

SCHOLARLY PRODUCTS 2012
ND INBRE 8P20GM103442-12

POSTERS (undergraduates are underlined)

Minot State University

Wagner SL, Roise AM, Zerr JRM, Heuschele J, Cohen J, Keller CP. Does abscisic acid (ABA) control the growth effects of indole-3-acetic acid (IAA) in expanding *Arabidopsis* leaves?
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Beachy CK. Variation in sex ratio in the western tiger salamander, *Ambystoma mavortium*, is correlated with geographic variation in cadmium risk.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Beachy CK, Beachy HO. Effect of temperature on postmaturation metamorphosis in the western tiger salamander, *Ambystoma mavortium*.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
Annual meeting of the Dakota Amphibian and Reptile Network. Black Hills State University, Spearfish, South Dakota, 2012.
Annual meeting of the North Dakota Academy of Science, 2012.
World Congress of Herpetology and Joint Annualmeeting of Ichthyologists and Herpetologists. University of British Columbia, Vancouver, 2012.

Langer W, Wendlund D, Beachy CK. Big Year(s): Continuing research in amphibian life history biology in North Dakota's smallest school district (Wolford Pond, 2011 and 2012).
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Radi A, Beachy CK. Under-Ice activity patterns in western tiger salamanders, *Ambystoma mavortium*.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
Annual meeting of the Dakota Amphibian and Reptile Network, 2012.
World Congress of Herpetologists and Joint Annual meeting of Ichthyologists and Herpetologists, 2012.

Wilson M, Kraft A, Winburn R, Beachy CK. Differential cadmium integration in several organs during sublethal exposure in the Axolotl, *Ambystoma mexicanum*.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Wilson M, Kraft A, Diede D, Winburn R, Beachy CK. Cadmium levels in amphibians and North Dakota wetlands.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
Annual meeting of the Dakota Amphibian and Reptile Network. Black Hills State University, Spearfish, South Dakota, 2012.
Annual meeting of the North Dakota Academy of Science, 2012.

4th Biennial National IDeA Symposium on Biomedical Research Excellence. NIH, Bethesda, Maryland, 2012.

Winburn R, Kraft A, Wilson M, Beachy C, Winburn RS. Determination of a cadmium concentration ratio for tail and liver samples of *Ambystoma mexicanum*.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Falkenberg MA, Bauer AW, Bobylev LI, Bobylev MM. Distribution of the products in the rapid synthesis of N-(2,4-dichlorobenzyl)formamide.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Hartman JR, Bobylev MM. Application of the accelerated Leuckart reaction to benzene-1,4-dicarboxaldehyde.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

O'Keefe K, Huesers M, Bobylev LI, Bobylev MM. Distribution of the products in the rapid synthesis of N-(4-chlorobenzyl)formamide.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Beaudoin J, Schmidt B. Testing lactoferrin for allosteric disulfide bonds.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Clark A, Schmidt B. Effects of R143E and R143L mutations in superoxide dismutase 1.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Abramova L, Beaudoin J, Fry D, Schumaier J, Theodore J, Shipunov A. The preliminary analysis of the flora of North Dakota.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Beaudoin J, Fry D, Schumaier J, Shipunov A. Heavy metal accumulation patterns in North Dakota plant communities.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Keller C, Gales P. Development of high resolution root growth measurement to estimate the onset of heavy metal toxicity in *Arabidopsis thaliana*.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Gillis N, Keller CP, Hossain KG. Assessing the role of soil type on root cortex cell membrane potential sensitivity to Zn^{++} between common bean (*Phaseolus vulgaris*) genotypes differing in seed Zn content.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Wagner SL, Keller C. Use of a self-referencing ion-selective microelectrode recording (SRISE) station for evaluation of changes in ion fluxes resulting from heavy metal treatment in two different species of arabidopsis roots.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

O'Keefe K, Huesers M, Bobyleva LI, Bobylev MM. Byproducts in the rapid synthesis of N-(4-chlorobenzyl)formamide.
244th ACS National Meeting, 2012.
ND EPSCoR 2012 State Conference September 2012.

