

## 2011 MAS Collegiate Division Oral Presentation Winners

### Category

#### Agriculture:

- 1<sup>st</sup> \*Mebruer, B., S. Tesfaye and M. Tarka. Research Investigator, Lincoln University. INVESTIGATING LANDUSE/LANDCOVER CHANGES AT OVERTON BOTTOM NATIONAL FISH AND WILDLIFE REFUGE FROM 1984 TO 2010 USING THEMATIC MAPPER IMAGES.
- 2<sup>nd</sup> \*Gravino, N., J.C. Barnett\*, S. Hohenadel\*, and M.F. Haskins. Biology Department, Rockhurst University. USING MALONIC ACID TO EXTEND THE "SHELF LIFE" OF STRAWBERRIES.
- 3<sup>rd</sup> \*Nicholson, J. and K.E. Garrison. Department of Chemistry, College of the Ozarks. ANALYSIS OF THE FERMENTATION PRODUCTS OF SORGHUM *HALEPENSE* WITH *RUMINOCOCCUS ALBUS*.

#### Biology (I):

- 1<sup>st</sup> \*Payne, K.V. and R. Snyder. Biology Department, College of the Ozarks. ANALYSIS OF BUCK:DOE RATIOS IN WHITE TAILED DEER(*ODOCOILEUS VIRGINIANUS*) USING INFRARED GAME CAMERAS.
- 2<sup>nd</sup> \*Winston, B. and K. Stephan. Department of Life and Physical Sciences, Lincoln University. EFFECTS OF 60 YEARS OF PRESCRIBED BURNING ON SOIL ORGANIC CARBON AND NITROGEN IN MISSOURI OAK-HICKORY FOREST.
- 3<sup>rd</sup> \*Plaster, J.A., A. Andrei<sup>1</sup> and T. Thompson<sup>2</sup>. <sup>1</sup>College of Agriculture and Natural Sciences, Lincoln University and <sup>2</sup>Missouri Department of Conservation. ABOVE GROUND ARTHROPODS IN MISSOURI'S GREATER PRAIRIE-CHICKEN HABITAT.

#### Biology (II):

- 1<sup>st</sup> \*Weber, R. E. and M. L. Spratt. Biological Sciences, William Woods University. THE PREVALENCE OF RICKETTSIAL BACTERIA FOUND IN MISSOURI TICKS.
- 2<sup>nd</sup> \*Forster, R.T. and S.A. Miller. Biology Department, College of the Ozarks. THE GENETIC RELATIONSHIPS OF *GAMMARUS PSUEDOLINMAEUS* (CRUSTACEA, AMPHIPODA): POSSIBLE GLACIAL INFLUENCES.
- 3<sup>rd</sup> \*Jacobs, J. and J. Benne. Department of Life and Physical Sciences, Lincoln University. INFLUENCES OF SURFACE AREA AND DENSITY ON LARVAL *AEDES AEGYPTI* DEVELOPMENT TIME AND MASS.
- 3<sup>rd</sup> \*Duke, H. and R. Kervin. Department of Biology, College of the Ozarks. ZINC'S EFFECT ON STRESS-INDUCED MATURE T LYMPHOCYTE APOPTOSIS.

#### Chemistry:

- 1<sup>st</sup> \*Rusbarsky, K., and J. Eason. Department of Chemistry, College of the Ozarks. SYNTHESIS OF A FLUORINE CONTAINING CONVERTIBLE NUCLEOSIDE.
- 2<sup>nd</sup> \*Detchou, C.S. and G.A. Frerichs. Department of Chemistry, Westminster College. BATCH pH OSCILLATIONS IN THE BRAY-LIEBHAFSKY REACTION.
- 3<sup>rd</sup> \*Smith, C. J. and K.E.Garrison. Department of Chemistry, College of the Ozarks. COPPER

PHTHALOCYANINE MODIFIED CARBON PASTE ELECTRODE FOR  
SIMULTANEOUS ELECTROCHEMICAL ANALYSIS OF HOMOCYSTEINE AND  
CYSTEINE.

