Kansas State University

Presenter	Abstract Title
Yared Assefa	Changes In Morphological Pattern With Advancement Of Sorghum Hybrids
Jasdeep Kaur Saini	Evaluating The Potential For Translocation Of Listeria Monocytogenes From Floor Drains To Food Contact Surfaces In The Surrounding Environment Using Listeria Innocua As Surrogate
Thilani N.Samarakoon	Functionalized Bimagnetic Core/Shell Fe/Fe_30_4 Stealth Nanoparticles For The Diagnosis And Treatment Of Cancer
Sumeet Gujrati	Reconfigurable Sensor Test Bed
Beau Burkitt	GIS-Enabled Kinematic Wave Approach For Rapid Soil Erosion Assessment And Improved BMP Site Selection
Benjamin Meade	Spatial Extent, Timing, And Causes Of Channel Incision, Black Vermillion Watershed, Northeastern Kansas
Hyma Gajula	The Interactions Of Bran With Gluten Proteins During Dough Development Using X-Ray Microtomography
Juhyan Yoo	Efficiency And Economics Of Lignocellulosic Ethanol Production From Agricultural Residues Using Novel Thermomechanical Pretreatment
Albert Iaroi	Conflicting Environmental Claims: Analysis Of The Discourse Surrounding Biofuels Development
Terrie A.Becerra	Social Factors Influencing Adoption Of Conservation Practices

The University Of Kansas

Presenter	Abstract Title
Madhav Ghanta	Greener Oxidation Of Propylene And Ethylene Minimizes Environmental Impact And Increases Safety
Jing Guo	Gas Phase Emissions From A Heavy-Duty Engine Using Biodiesel Blends
Leah Kapa	Executive Function In Simultaneous And Sequential Bilingual Children
Shuang Cai	Nanoconjugate Delivery System For Treatment Of Advanced Breast Cancer
Natalie Ciaccio	Brain Cancer: New Hope For A Deadly Disease
Audra Sterling	Fragile X Syndrome: What Can We Learn About Autism From Fragile X Syndrome?
James Stoutenborough	Promoting Wind Energy: Evaluating The Effects Of State Renewable Energy Incentives
John Shelley	Sedimentation In Kansas Reservoirs And The Kansas Analytical Method For Natural Channel Design

The University of Kansas Medical Center

Presenter	Abstract Title
Brittany K Gorres	The Combined Effect Of A High Fat Diet And Estrogen Loss On Insulin Resistance
Katryn Allen	Bile Acids Induction Of Pro-Inflammatory Gene Expression In Mouse Hepatocytes Is Egr-1 Dependent
Brian R. Earl	Uncovering The Causes Of Hearing Loss
Carol Kemper	The Impact Of Work Unit And Organization Support On Adverse Patient Outcome
Nicholas Stucky	Studying The Molecular Causes Of Migraine: A Pathway To New Therapeutic Targets

Wichita State University

Presenter	Abstract Title
Masako Maeda	Peer Reviews Of Teaching: Are They Useful?
Zachary Kral	Damage Detection In Metal Structures Using Acoustic Emission
Justin Lygrisse	Detection And Quantification Of Ketamine Hcl In Alcohol/Water Matrices Using Esi-Ms^n And Lc-Esi-Ms
Mindy L. Slimmer	Impact Of The First Step To Active Aging On Older Adult's Functional Fitness, Balance, And Daily Activity
Julinda Taylor	Ncreasing Efficiency Of Data Caching Using Bloom Filters In Ad Hoc Wireless Networks
Aly Ahmady	Identifying Users' Characteristics Critical To Product Selection Using Rough Set Theory
Lisa Lutz	A School Districts' Perceptions: Necessary Skills In The 21st Century
Janani Sri Gopu	Synthesizing Drug-Carrying Nanocomposite Sphere For Targeted Drug Delivery
Megan Simpson	Testing A Global Screening Method To Probe The Role Of Epigenetics In An Experimental Model Of Estrogen-Dep.9 (p)- (d)10 (e)4 (l21)-10 (e)3.9 ((e)4 (l21)-10)-27 (e)4 72H2 (a)4-

KANSAS STATE UNIVERSITY

CHANGES IN MORPHOLOGICAL PATTERN WITH ADVANCMENT OF SORGHUM HYBRIDS

Yared Assefa*, and Scott Staggenborg
Department of Agronomy, College of Agriculture

