SCHOLARLY PRODUCTS 2018

ND INBRE: HEALTH AND THE ENVIRONMENT

P20GM103442

PRESENTATIONS (undergraduates are underlined)

Minot State University

<u>Adeleke AF</u>, Keller CP. Examining the Role of ABP1 in Elongation of Excised Arabidopsis Hypocotyl Sections. North Dakota Academy of Science 110th Annual Meeting, April 2018.

Brown D, Kast,S, Huether S, Royer R, Lepp P. Nanopore Real-time Sequencing of 16S rRNA for Species Identification. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Burnett BJ</u>, Keller CP. Effect of Null Mutation of Auxin Binding Protein-1 on Arabidopsis Germination and Hypocotyl Growth. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Burnett BJ</u>, Keller CP. The effects of null mutation of Auxin Binding Protein 1 on germination and seedling development in Arabidopsis. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Clark PA</u>, <u>Kraft A</u>, Cole-Harding S, Winburn N. Time Interval Analysis of Caffeine Concentration in Human Saliva Utilizing GC/MS. North Dakota Academy of Science 110th Annual Meeting, April 2018.

Desai R, Taghavi S, Super HJG, Chien J, Kakadia PM, Bohlander SK. Whole Exome Sequencing For Characterization Of Cooperating Mutations In Murine Acute Leukemias North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Dostert-Azzarello TA</u>, Bobyleva LI, Bobylev MM. Rapid Synthesis Of N-Methyl-N-(2-Trifluoromethylbenzyl)Formamide. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Ghimire B</u>, Heimdal KK, Hernandez ERA, Super HJ. Epigenetic Manipulation Can Sensitize AML Cells to Differentiate with ATRA. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Ghimire B</u>, Shabani Z. TAAR1 Mediates the Aversive Effects of Methamphetamine. North Dakota Academy of Science 110th Annual Meeting, April 2018. <u>Gooding JR</u>, Bobyleva LI, and Bobylev MM. Rapid Synthesis of N-(10-Chloro-9-Anthrylmethyl)-N-Methylformamide. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Gudejko M</u>, Bobyleva LI, and Bobylev MM Rapid Synthesis Of N-Methyl-N-(4-Phenylbenzyl)Formamide North Dakota Academy of Science 110th Annual Meeting, April 2018.

Hamm AR, Bobyleva LI, Bobylev MM. Rapid synthesis of N,N-di-(2-methoxybenzyl)-N-methylamine.

10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Hamman A</u>, Bobyleva LI, Bobylev MM. Rapid Synthesis of N-(4-Isobutylbenzyl)-N-Methylformamide. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Heick KH</u>, Bobyleva LI, and Bobylev MM. Rapid Synthesis of N-(4-methoxybenzyl)-Nmethylformamide. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Heick KH</u>, Bobyleva LI, and Bobylev MM Rapid Synthesis Of N-(9-Anthrylmethyl)-N-Methylformamide North Dakota Academy of Science 110th Annual Meeting, April 2018.

Heimdal K, <u>Hernandez ER</u>, Super H. New Approaches To Treating Cancer: Epigenetic Modifiers Can Help Leukemia Cells Respond To Therapy. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Hernandez ER</u>, Heimdal K, Super H. New Approaches To Treating Cancer: Epigenetic Modifiers Can Help Leukemia Cells Respond To Therapy. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Houlton S</u>, Shabani Z. Of Mice and Meth: A Mouse Model For Acute Methamphetamine Withdrawal And Depression-Like Symptoms. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Huether S</u>, <u>Brown D</u>, Royer R, Lepp P. Analysis Of Tick Associated Bacterial Diversity Using Nanopore Real-Time Sequencing. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Kraft A</u>, Cole-Harding S, Winburn N. Effects of Carbonation and Sweetener on Caffeine Concentrations of Human Saliva with GC/MS Analysis. North Dakota Academy of Science 110th Annual Meeting, April 2018. <u>Lee HS</u>, Bobyleva LI, and Bobylev MM. Rapid Synthesis Of N-(2-Fluorobenzyl)-N-Methylformamide. North Dakota Academy of Science 110th Annual Meeting, April 2018.