Geosciences:

- 1<sup>st</sup> \*Hunter, B.S., and J.P. Pope. Department of Geology/Geography, Northwest Missouri State University. POSSIBLE HIGH-ORDER CYCLES PRESERVED IN THE HIGH-STAND SYSTEMS TRACT OF THE QUEEN HILL SHALE MEMBER OF THE LECOMPTON FORMATION (SHAWNEE GROUP, VIRGILIAN STAGE, UPPER PENNSYLVANIAN) OF NORTHWEST MISSOURI.
- 2<sup>nd</sup> \*Windett, J. R. and D. P. Fox. Department of Natural and Physical Sciences, Park University. ANALYSIS OF INTEGRATED PASSIVE SOLAR WATER HEATER TECHNOLOGY FOR SUSTAINABLE COMMUNITY DEVELOPMENT.
- 3<sup>rd</sup> \*Tounzen, M. R. and D. P. Fox. Department of Natural and Physical Sciences, Park University. GIS ANALYSIS OF POTENTIAL WIND ENERGY PRODUCTION IN MISSOURI.

Math & Computer Science:

- 1<sup>st</sup> \*Schuyler, J., D. Royal, E. Ingebretson, A. Rodriguex, and C. Gubera. Department of Computer Science, University of Missouri-Columbia. CONSTRUCTING A REMOTELY OPERATED UNDERWATER VEHICLE (ROV) CAPABLE OF CAPTURING 3D FILM.
- 2<sup>nd</sup> \*Kwentus, T., J. Colbert, J. Hitchens, J. Russell and S. Sutton. Computer Science Department, University of Missouri-Columbia. COMPUTER SYSTEMS ARE CONTANTLY UNDER ATTACK .
- 3<sup>rd</sup> \*Skrypnykova, Y. and S. Balakumar. Computer Science, Technology and Mathematics, Lincoln University. POLYNOMIAL APPROXIMATION OF NORMAL DENSITY.

Engineering & Physics:

- 1<sup>st</sup> \*Nahlik, E, R. Gupta, P. K. Kahol, Y. Kolekar, and K. Ghosh. Department of Physics, Astronomy and Materials Science, Missouri State University. SPINTRONIC APPLICATIONS USING CHROMIUM DOPED INDIUM OXIDE.
- 2<sup>nd</sup> \*Langhoff, M.R., S. Gupta, P.K. Kahol, Y. Kolekar, and K. Ghosh. Department of Physics, Astronomy and Materials Science, Missouri State University. TRANSITION METAL DOPED OXIDE DILUTE MAGNETIC SEMICONDUCTORS FOR SPINTRONIC APPLICATIONS.
- 3<sup>rd</sup> N/A

Social & Behavioral Science (I):

- 1<sup>st</sup> \*Minix, E. Department of Social Sciences, Central Methodist University. TECHNOLOGY DEPENDENCE: FACEBOOK ADDICTION.
- 2<sup>nd</sup> \*Pitera, J. and R. Ghinescu. Department of Social and Behavioral Sciences, Lincoln University. THE IMPACT OF MORTALITY SALIENCE ON SENSATION SEEKING AND IMPULSIVITY.
- 3<sup>rd</sup> \*Ilango, G., N. Petronic\*, and M. Humo. Department of Psychology, Westminster College. OPTIMISM OPTIMISM SEEMS TO BE ONE OF THE INFLUENTIAL FACTORS ON HEALTH.

Social & Behavioral Science (II):

- 1<sup>st</sup> \*Woods, E.G. and M.S. Aruguete. Department of Social and Behavioral Sciences. Lincoln University. PREDICTORS OF STUDENT ABSENCES FROM COLLEGE COURSES.
- 2<sup>nd</sup> \*Murray, L.J. and M.S. Aruguete. Department of Social and Behavioral Sciences, Lincoln University. VARIABLES ASSOCIATED WITH COLLEGE STUDENTS' ATTITUDES TOWARD MARRIAGE.
- 3<sup>rd</sup> \*Shaffer, L. Department of Social Science, Central Methodist University. PROMOTING RESPONSE VARIABILITY AND STIMULUS GENERALIZATION IN COLLEGIATE WRESTLING TAKEDOWNS .