Uran LW, Bobylev MM. Rapid synthesis of N-[1-(1-naphthyl)ethyl] formamide.
244th ACS National Meeting, 2012.
ND EPSCoR 2012 State Conference, 2012.

Falkenberg MA, Bauer AW, Bobyleva LI, Bobylev MM. Rapid synthesis of N-(2,4-dichlorobenzyl)formamide.
244th ACS National Meeting, 2012.
ND EPSCoR 2012 State Conference, 2012.

Wagner SL, Keller CP. Initial Characterization of Arabidopsis Root Ion Fluxes using a Self-Referencing Ion-Selective Microelectrode Recording Station Reveals Oscillations in K⁺ fluxes. Fourth Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE), 2012.

Burckhard BA, Bobylev MM. Byproducts in the rapid synthesis of N-vanillylformamide.
ND EPSCoR 2012 State Conference, 2012.

Burckhard BA, Uran LW, Bobyleva LI, Bobylev MM. Addressing the hazards of post-flood mold to public health.
Posters on the Hill 2013, 2013.

Hartman JR, Bobylev MM. Application of the accelerated Leuckart reaction to benzene-1,4-dicarboxaldehyde.
2013 Research Poster Session, 2013.
ND EPSCoR 2012 State Conference, 2012.

Collins JA, Namanny H, Bobyleva LI, Bobylev MM. Rapid synthesis of N-(4-isopropylbenzyl)formamide.
244th ACS National Meeting, 2012.
2013 Research Poster Session, 2013.

Keller CP, Wagner SL, Roise AM, Morse AL. Does Abscisic Acid (ABA) Control the Growth Effects of Indole-3-Acetic Acid (IAA) in Arabidopsis leaves?
Fourth Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE), 2012.

Falkenberg MA, Bauer AW, Bobyleva LI, Bobylev MM. Rapid synthesis of N-(2,4-dichlorobenzyl)formamide.
244th ACS National Meeting, 2012.

Valley City State University

Bilski J, McLean K, McLean E, Hager A, Soumaila F, Dobmeier A, Kraft C, Fergel A, Farnsworth A, Nelson E, Berens J, Meyer B, Scheen A, Ostgarden J, Kyei-Asare F, Hoggart C, Dissette N. A study on coal fly ash (FA) phytoremediation.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Jerzy Bilski, Soumaila F, Mclean E, Hager A, Mardee LM, Dobmeier A. Engineering soil and coal ash based growth media for crop plants.
International Conference of Agricultural Engineering, Valencia, Spain, 2012.

Bilski J, Jacob D, McLean E, Soumaila F, Kraft C, Fergel A, Nelson E, Farnsworth A, Lander M. Pilot study on the engineering of coal fly ash based growth media for plants. North Dakota Academy of Science, 2012.

Kraft C, Jacob D, McLean E, Soumaila F, Fergel A, Nelson E, Lander M, Bilski J. Heavy metals accumulation in plants grown on coal fly ash ameliorated by various additives.
North Dakota Academy of Science, 2012.

Fergel A, Lander M, Nelson E, Farnsworth A, Kraft C, McLean E, Soumaila F, Bilski J. Barley response to mineral stress caused by the presence of coal fly ash (FA) in plant growth media.
North Dakota Academy of Science, 2012.

Dickinson State University

Murray J, Haas H, Schmidt H, Burgess L. Cadmium treatment reduces the expression of connexin mRNAs in human kidney tubule cells.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Haas H, Murray J, Parker T, Schmidt H, Burgess L. The expression of connexin 43 and 37 mRNAs and proteins from human proximal tubule cells after transfection.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Mayville State University

Biggane JP, Gonnella TP, Keating JM, Kjemhus JA, Picklo MJ. Lifetime fluorescence analysis and the effect of magnesium ions on binding of NADH to human cytosolic aldehyde dehydrogenase 1.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Gonnella TP, Keating JM, Ness JA, Picklo MJ. NADH fluorescence lifetime analysis of the effect of magnesium ions on cytosolic aldehyde dehydrogenase.
NDSU Symposium on Excellence in Nurturing Undergraduate Research, 2012.
National IDeA Symposium of Biomedical Research Excellence (NISBRE), 2012.
16th International Meeting on Enzymology and Molecular Biology of Carbonyl Metabolism, Plön, Germany, 2012.