Mensah A, <u>Kraft A</u>, Cole-Harding S, Winburn N. Effects of Cream And Sugar On Caffeine Absorption. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Olson EW</u>, <u>Winburn MR</u>, Schmidt BJ, Winburn NR. Method Optimization for Gas Chromatography-Mass Spectrometry of Catecholamines. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Rogers M</u>, Bobyleva LI, and Bobylev MM Rapid Synthesis Of N-Methyl-N-(3-Nitrobenzyl)Formamide. North Dakota Academy of Science 110th Annual Meeting, April 2018.

Shipunov A, <u>Pay K</u>, Schmolly K, Pirani JR. Picramnia Family and R phylogeny pipeline. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Skinner TA</u>, Park SY, Bobyleva LI, Bobylev MM. Synthesis of N-Fluorobenzyl-N-Methylformamides. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Skinner TA</u>, Bobyleva LI, Bobylev MM. Rapid Synthesis of N,N-di-(4-chlorobenzyl)-Nmethylamine. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Sundhagen SE</u>, Bobyleva LI, Bobylev MM. Rapid Synthesis of N-ethyl-N-(4isopropylbenzyl)formamide. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

10 Annual 14D II (DICE Chaergraduate Research Symposium, Oct 2010.

<u>Sundhagen SE</u>, Bobyleva LI, Bobylev MM. Synthesis of N-Alkyl-N-(4-Isopropylbenzyl) Formamides. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Torgunrud J</u>, Bobylev MM. Scalable Synthesis of Novel Cancer-Preventing Agents. 22^{nd} Annual CUR Posters on the Hill, April 2018.

<u>Wilson BS</u>, Bobyleva LI, and Bobylev MM. Rapid Synthesis Of N-(4-Cyanobenzyl)-N-Methylformamide. North Dakota Academy of Science 110th Annual Meeting, April 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Winburn MR</u>, <u>Olson EW</u>, Schmidt BJ, Winburn NR. Optimization of Solvent and Conditions for the Extraction of Catecholamines from Artificial Cells. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Winterton EM</u>, Bobyleva LI, and Bobylev MM. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Dickinson State University

<u>Frederick A</u>, <u>Almosawi A</u>, <u>Centko A</u>, <u>Hondl C</u>, Whippo CW. Photosynthetic Performance of Plants Growing in the Plains Cottonwood Riparian Areas of Theodore Roosevelt National Park. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Frederick A, Centko A, Almosawi A, Hondl C</u>, Whippo CW. Photosynthetic Performance of Plants Growing in the Plains Cottonwood Riparian Areas of Theodore Roosevelt National Park. Plant Biology Meeting, Montreal, Quebec, Canada, July 2018

<u>Hondl C</u>, <u>Frederick A</u>, <u>Almosawi A</u>, <u>Centko A</u>, Whippo CW, Steffan J. Arabidopsis Growth and Physiology in Response to Growth on Saline Soils. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Hondl C, Frederick A</u>, <u>Almosawi A</u>, <u>Centko A</u>, Whippo CW, Steffan J.. Drug Loaded Nutritious Crop Plant Could be an Alternative for Maintaining Multiple Chronic Diseases. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Hondl C</u>, <u>Frederick A</u>, <u>Centko A</u>, <u>Almosawi A</u>, Whippo CW. Arabidopsis Growth and Physiology in Response to Growth on Saline Soils. Plant Biology Meeting, Montreal, Quebec, Canada, July 2018