For the past six decades efforts in plant breeding have resulted in a number of improved sorghum hybrids to the world. In the USA, sorghum grain yield has improved more than a 139% since 1950's. Of the 139% increase, 46% is reported to be due to hybrid improvement. The objective of this paper was to identifying the changes in morphology and phenology with hybrid improvement in the past six decades. To meet the objective, five hybrids: P848/RS610, P828/P833, P8585, P8385, and P85G46 which were released in periods of 1954-1964, 1964-1974, 1974-1984, 1984-1994, and 1994-2005, respectively were studied for two years (2007 and 2008 summer) in a greenhouse. The five hybrids were studied in three watering treatments: well watered control, preflowering stress and postflowering stress. There was a 129% increase in dry weight of root comparing the oldest and newest hybrids. Leaf biomass has also increased substantially with advancement of hybrids. Recent hybrids were also relatively consistent in growth and had better panicle length in any watering

SPATIAL EXTENT, TIMING, AND CAUSES OF CHANNEL INCISION, BLACK VERMILLION WATERSHED, NORTHEASTERN KANSAS

Benjamin Meade*, Mark Grossard, and Richard Marston
Department of Geography, College of Arts and Sciences

The Black Vermillion River (watershed area = 1310 square kilometers) contributes runoff and sediment into Tuttle Creek Lake, a large

THE UNIVERSITY OF KANSAS

GREENER OXIDATION OF PROPYLENE AND ETHYLENE MINIMIZES ENVIRONMENTAL IMPACT AND INCREASES SAFETY

Madhav Ghanta*
Department of Chemical & Petroleum Engineering, The University of Kansas

Propylene oxide (PO) and ethylene oxide (EO) are important chemical intermediate for a broad spectrum of consumer

BRAIN CANCER: NEW HOPE FOR A DEADLY DISEASE

Natalie Ciaccio*
Department of Pharmaceutical Chemistry, The Department of Kansas

Brain cancer is a deadly disease for which limited treatment options exist. New hope has been attributed to a protein molecule that appears to play an important role in the survival of this type of cancer. An animal model has shown that interference with the function of this protein causes the tumor cells to die and the tumor to shrink in size dramatically. Moreover, this protein is not present in normal brain tissue, which means that by targeting it, the cancer can be treated without harming the rest of the brain, minimizing side effects and complications for the patient. The focus of my research is to obtain structural information about this protein that will be needed to facilitate drug design.

FRAGILE X SYNDROME: WHAT CAN WE LEARN ABOUT AUTISM FROM FRAGILE X SYNDROME?

Audra Sterling*
Department of Cognitive Psychology, The University of Kansas

Fragile X syndrome (FXS) is the most common inherited cause of intellectual disability. It is caused by mutation on the X chromosome. Individuals with FXS often have a co-diagnosis of autism, or display symptoms concurrent with autism. This study examines the language phenotype in children with FXS, and the impact that autism has on FXS. Thirty-three children participated in the study (ages 8-16). Standardized testing and language samples were used to evaluate variables of interest. The males with FXS showed deficits in language comprehension and production, although they displayed a profile of strengths and weaknesses. Boys with FXS and autism had lower scores compared to boys with FXS only. Girls were not as impaired but did show variability.

PROMOTING WIND ENERGY: EVALUATING THE EFFECTS OF STATE RENEWABLE ENERGY INCENTIVES

James Stoutenborough*
Department of Political Science, The University of Kansas

Policy scholars tend to focus on the adoption of policies, but often fail to take their examinations to the next logical level. We fail to ask, “Did this policy achieve its goal?” My research attempts to determine if state renewable energy policies, that are designed to promote the construction of renewable energy sources, actually achieve their intended goals. This is particularly important seeing as the national government often adopts successful state policies. My research attempts to determine if these policies actually have an impact on the total installed wind energy capacity. The data clearly suggests that some policies achieve their goals and have an impact on capacity, while others do not.