Martin TJ, Gonnella TP, Biggane JP, Picklo MJ. Investigation of NADH protection of human mitochondrial aldehyde dehydrogenase 2 from 4-HNE inactivation.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Kowalski T, Yeboah S, Tucker M, Mamidi S, Jacob D, Hossain K. Association of molecular markers with human health related traits in common bean.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Tucker M, Kowalski T, Yeboah S, Jacob D, Mamidi S, Hossain K. Uptake and translocation of metals in the tissues of crop plants.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Turtle Mountain Community College

Keplin K, Best LG, Bercier S, Poitra S, Anderson CM. Characteristics of two measure of endothelial function among American Indian participants in a case-control study of pre-eclampsia.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
10th Annual American Indian Health Research Conference, 2012.

Pearson N, Best LG. Student research in a biomedical field.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
10th Annual American Indian Health Research Conference, 2012.

Cankdeska Cikana Community College

Azure LA. Cankdeska Cikana Community College & North Dakota Idea Network for Biomedical Research Excellence (ND INBRE).
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
10th Annual American Indian Health Research Conference, 2012.

Longie CR. Impact of American Indian/Alaskan Native high school.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
10th Annual American Indian Health Research Conference, 2012.

McKay L. Prevention of type II diabetes amongst Native Americans.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
10th Annual American Indian Health Research Conference, 2012.

Longie E. American Indian Health Web Portal.
10th Annual American Indian Health Research Conference, 2012.

Azure L. Needs Assessment – Future of American Indian Nursing
North Dakota Conference, 2012.

Azure L. Case Study –PEEC: A True Partnership. North Dakota State University, 2012.

Azure L. Building Research Capacity in Tribal Colleges and Communities.
24th Annual Native Research Network, 2012.

North Dakota State University

Steffen A, Hopkins D, Saini-Eidukat B, Utter R. Preliminary investigation of soil trace metals in landscapes influenced by the Pierre Formation in northeastern North Dakota.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Passolt H, Werkmeister C, Otte M, Jacob D. Variation in concentrations of cadmium, uranium and zinc between disturbed and undisturbed wetlands.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
The 4th Biennial National IDeA Symposium, 2012.

Alroobi R, Ahmed S, Salem S. Discovering maximal cohesive subgraphs and patterns from attributed biological networks.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Yellick AH, Jacob DL, KeKeyser ES, Hargiss CLM, Yan C, Otte ML. Rapid assessment of wetland plant communities in the context of multi-element fingerprinting.
Northern Plains Biological Symposium, 2012.

Yellick AH, Jacob DL, KeKeyser ES, Hargiss CLM, Yan C, Otte ML. Multi-Element fingerprinting of wetland soils yields insight into wetland quality and functioning.
SWS/INTECOLMeeting, 2012.

Asgary A, Jacob DL, Otte ML. Multi-Element fingerprinting of riparian wetlands
SWS/INTECOLMeeting, 2012.

Asgary A, Otte ML, Jacob DJ. Multi-element analysis of riparian sediments. NDSU Environmental and Conservation Science Greenbag Seminar, Fargo, ND.
Northern Plains Biological Symposium, 2012.

Kissoon L, Jacob D, Hanson M, Herwig B, Bowe S, Otte M. Plant communities and biogeochemistry of clear and turbid shallow lakes.
SWS/INTECOL Meeting, 2012.

Kissoon LT, Jacob DL, Hanson MA, Herwig BR, Bowe SE, Otte ML (2012) Plant communities in Minnesota shallow lakes: relationships with land use.
ND EPSCoR State Conference, 2012.