Mayville State University

<u>Hansen ML</u>, <u>Leschied CM</u>, Nelson AE, Gonnella TP. The Effect of Magnesium Ion on Aldehyde Dehydrogenase (Aldh) Inhibitor Efficiency And Selectivity. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Hansen ML</u>, <u>Ogburn KS</u>, Gonnella TP. The Effect of Magnesium Ion on Aldehyde Dehydrogenase (Aldh) Inhibitor Efficiency And Selectivity. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Jacobson LA</u>, O'Brien KJ, <u>Slaba MR</u>, Mehus JO. Stagnicola elodes Generational Clutch Responses to Chronic Cadmium Exposure. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Leier J, Ogburn KS, Gonnella TP. The Effect of Magnesium Ion on Straight-chained Substrate Inhibition of Mitochondrial Aldehyde Dehydrogenase (ALDH2). 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018. <u>Matthys JJ, Pollack S</u>, Quadir M, Arif-Uz-zaman M, Kalavacharla V, Hossain KG. Nanoparticle Mediated CRISPR/Cas 9 Vector Delivery for Plant Genome Editing. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Nelson AE</u>, O'Brien KJ, <u>Slaba MR</u>, Mehus JO. Comparative Embryonic Mutation and Mortality Responses to Chronic Cadmium Exposure. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

O'Brien KJ, <u>Jacobson LA</u>, <u>Slaba MR</u>, Mehus JO. Influence on Developmental Factors Contributing to Stagnicola elodes Fecundity. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Cankdeska Cikana Community College

<u>Charboneau A</u>, Voels B. Expression of GAGE1 and GAGE2A in Estrogen Receptor Positive and Negative Breast Cancer Cell Lines. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

<u>Greywater D</u>, Voels B. Expression of GAGE12C and GAGE12D in Estrogen Receptor Positive and Negative Breast Cancer Cell Lines Does Not Correspond to Estrogen Receptor Status. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Leaf C, Voels B. Expression of GAGE2B and GAGE2C in Estrogen Receptor Positive and Negative Breast Cancer Cell lines. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Lohnes A, Voels B. An Analysis of the Expression of GAGE6, GAGE2A, GAGE12J, GAGE13, GAGE12C, and GAGE12B Genes in Thirteen Common Breast Cancer Cell Lines. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Marxen H, Wadsworth A. Utilizing Photovoice Research as a Mechanism to Explore Environmental Health on a Rural Northern Plains Tribal Reservation. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Roan Eagle I, Voels B. Characterization of GAGE2B, GAGE2C, GAGE2E, GAGE12C, and GAGE12D Gene Expression in Breast Cancer Cell Lines. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Turtle Mountain Community College

<u>Azure CA</u>, Best LG. Genetic variants (RS1342326, RS1837253, RS7444910) are not associated with asthma among Native American Children. 6th Annual North Dakota Tribal College Research Symposium, March 2018

Best LG, <u>Azure C</u>, Voels B. Leukocyte Expression Of C-Reactive Protein Is Minimal And Not Dependent On Rs1205 Genotype. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Poitra KA</u>, Best LG. Genetic Variant RS1423155 is Associated with Asthma Among Native American Children. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Sitting Bull College

Harrison K. Bison (Bison bison) Grazing Effect on Plant Diversity. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Howard M. Coyote Food Habits In The North Dakota Mixed-Grass Prairie. 6th Annual North Dakota Tribal College Research Symposium, March 2018. North Dakota Academy of Science 110th Annual Meeting, April 2018

Johnson FL. The Great Plains Turnip (Pediomelum esculentum). 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Lupe C, Mongoh MN. Bison Health: Bovine Viral Diarrhea (BVD) in Bison herds on Standing Rock Sioux Reservation.

6th Annual North Dakota Tribal College Research Symposium, March 2018.

Miner, P. The Effects Of Bison Grazing On Soil Properties In A Mixed-Grass Prairie. 6th Annual North Dakota Tribal College Research Symposium, March 2018. North Dakota Academy of Science 110th Annual Meeting, April 2018

<u>Silk M</u>, Silk JW, Mongoh MN. Effects of Sustainable Bio-based Polymers on Microbial Growth.

6th Annual North Dakota Tribal College Research Symposium, March 2018.