SEDIMENTATION IN KANSAS RESERVOIRS AND THE KANSAS ANALYTICAL METHOD FOR NATURAL CHANNEL DESIGN

John Shelley*, Bruce McEnroe, and C. Bryan Young
Department of Civil Engineering, The University of Kansas

Kansas has a sedimentation problem. The water reservoirs on which we depend for drinking water, flood protection, and recreation are filling in with sediment. In places, the rates of sedimentation far exceed anticipated rates, and the effects of sedimentation have already become severe. Studies have demonstrated that the sediment filling in these reservoirs is predominantly derived from stream channel bank erosion. The Kansas Analytical Method is a strea se3p18 (t)9 (h)-12 (e)-19 (l)9 (y)-12catel

THE UNIVERSITY OF KANSAS MEDICAL CENTER

THE COMBINED EFFECT OF A HIGH FAT DIET AND ESTROGEN LOSS ON INSULIN RESISTANCE

Brittany K Gorres*, Greg L Bomhoff, Anisha A Gupte, Paige C Geiger,
Department of Molecular and Integrative Physiology, The University of Kansas Medical Center

Post-menopausal women have an increased incidence of Type 2 Diabetes (T2D) compared to pre-menopausal women, and hormone replacement therapy (HRT) can decrease this risk. Our objective was to investigate the roles of estrogen (E2) and a high fat diet in the development of T2D in female Sprague Dawley rats. Rats were fed a high fat (HF, 60%kcal fat) or chow (10%kcal fat) diet and were either ovariectomized (OVX) or sham-OVX for 6 weeks. A subset of the HF OVX group was given PPT, a specific estrogen receptor " (ER") activator, for 3 days prior to sacrifice (10mg/kg). HF OVX rats had significantly higher body weight compared with chow OVX and HF sham rats ($p<0.05$). Accordingly, the HF OVX group

WICHITA STATE UNIVERSITY

PEER REVIEWS OF TEACHING: ARE THEY USEFUL?

Masako Maeda*, Phillip R. Sechtem, and Rosalind R. Scudder
Department of Communication Sciences and Disorders, Wichita State University

Peer reviews of teachers consist of formal evaluations of faculty members performed by colleagues and peers in their college or university. They are frequently used for promotion, tenure, and salary adjustments. According to existing literature, they may also be used for formative purposes as in the development and improvement of teaching methods, techniques, and styles. Despite the purposes mentioned above, little is known about the authenticity, practicality, and usefulness of peer reviews of university teachers. The purpose of this study was to learn more about methods and uses of information gained from peer

IMPACT OF THE FIRST STEP TO ACTIVE AGING ON OLDER ADULTÕS FUNCTIONAL FITNESS, BALANCE, AND DAILY ACTIVITY

Mindy L. Slimmer*, Eun Young Park, and Nicole L. Rogers
Gerontology Department, Wichita State University

Purpose of the study was to determine how the First Step to Active Aging (FSAH) program impacts functional fitness

THE STUDY OF THE EFFECT OF LONG TERM WATER COVER ON THE MILL TAILINGS OF THE SILVER LAKE MILL # 1, NEAR SILVERTON, COLORADO

Renee Vardy*
Geology Department, Wichita State University

Mining and milling of metals were the primary industries in the study area during the late 1800's into the early 1900's. Wastes from the mining and milling processes are abundant in the area and present a significant environmental threat. Abandoned in 1900, the Silver Lake Mill # 1 is located on Silver Lake, southeast of Silverton, CO. Tailings (mill wastes) are located above and below the lake level providing an excellent location to study long term water cover of mill tailings. The project included water samples from the lake, its outlet and inlets plus tailings samples above and below water. These samples were used to determine if the lake is contaminated and if so, the pollution source. Field parameters of pH, conductivity, temperature, and dissolved oxygen were observed. Samples were analyzed for Al, Fe, Cu, Ni, Zn, Cd, and Pb. All parameters except Ni were found in the lake, but the inlets, which had low concentrations, cannot entirely account for this. Examination of results show the lake holds contaminated water with increasing metal concentrations with depth. It also reveals the source of contamination is primarily transfer from submerged tailings. Lastly, it shows that the contamination is generally contained within the lake.

For Information on Graduate Programs Contact Respective Deans:

Dr. Carol Shanklin
Kansas State University
103 Fairchild hall
Manhattan, KS
785-532-6191
www.ksu.edu/grad

Dr. David McDonald
Wichita State University
107 Jardine Hall
1845 Fairmount
Wichita, KS 67260-0004
(316) 978-3095
www.wichita.edu/gradschool

Wee.48 r.(pe)-4