Monthean A, Asgary A, Jacob DL, Otte ML. Multi-element fingerprinting of sediments at Little Missouri River to investigate the sources of uranium.
The 4th Biennial National IDeA Symposium, 2012.

Stalboerger A, Jacob DL, Otte ML. Treatment wetlands for the reduction of sulfate and binding of phosphate.

Northern Plains Biological Symposium, 2012.

Stalboerger AJ, Lin W, Jacob DL, Otte ML. Treatment wetlands for removal of sulfate from tile drain water. SWS/INTECOLMeeting, 2012.

Newton C, Cheng W, Yan C. Analysis and prediction of protein-DNA binding sites.

NDSU summer STEM Research Experience. 2012.

University of North Dakota Native American Research Team

Peters WMK, Gray JS. The effect of native spiritual practices on substance use.

10th Annual American Indian Health Research Conference, 2012.

Schroeder J, Gray JS, Carter P. Elder abuse in Indian country.

10th Annual American Indian Health Research Conference, 2012.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Slinkey M, Gray JS, Carter P. Assessment of substance use in Northern Plains Indians.

10th Annual American Indian Health Research Conference, 2012.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Wheeler MJ, Hill KG, Guttmanova K, Hartigan LA, Olsen P. Conducting culturally relevant, sustainable prevention in Indian Country.

10th Annual American Indian Health Research Conference, 2012.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Wheeler MJ, Gray JS. Substance use among Northern Plains Indians.

10th Annual American Indian Health Research Conference, 2012.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Mudgett MA, Gray JS. Rumination related to substance abuse by age and gender.

10th Annual American Indian Health Research Conference, 2012.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Kagan C, Petros T, Gray J. Examining culture: A comparison of two measures of American Indian level of acculturation.

10th Annual American Indian Health Research Conference, 2012.

University of North Dakota

Albrecht K, Bowker W, Laternus D, Chhoun J, Carlson E. TEM stereometric analyses of diabetes-induced microvascular basement membrane thickening and possible protection by endothelial specific overexpression of metallothionein in transgenic mice.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Cymbaluk A, Kees E, Laternus D, Chhoun J, Zheng S, Epstein P. Overexpression of metallothionein in renal podocytes mitigates adriamycin-induced albuminuria in the absence of glomerular cytopathology.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Frenette A, Laternus D, Tessema C, Carlson E. Scanning and transmission electron microscopic analyses of the glomerular filtration barrier in aged (450 day-old) transgenic mice.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Conway P, Hanson B, Wages J, Sens D. Factors contributing to students' career paths: Recruiting students into science and health careers.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

10th Annual American Indian Health Research Conference, 2012.

Conway P, Hanson B, Wages J, Gonnella T, Super H, Sens D, Doze V, Cisek K. Recruiting students into science: Evaluating North Dakota INBRE's impact.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

10th Annual American Indian Health Research Conference, 2012.

Snyder S, Cain JT, Nour S, Maltese M, Two Hawk C, Darland DC. Developing a heterotypic cell culture model to determine the mechanism of Vegf action in neural stem cell fate Decisions.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Swanson I, Dhasarathy A. An inducible system to regulate gene expression.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Amoth HM, Collette KM, Zhou XD, Perez DM, Doze V. Chronic α 1A - adrenergic receptor stimulation reduces carcinogenesis in mice.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Doze V, Conway P, Olimb S, Wages J, Sens D, Hanson B, Cisek K. Impact of summer research experiences on educational & career paths of rural & tribal undergraduate students.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Collette K, Nielsen A, Perez D, Doze V. Alpha1A adrenergic receptor (α 1AAR) influences on neural progenitor cell fate in the adult mouse hippocampus.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Goldenstein B, Fossen A, Perez D, Doze V. Ablation of alpha-1A adrenergic receptor stimulated neurogenesis effects cognitive function.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Morin KJ, Wilkie LN, Davis BA, Combs CK, Hasselton J, Perez D, Doze VA. Behavioral characterization of APP/PS1 mice.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

10th Annual American Indian Health Research Conference, 2012.