Nueta Hidatsa Sahnish College (Fort Berthold Community College)

Alvarez LM, Hartman K, Saini-Eidukat B. An Investigation of Indoor Air Quality in the Welding Shop at Nueta Hidatsa Sahnish College. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

<u>Fox CC</u>, Hartman K, Sand T. An Investigation into the Presence of Mercury in Lake Sakakawea. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

<u>Hall AD</u>, Sand-Driver T, Rangeland Management on Fort Berthold Indian Reservation, Culturally Relevant Social Mechanisms Behind Management Practices. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

<u>Hall AD</u>, Hartman K, Sand-Driver T. An Investigation Study of Juneberry (Amelanchier anifolia) Phenology on Fort Berthold Indian Reservation. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Medeiros J. Sustainable Energy Efficiencies Applications. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Voigt L. Climate Change Effects on Pollinators. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

University of Mary

<u>Angstman JM</u>, Lula MA, Hecker KA, Gagen JK, Fleischacker CL. Host Infectivity of F1 subcluster bacteriophages with multiple Mycobacterium species hosts. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Kelly A</u>, <u>Pelach J</u>, Peliska JA. Synthesis of a Photoaffinity Label Inhibitor of HIV-1 Reverse Transcriptase.

10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Kling A</u>, Craven C, <u>Lee T</u>, Peliska J. Development of Assays for the Characterization of Inhibitors of HIV-1 Reverse Transciptase. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Schmitz T</u>, Ross M, Binegar N, <u>Howard A</u>, Peliska JA. Metabolomics, Autism and Biosensors: Disease Diagnosis and Drug Efficacy. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Smith ZJ, Merck MN, Erb CM, Ronderos DS. CRISPR-Cas9 knockout of Prdx2540-2 in Drosophila.

10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Wald KM</u>, <u>Spencer ST</u>, Davis KL, da Costa Aparacedo R, Ronderos DS. Development of a Visual System Assay for Drosophila melanogaster. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

University of North Dakota

Biggane E, Somji S, Garrett SH, Sens DA, Dunlevy JR. SPARC in a Cell Culture Model of Arsenic and Cadmium-Induced Bladder Transitional Cell Carcinoma. Society of Toxicology Annual Meeting, March 2018.

Biggane E, Somji S, Garrett SH, Sens DA, Zhou X, Nore A, Dunlevy JR SPARC in a Cell Culture Model of Heavy Metal Induced Bladder Transitional Cell Carcinoma 6th Annual North Dakota Tribal College Research Symposium, March 2018. North Dakota Academy of Science 110th Annual Meeting, April 2018.

Biggane ER, Somji S, Garrett SH, Sens DA, Zhou X, Nore A, Dunlevy JR. Environmental Exposure to Cadmium and Bladder Urothelial Carcinoma: SPARC Expression at Tumor Initiation and After Tumor Formation.

10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Biggane J, <u>Dent ZO</u>, <u>Power JA</u>, <u>Knauth TP</u>, Perez DM, Doze VA. Importance of the Alpha 1Aadrenergic Receptor in the Antiepileptic Properties of Norepinephrine North Dakota Academy of Science 110th Annual Meeting, April 2018.

Biggane JP, <u>Dent ZO</u>, <u>Knauth TP</u>, <u>Power JA</u>, Perez DM, Doze VA. The α 1A-adrenergic receptor is important for preventing seizure vulnerability and crucial for α 1-adrenergic receptor antiepileptic effects

North Dakota Tribal College Research Symposium, March 2018.

6th Annual North Dakota Tribal College Research Symposium, March 2018.

Biggane JP, <u>Knauth TK</u>, <u>Dent ZO</u>, Perez DM, Doze VA. The α 1A-adrenergic receptor is important for preventing seizure vulnerability and norepinephrine-mediated antiepileptic effects.

UNDSMHS Frank Low Research Day Poster Session, April 2018.

Biggane JP, <u>Power JA</u>, <u>Dent ZO</u>, <u>Knauth TP</u>, Perez DM, Doze VA. Knockout mouse models reveal that activation of the α1A-adrenergic receptor reduces epileptiform event frequency in the mouse CA3 hippocampus.

University of North Dakota Graduate Research Achievement Day, March 2018.

