County Graduate Assistant | Historical and Cultural Society of Clay County |
| Dali Sun | Electrical & Computer Engineering | CENG | Rick Jansen Bakhtiyor Rasulev | \$145,000.00 | Using the Secondary structure (beta-sheet) of exosomal proteins for noninvasive pancreatic cancer detection | National Institutes of Health |
| Jessica Vold | Mechanical Engineering | CENG | | \$31,647.00 | M2M X-Hab 2021 Academic Innovation Challenge Pathbuilder Project | NASA |
| Charles Peterson | Deans Office, Health Professions | CHP | | \$149,532.00 | Clinical Pharmacy Teaching Program | Lake Region Healthcare Corporation |
| Charles Peterson | Deans Office, Health Professions | CHP | | \$77,932.00 | Sanford Health Imagenetics Program | Sanford Health |
| Estelle Leclerc | Pharmaceutical Sciences | CHP | | \$75,000.00 | Efficacy of RAGE Inhibitors with Dacarbazine in PDX Models of Melanoma | NIH / University of North Dakota |
| Sathish Venkatachalem | Pharmaceutical Sciences | CHP | | \$1,533.00 | Dakota Cancer Collaborative on Translational Activity | NIH / University of North Dakota |
| Paul Carson | Public Health | CHP | Kylie Hall | \$126,003.00 | Immunization Disparities in North Dakota | CDC / ND Department of Health |
| Pamela Johnson | Public Health | CHP | Paul Carson Mark Strand | \$97,604.00 | ND Public Health Strategy Task Force | ND Department of Health |
| Pamela Johnson | Public Health | CHP | | \$40,000.00 | COVID-19 Response | DHHS / ND Department of Health |
| Kara Gange | Health, Nutrition & Exercise Sciences | CHSE | | \$12,360.00 | Concordia College - Lauren Konkol | Concordia College |
| Kara Gange | Health, Nutrition & Exercise Sciences | CHSE | | \$10,450.00 | Graduate Assistant at Minnesota State University Moorhead - Austin Hills | Minnesota State University, Moorhead |
| Kara Gange | Health, Nutrition & Exercise Sciences | CHSE | | \$10,450.00 | Graduate Assistant at Minnesota State University - Kiley Lovelace | Minnesota State University, Moorhead |
| Kara Gange | Health, Nutrition & Exercise Sciences | CHSE | | \$12,231.00 | Graduate Assistant at Essentia Health - Rebekah Zerbe | Essentia Health |

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| Kara Gange | Health, Nutrition & Exercise Sciences | CHSE | | \$12,231.00 | Graduate Assistant at Essentia Health - Mickaella Langer | Essentia Health |
| Joel Hektner | Human Development & Family Science | CHSE | Sean Brotherson Meagan Hoffman | \$75,000.00 | Evaluation of 21st Century Community Learning Center After-school Programs in North Dakota | DoEd / ND Department of Public Instruction |
| Matthew Smith | Biological Sciences | CSM | | \$9,450.00 | Restoration of Cassel Woods, MN | National Audubon Society |
| Philip Boudjouk | Chemistry and Biochemistry | CSM | | \$148,032.00 | Silicon-Based Battery Materials | DoD / PPG Industries |
| Dmitri Kilin | Chemistry and Biochemistry | CSM | | \$130,000.00 | CAREER: Investigation of Laser-driven Chemical Reactions by Molecular Dynamics | National Science Foundation |
| Andrew Croll | Physics | CSM | Wenjie Xia | \$35,224.00 | Guided Energy Absorption in Crumpled Polymer Sheets | U.S. Army |
| Benjamin Balas | Psychology | CSM | | \$179,888.00 | RII Track-2 FED: The Visual Experience Database: A Large-Scale Point-of-View Video Database for Vision Research | NSF / Bates College |
| Benton Duncan | Graduate School | GRAD | | \$138,000.00 | Graduate Research Fellowship Program | National Science Foundation |
| Debra Habedank | Center for Child Development | Misc | | \$377.50 | USDA Child and Adult Care Food Program | USDA-FNS / ND Department of Public Instruction |
| Thomas Claeys | North Dakota Forest Service | Misc | Lezlee Johnson | \$1,550,960.00 | FY 2020 USDA Forest Service Consolidated Payments Grant | Forest Service |
| Marianne Quittschreiber | Wellness Center | Misc | | \$496.14 | NDSU Wellness Center Child Care ND Food Program | USDA-FNS / ND Department of Public Instruction |
| Marianne Quittschreiber | Wellness Center | Misc | | \$496.14 | NDSU Wellness Center Child Care ND Food Program | USDA-FNS / ND Department of Public Instruction |
| Christopher Padilla | Upper Great Plains Transportation Institute | UGPTI | | \$74,755.00 | Transportation Learning Network | DOT / ND Department of Transportation |
| Kimberly Vachal | Upper Great Plains Transportation Institute | UGPTI | Alan Dybing | \$35,000.00 | Wheat Transportation Research | ND Wheat Commission |
| Bradley Wentz | Upper Great Plains Transportation Institute | UGPTI | | \$9,165.00 | ATCMTD Transportation Management Center Grant Application | ND Department of Transportation |