Sandquist E, Doze V, Sens D. The effects of cadmium on neurogenesis-dependent behavior.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Davis B, Luger E, Fossen A, Hasselton J, Perez D, Doze V. Alpha-1A adrenergic receptor stimulation improves mood in mice.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

10th Annual American Indian Health Research Conference, 2012.

Klinger AR, Wilt K, Larson JL, Hewitt HM, Somji S, Dunlevy JR. Expression of tenascin C and fibronectin in UROtsa bladder cells treated with arsenic and cadmium.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Wilt KJ, Klinger AR, Hewitt HM, Larson JL, Somji S, Dunlevy JR. Expression of thrombospondin-1 and -2 in UROtsa bladder cells exposed to arsenic or cadmium.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Breen W, Garrett SH, Somji S, Sens DA. Human urothelial cells exposed to arsenic and cadmium overexpress N-Cadherin and Twist.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Dintzner T, Garrett SH, Somji S, Sens DA. Expression of MT-3 on cadmium treated human proximal tubule cells.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Zhang K, Somji S, Sens MA, Sens DA, Garrett SH. Gene expression profiles of multiple independent cadmium and arsenite induced malignant transformations of human urothelial cells (UROtsa).

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Garrett SH, Van Gieson J, Sens MA, Sens DA, Somji S. Arsenite and cadmium induced epigenetic modification in the promoter of the metallothionein 3 gene.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Holm TT, Mehus AA, Somji S, Sens DA, Sens MA, Garrett SH. Expression of metallothionein isoforms in HK-2 MT-3 cells exposed to cadmium over a 3-day time-course.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
UND Summer Research Poster Session, 2012.

Holmquist A, Garrett SH, Sens DA, Somji S. Analysis of BMP2, SEMA3A and TFAP2B expression in human proximal tubule cells (HPT) transformed by cadmium.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
UND Summer Research Poster Session, 2012.

Schrader M, Garrett SH, Somji S, Sens DA. Epigenetic regulation of metallothionein-1E in breast cancer.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
UND Summer Research Poster Session, 2012.

Slusser A, Bathula C, Dunlevy JR, Shabb J, Sens DA, Somji S, Garrett SH. Identification of metallothionein-3 interacting proteins in human proximal tubule cells.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Van Gieson J, Garrett SH, Sens DA, Somji S. Expression of the human anterior gradient 2 (AGR2) analog gene in the As⁺³ and Cd⁺²-transformed breast epithelial cell line MCF-10.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Voels B, Garrett SH, Somji S, Sens DA. The unique N and C-terminal domains of metallothionein-3 influence the growth and differentiation of MCF-7 breast cancer cells.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Feltsa B, Burbach N, Sandtner W, Bulling S, Sitte H, Henry LK. A conserved asparagine in the first transmembrane domain of the human serotonin transporter is critical for concentrative uptake and cation selectivity during substrate transport.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Kubat B, Nechaev S. Adopting permanganate footprinting for analysis of RNA polymerase II pausing in mammalian cells and on a genome-wide scale.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
UND Summer Research Poster Session, 2012.

Secord-Holmes A, Nechaev S. Development of genome-wide RNA profiling for simultaneous detection of gene expression and RNA polymerase II pausing.
4th Annual ND INBRE Undergraduate Research Symposium, 2012.
UND Summer Research Poster Session, 2012.

Nadeau GM, Gruchalla KL, Rhen T. Effects of atrazine on the hypothalamus development in the snapping turtle.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

10th Annual American Indian Health Research Conference, 2012.

UND Summer Research Poster Session, 2012.

Johnson K, Todhunter R, Davidson B, Riedinger J, Muhonen W, Shabb J. Tissue survey and immunohistochemistry staining analysis of FAM129B in mouse and human tissues

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Mehus AA, Muhonen WW, Garrett SH, Somji S, Sens MA, Sens DA, Shabb JB. Relative and absolute quantification of metallothionein isoforms in human kidney cells using stable isotope labeling of cysteines and MALDI-TOF/TOF mass spectrometry.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Todhunter R, Johnson K, Davidson B, Riedinger J, Holdman E, Muhonen W, Shabb J.