Biggane JP, <u>Power JA</u>, <u>Dent ZO</u>, <u>Knauth TP</u>, Perez DM, Doze VA. The α1A-Adrenergic Receptor is Important for Preventing Seizure Vulnerability and Crucial for α1-Adrenergic Receptor Antiepileptic Effects [UPDATED] North Dakota EPSCoR State Conference, April 2018.

Biswas N, Knopick PL, Riha N, O'Donnell K, Nilles ML, Terman DS, Bradley DS. Staphylococcal enterotoxins and Yersinia pestis type 3 secretion needle protein combination therapy to enhance anti-tumor immune responses.

10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Boldt L</u>, Williamson M, Darby B. Is rRNA Copy Number Linked to Increased Growth Rates in Bacterial Feeding Nematodes? 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

<u>Cano J</u>, <u>Ward AM</u>, Hovde MJ, Foster JD. Depalmitoylation of the Dopamine Transporter by Acyl Protein Thioesterase 2 In Vitro. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

<u>Clark LE</u>, Germundson DL, Smith NA, Nagamoto-Combs K. Food-Allergy-Induced Proliferation of Astrocytes, Microglia, and CD4+ T Lymphocytes in the Murine Brain. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

Davis BA, Somji S, Sens DA, Garrett SH. The Effect of Combined Exposure of Hyperglycemia and Cadmium on Human Proximal Tubule Cells. Society of Toxicology Annual Meeting, March 2018. 6th Annual North Dakota Tribal College Research Symposium, March 2018. North Dakota Academy of Science 110th Annual Meeting, April 2018.

Doze VN, Cox J, Michelson K, Tkach E, Darland D. Interdependence of Vascular and Neural Stem Cells in the Embryonic Mouse Cortex. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. College of St. Benedict/St. John's University Thursday Forum, Sept 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Ekman D, Michelson KM, Tkach E, Cox J, Darland DC. The Role of Vascular Cell Influence on Cortical NSC Fate Choice.

2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

<u>Fleming LA</u>, Corum NJ, Nelson AE, Garrett SH, Slusser-Nore A. EMT Markers and Progenitor Characteristics in TERT and Cd²⁺ or As³⁺ Transformed TERT Cells. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

<u>Fleming LA</u>, Corum NJ, Nelson AE, Shrestha S, Garrett SH, Slusser-Nore A. EMT Markers in Cadmium and Arsenic Treated Cells. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Freeberg BA, Garrett SH, Sens DA, Somji S. The Association of Metallothioneins Expression and Cisplatin Treatment in Human Bladder Cancer 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Germundson DL, <u>Vendsel LP</u>, Nagamoto-Combs K. Alterations in Central and Peripheral Histamine Receptors and Gut Tight Junction Proteins in a Mouse Model of Milk Allergy. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Guyer R</u>, Corum NJ, Nelson AE, Garrett SH, Slusser-Nore A, Shrestha S. CD24+ RPTEC/TERT1 Cells in the Context of Acute and Chronic Cadmium Exposure. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Han J, Xing Y, Wu X, Zhao JX, Pierce DT. Ultrasensitive Detection of hg2+ Using Single Particle Inductively Coupled Plasma Mass Spectrometry North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Hasler W</u>, Jochim M, <u>Pratt C</u>, Keller A, Darby B, Simmons R. Gut Microflora of the Western Honey Bee. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

<u>Hasler W</u>, Simmons R. Assessing the Health of Pollinator Communities in North Dakota. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Haugen JO</u>, Corum NJ, Nelson AE, Garrett SH, Slusser-Nore A, Shrestha S. Metallothionein Isoform and ZIP Transporter Expression in RPTEC/TERT1 and CD24+ cells. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Henderson A</u>, Rodriquez MA, Kretschmar M, Allen MD, Shetty M, Perley D, Henry LK. Validation of RNA-Seq differentially expressed genes from a murine neonate model of antidepressant exposure using qPCR.

2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

Hoggarth ZE, Osowski DB, Freeberg BA, Garrett SH, Zhou X, Sens DA, Somji S. UROTSA as a Model to Study Development of Heavy Metal Induced Basal Muscle Invasive Bladder Cancer.

North Dakota Academy of Science 110th Annual Meeting, April 2018.

Hoggarth Z, Slusser-Nore A, Osowski D, Garrett SH, Sens DA, Somji S. Enrichment of genes associated with squamous differentiation in cancer initiating cells isolated from arsenite transformed UROtsa cell lines.

10th Conference on Metal Toxicity and Carcinogenesis, Oct 2018.

10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Hoggarth ZE, Osowski DB, Freeberg BA, Garrett SH, Zhou X, Sens DA, Somji S. Designation of As3+ and Cd2+ Malignantly Transformed Cell Lines, Urospheres, and Tumors into Bladder Cancer Subtypes.

6th Annual North Dakota Tribal College Research Symposium, March 2018.

Jensen BM, Johnson HG, Darland T. Effects of Embryonic Cocaine Exposure in Zebrafish. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 2018 SACNAS Conference, Oct 2018. Johnson HG,, Jensen BM, Darland T. Epigenetic Effects of Cocaine on Zebrafish. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 2018 SACNAS Conference, Oct 2018.

Juran A, Wu J, Zhang K. Cadmium Exposure is Detrimental to Cardiovascular Development and Function. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

<u>Kalonick MJ</u>, Corum NJ, Nelson AE, Garrett SH, Slusser-Nore A. CD44 variant 4 (CD44s) expression and localization in 4.5 uM transformed TERT cells 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

Larsen RW, O'Donnell KL, Bradley DS, Nilles ML. Pathogenic differences in Toll-like receptor 2 knockout mice between Yersinia pestis strains KIM5 and CO92 in a yopJ dependent manner. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Lohnes AM, Burum JD, Simmons RB. Finding DNA Identifiers for the Different Sexes of the White-Tussock Moth (Lepidoptera: Lymantriidae). 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Munyeshyaka MR</u>, Biggane JP, <u>Power JA</u>, Dent ZO, Doze VA. Reduction of Epileptiform Frequency by α_{1A}-Adrenergic Receptor Agonists. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

Nagamoto-Combs, K. Gut, Brain, and Bugs: Potential Roles of Food Allergy and Intestinal Microbiota in Mental Health. UNDSMHS Host-Pathogen Interaction COBRE Symposium, Sept 2018.

Nagamoto-Combs K, Doze VA. A behavioral research core facility provides advanced tools essential for phenotypic characterization in rodent behavior. National IDeA Symposium of Biomedical Research Excellence NIH, NIGMS 7th Biennial Meeting, June 2018.

Nagamoto-Combs K, Doze VA. Behavioral research core facility: infrastructure and advanced equipment for cognitive and motor skill assessments in rodents. UNDSMHS Epigenomics COBRE Symposium, May 2018.

Nagamoto-Combs K, Smith NA, Germundson DL. Oral Sensitization of Mice to a Cow's Milk Allergen Induces Increased Grooming Behavior and Epigenetic Changes in the Brain. Society of Toxicology Annual Meeting, March 2018.

Nagamoto-Combs, K., Smith NA, Germundson DL. Oral sensitization to a milk allergen triggers behavioral changes and neuroinflammatory response in male C57BL/6J mice. Psychoneuroimmunology Annual Meeting, June 2018.

Nelson AE, Hoggarth ZE, Zhou X, Garrett SH, Sens DA, Somji S. Differential gene expression patterns in subcutaneous and intra-peritoneal tumors produced by UROtsa cells malignantly transformed by cadmium and arsenite.

10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

O'Shea L, Cisek K. ND INBRE K-12 STEM Laboratories. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Oancea SC, Olson P, Nucci LB. The association between sleeping pill use and depression among adult individuals residing in Brazil: does age group, gender, and owning a pet modify this association?

Society of Epidemiologic Research (SER) 51st Annual Meeting, June 2018.