Comparative analysis of FAM129B immuno-precipitation methods in human melanoma and breast epithelial cell lines.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Wu M, Li J, Li X, Privratsky B, Ye Y, Zhao Y, Wang W, He C. Proteome-wide screening of novel pathogenic proteins with redox activity in *Pseudomonas aeruginosa*.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Ye Y, Wu M. Decreased inflammatory response in caveolin-1-deficient mice is regulated by STAT5/NF- κ B in hyperoxia mice.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Nchifor J, Zhou L, Xie L. Pten is required in the second heart field for heart development.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Rasmussen D, Zhou L, Xie L. Interaction of sonic hedgehog and OSR1 in atrial septation.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Zhou L, Johnson A, Xie L. PPAR- γ is required in the second heart field for outflow tract septation.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Clarke K, Xi B, Logan T, Zhang K. The aerosol levels are associated with lung cancer risk.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Clarke K, Weichel B, Yang Y, Zhang K. RNA-Seq assembly: A study of ABySS, CBdenovo, Mira, Trinity and Velvet.

UND Summer Research Poster Session, 2012.

Kokal T, Zhang K. Genetic algorithm facilitates tumor subtype identification using array CGH data.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Rodemeyer P, Tkach M, Zhang K. A power analysis of maximal information coefficient for identifying global gene-gene interactions.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Weichel B, Clarke K, Rhen T, Zhang K. Constructing analysis pipelines for assembling RNA-Seq data generated from both Illumina Solexa and Roche 454 platforms.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Yang Y, Clarke K, March R, Zhang K. A novel assembly algorithm optimized for RNA-Seq data.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Nielsen ARD, Collette KM, Perez DM, Doze VA. Chronic α 1AAR stimulation may increase adult neurogenesis and parvalbumin interneurons.

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

UND Summer Research Poster Session, 2012.

Madche D, Gerszewski M, Green M, Srinivasachar S, Benson S. Scoping study and partial conceptual design for carbon dioxide capture using potassium carbonate.

University of North Dakota Honors Program

4th Annual ND INBRE Undergraduate Research Symposium, 2012.

Frenette A, Laturus D, Tessema C, Carlson E. Scanning and transmission electron microscopic analyses of the glomerular filtration barrier in aged (450 day-old) transgenic mice.

UND Summer Research Poster Session, 2012.

Lor C, Safratowich B, Hossain M, Carvelli L. Creating a transgenic worm to unravel the molecular mechanisms of amphetamine and β -phenylethylamine.

UND Summer Research Poster Session, 2012.

Rebel AA, Urquhart SA, Puig KL, Brose SA, Golovko M, Combs CK. Obesity induces depression-like behavior in a murine high fat diet model.

UND Summer Research Poster Session, 2012.

Urquhart S, Rebel AA, Puig KL, Combs CK. Maternal diet-induced obesity alters the immune system of nursing offspring.

UND Summer Research Poster Session, 2012.

Person KA, Maltese MJ, Cain JT, Darland DC. Epigenetics and neural stem cell fate: The role of Vegf isoforms.
UND Summer Research Poster Session, 2012.

Person KA, Nelson KL, Darland DC. Cortical neural stem cell ventral migration pathway: The role of Vegf isoforms.
UND Summer Research Poster Session, 2012.

Roemmich AJ, Nour SI, Darland DC. Regulation of cortical layering and neural stem cell fate in Vegf isoform mice.
UND Summer Research Poster Session, 2012.

Espinoza AM, Seiler J, Darland T. Identification of a candidate gene underlying the small eye phenotype of a mutant zebrafish.
UND Summer Research Poster Session, 2012.

Hensleigh RM, Skonseng GA, Stanislawski DJ, Vaughn RA, Foster JD. Membrane permeable C- and N- terminal DAT-TAT fusion peptide synthesis for analysis of DAT regulation and function.
UND Summer Research Poster Session, 2012.