Oancea SC, Sukumaran P. The association between alcohol consumption and depression among adult individuals residing in Brazil: the effect-modifying role of gender and age group. Society of Epidemiologic Research (SER) 51st Annual Meeting, June 2018.

Oancea SC, Wu G. The use of marijuana or hashish and its association with the receipt of flu vaccination among adults residing in the US: results from the BRFSS 2016 study. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Olson P, Oancea SC. The association between sleeping pill use and depression among adult individuals residing in Brazil: does age group, gender, and owning a pet modify this association? University of North Dakota School of Medicine & Health Sciences Frank Low Research Day Poster Session, April 2018.

Osowski DB, Freeberg BA, Hoggarth ZE, Garrett SH, Sens DA, Zhang K, Somji S As⁺³- and Cd⁺²- Transformed UROtsa Isolates Characterized into Basal and Luminal Muscle-Invasive Bladder Cancer Subtypes

6th Annual North Dakota Tribal College Research Symposium, March 2018.

Osowski DB, Garrett SH, Sens, DA, Somji S. Keratin Gene Expression in a Serum-Free AS3+and CD2+- Tranformed Urothelial Cell Model System. North Dakota Academy of Science 110th Annual Meeting, April 2018.

Osowski DB, Somji S. Muscle-Invasive Bladder Cancer Marker Gene Expression in Spheroids Isolated from the UROtsa Cell Line. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Power JA, Biggane JP, Dent ZO, Collette KM, Knauth TP, Perez DM, Doze VA. α1Aadrenergic receptor activation reduces epileptiform event frequency and receptor knockout increases seizure susceptibility.

10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Pathak P</u>, Corum NJ, Hoggarth ZE, Nelson AE, Somji S, Slusser-Nore A. Expression of CD47, CD66c, KRT14, SOX2 and SIITRK6 cancer stem cell marker in As³⁺ and Cd²⁺ transformed Urotsa monolayer and spheroids.

2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

<u>Pathak P</u>, Slusser-Nore A, Hoggarth ZE, Nelson AE, Somji S. Re-differentiation of cancer stem cells results in the reversal of gene expression patterns to the parental cell lines. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Pierce DT, Wang Y. Metal Analysis Core Facility. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Pratt C, Divan A, Brissette C. A Comparison of Coronal and Horizontal Sectioning for the Histologic Evaluation of the Dura Mater.2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

Rodriquez MA, Allen MD, Shetty M, Perley D, Henry LK. Neonate Escitalopram Exposure Significantly Alters Midbrain Expression of Epigenetic Genes. North Dakota Academy of Science 110th Annual Meeting, April 2018.

<u>Ross R</u>, Pierce DT, Zhao J, Wu X, Wang Y. Lanthanide-Doped Nanoparticles for Biomarker Detection by ICP-MS. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Shrestha S, Garrett SH, Dunlevy JR, Sens DA, Somji S. Effect of Cadmium on the Stem/Progenitor Cell Populations in Renal Proximal Tubular Cultures. 6th Annual North Dakota Tribal College Research Symposium, March 2018. North Dakota Academy of Science 110th Annual Meeting, April 2018.

Shrestha S, Garrett SH, Zhou X, Sens DA, Somji S. The CD24⁺CD133⁺ cells isolated from human proximal tubules have proliferative and regenerative potential in response to insult by the environmental toxicant cadmium.

10th Conference on Metal Toxicity and Carcinogenesis, Oct 2018.

Shrestha S, Somji S, Sens DA, Garrett SH. Effect of Cadmium on Stem Cell Populations in Renal Tubular Cells. Society of Toxicology Annual Meeting, March 2018.

Slusser-Nore A, Flemming L, Somji S, Sens DA, Garrett SH. Prolonged exposure to sodium arsenite initiates epithelial-mesenchymal transition in human renal proximal tubule epithelial cells (RPTEC/hTERT)

10th Conference on Metal Toxicity and Carcinogenesis, Oct 2018.