Skonseng GA, Hensleigh RM, Stanislawski DJ, Vaughn RA, Foster JD. Identification of multiple palmitoylation sites on the dopamine transporter.
UND Summer Research Poster Session, 2012.

Hanson B, Grove B. Gravin (AKAP12), an A kinase anchoring protein linked to cell migration, codistributes with actin, rhoA, and rac at the periphery of endothelial cells.
UND Summer Research Poster Session, 2012.

Landis E, Felts B, Henry K. Use of serotonin transporters from different species to identify molecular determinants necessary for MDMA recognition as a substrate.
UND Summer Research Poster Session, 2012.

Stojkowska I, Pinsonneault D, Henry K. Study to determine if human serotonin transporter mutants associated with autism induce conformational changes.
UND Summer Research Poster Session, 2012.

Moyer CL, Darland DC, Meberg P. Integration of neural stem cell differentiation and migration during early cortical development.
UND Summer Research Poster Session, 2012.

Boff B, Steichen A, Stein E, Binstock B, Sharma J, Mishra B. Inhibiting effects of mesocortisol on sepsis inducing bacteria.
UND Summer Research Poster Session, 2012.

Ohm J, Guo D, Zygarlicke S. The neuroregenerative and neuroprotective effects of ciliary neurotrophic factor on parkinsonian mice.
UND Summer Research Poster Session, 2012.

Postma G, Bhatt D, Rosenberger T. Acetate alters adenosine metabolism in BV-2 microglia cells.
UND Summer Research Poster Session, 2012.

Poole L, Steichen A, Binstock B, Mishra B, Sharma J. Expression and distribution of Clec4e during pulmonary Klebsiella pneumoniae infection.
UND Summer Research Poster Session, 2012.

Johnson A, Nchifor J, Zhou L, Xie L. PPAR- γ is required in the second heart field for heart development.
UND Summer Research Poster Session, 2012.

Nchifor J, Xi B, Logan T, Zhang K. Higher level of aerosols increases lung cancer risk.
UND Summer Research Poster Session, 2012.

Tkach M, Garrett S, Zhang K. Detecting gene-gene interaction using distance correlation.
UND Summer Research Poster Session, 2012.

Schwartz CA, Vonnahme KA, Schauer CS, Lonergan SM, Grubbs KJ, Shabb JB, Muhonen WW, Keller WL, and Maddock-Carlin KR. Proteomic analysis of fetal ovine skeletal muscle as influenced by maternal metabolizable protein supplementation in isocaloric diets during late pregnancy.
2013 ASAS Midwestern Section/ADSA Midwestern Branch Annual Meeting, Des Moines, Iowa

Mehus A, Muhonen W, Garrett SH, Somji S, Sens MA, Sens DA, Shabb J. Relative quantification of metallothionein isoforms in human kidney cells using stable isotope labeling of cysteines and MALDI-TOF/TOF mass spectrometry.
J Am Soc Mass Spectrom 23 (S1):86, 2012.

Holdman EA, Anderson T, Todhunter R, Riedinger J, Muhonen W, and Shabb J (2012) Immuno-enrichment of the novel B-raf target FAM129B from rat lung tissue
FASEB J 26:753.4

K. Zhang, Yang Y. A hidden Markov model-based algorithm for identifying tumor subtype using array CGH data.
20th Annual International Conference on Intelligent Systems for Molecular Biology (ISMB), 2012.

Zhang K. Tumor subtype identification and patients stratification using a CGH data. Pacific Coast Statisticians and Pharmacometricians Innovation Conference (PaSiPhIC).
Cal Poly, 2012.

Xie L, Zhang K. A meta-analysis of global gene expression and interaction in heart development of mouse.

Weinstein Cardiovascular Development Conference. Chicago, IL, 2012.

Weickel B, Zhang K. Integrative assembly for RNA-Seq data generated from both Illumina Solexa and Roche 454 platforms.

NIGMS Fourth Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE), 2012.