Slusser-Nore A, Garrett SH, Zhou X, Sens DA, Sens MA, Somji S. Expression of KRT6 Is Regulated by the ERK1/2 Pathway in Arsenite-Transformed Urotsa Cells. Society of Toxicology Annual Meeting, March 2018. Slusser-Nore A, Garrett SH, Zhou X, Sens DA, Sens MA, Somji S. The expression of keratin 6 is regulated by activation of the ERK1/2 pathway in arsenite transformed human urothelial cells 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Smith NA, Germundson DL, Nagamoto-Combs, K. Allergic challenge induces differential behavioral responses based on genetic background in mice. UNDSMHS Host-Pathogen Interaction COBRE Symposium, Sept 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Smith NA, Germundson DL, Nagamoto-Combs K. Milk allergy induces behavioral changes associated with inflammation and gene regulation in the brain. National IDeA Symposium of Biomedical Research Excellence NIH, NIGMS 7th Biennial Meeting, June 2018.

Smith NA, Germundson DL, Nagamoto-Combs K. Milk Allergy Induces Behavioral Changes Associated With Neuroinflammation And Gene Regulation. North Dakota Academy of Science 110th Annual Meeting, April 2018.

Smith NA, Germundson DL, Nagamoto-Combs, K. Sensitization to a cow's milk protein results in behavioral changes and altered expression of genes associated with neuroinflammation and vascular integrity in the brain.

Society for Neuroscience Annual Meeting, Nov 2018.

Smith NA, Germundson DL, Nagamoto-Combs, K. Transcriptional and behavioral changes associated with milk allergy-induced peripheral inflammation. UNDSMHS Frank Low Research Day Poster Session, April 2018. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Solseng TM, Corum NJ, Nelson AE, Hoggarth ZE, Somji S, Slusser-Nore A. Stem cell and cancer stem cell markers in UROtsa vs As 6d & Cd #7. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>Stampfli A</u>, <u>Ward AM</u>, Hovde MJ, Foster JD. L-Glutamate Treatment Alters Dopamine Transporter Palmitoylation in Vitro. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

<u>Steffl AM</u>, Corum NJ, Nelson AE, Hoggarth ZE, Somji S, Slusser-Nore A. Stem cell and cancer stem cell markers in UROtsa vs. As6d & Cd #7. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

Sukumaran P, Oancea SC. The effect-modifying role of gender and age group on the association between alcohol-use and current depression among individuals residing in Brazil. UNDSMHS Frank Low Research Day Poster Session, April 2018.

<u>Thomas A</u>, Cisek K, O'Shea L, Sens DA, Doze VA. Implementing Bio-Rad Labs and Meeting State Teaching Standards as a High School Science Teacher. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Wegner A, Warns J, Ghribi O. The Impact of Oxysterols on the Cell Cycle in Colon Cancer. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

<u>Wenz AK</u>, Hanson P, Rhen T. Tissue specific gene expression of Chelydra serpentine provides insight into the molecular mechanisms of temperature-dependent sex determination. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

Werner G, White R, Floura M, Achatz T, Tkach V. Swimmer's Itch: Swimming with Schistosomes. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

<u>White R, Werner G,</u> Bell J, Achatz T, Tkach V. Discovering The Unknown Lineages of Haemosporida. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018.

<u>Wieser J</u>, Sohrabi M, Combs CK. Effects of Dextran Sulfate Sodium-Induced Colitis on an APP^{NL-G-F} Mouse Model of Alzheimer's Disease. 2018 UND SMHS Summer Undergraduate Research Symposium, Aug 2018. 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.

Wu J, Xiang M, Olson P, Zhang K. Cadmium Induces Noncompaction of Ventricular Myocardiumin Mouse Embryo. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Xiang M, Duea P, Xie L, Zhang K. Integrative analysis of transcriptomes, chromatin landscapes and DNA methylation reveal essential regulatory elements during early heart development. 6th Annual North Dakota Tribal College Research Symposium, March 2018.

Zheng Y, Oancea SC, Zhou X, Sens MA. What are the cancer rates in place A? 10th Annual ND INBRE Undergraduate Research Symposium, Oct 2018.