

SCHOLARS WEEK

MIDDLE
TENNESSEE
STATE UNIVERSITY

2015 UNIVERSITY EXPOSITION

FRIDAY, MARCH 20

Complete schedule of events, abstracts, and other information is available at <http://www.mtsu.edu/research/scholarsWeek/>

VIDEO/ANIMATION PRESENTATIONS

Student Union Theater

- 12:30-1:25 First Look
1:30-2:00 Happy New Year Mr. Kates
2:05-2:15 Tethered and Coffee (from Kevin McNulty)
2:20-3:00 Paris Documentaries

CENTERS, INSTITUTES, AND PROGRAMS

- 1 Business and Economic Research Center (BERC)
- 2 Tennessee Center for Botanical Medicine Research (TCBMR)
- 3 College of Graduate Studies (CGS)
- 4 Undergraduate Research Center (URC)
- 5 Interdisciplinary Microanalysis and Imaging Center (MIMIC)
- 6 Women in STEM Center (WISTEM)
- 7 Forensic Institute for Research and Education (FIRE)

FACULTY POSTERS

- 100 "IF ONE OF US WOULD GET OFF, THERE WOULD BE ROOM FOR ME": FEMINIST PRESS RHETORIC AGAINST SECTION 213 OF THE 1932 FEDERAL ECONOMY ACT. Jane Marcellus
- 101 AERIAL VEGETATION MONITORING OF RIPARIAN AREAS IN AN URBAN ENVIRONMENT. Jeremy Aber, Whitney Patton, Christopher Wyatt
- 102 WITHDRAWN
- 103 WITHDRAWN
- 104 THE HARPETH RIVER AND STONES RIVER FAULT ZONES ON THE NORTHWEST FLANK OF THE NASHVILLE DOME, CENTRAL TENNESSEE. Mark Abolins, Joe Camacho, Shaunna Young, Mark Trexler, Alex Ward, Matt Cooley, Albert Ogden
- 105 HISTORY OF BUILDINGS AND LABORATORIES FOR CHEMISTRY AT MTSU. Martin V. Stewart
- 106 IMPLEMENTING AUTHENTIC RESEARCH EXPERIENCES INTO FRESHMEN BIOLOGY COURSES THROUGH THE SMALL WORLD INITIATIVE. Drew Sieg, Kim Sadler

UNDERGRADUATE POSTERS

- 200 WALK A MILE IN HER SHOES: SEXUAL ASSAULT ON COLLEGE CAMPUSES. Ashley Bass, Ashley Heath, Abdulhadi Alanazi
- 201 NSA: NATIONAL "SPYING" AGENCY? Alan Goodwin, Avia Hogan, Matthew Marlow
- 202 A CLASS MADE OF GLASS: THE CLASSROOM OF THE FUTURE IS NOW. Tyler Patrick, Krista Stahl, Ashanti Holder

- 203 TO INTUBATE OR NOT TO INTUBATE? EMERGENCY PRE-HOSPITAL INTUBATION. Craig Young, Breia McCray, Rontez Dalton
- 204 BRIDGING THE GENDER GAP IN TECHNOLOGY. Tina Warren
- 205 ASSESSING WHETHER FORAGING RANGE OVERLAP BETWEEN *APIS MELLIFERA* AND *BOMBUS* SPECIES SPREADS PARASITES THAT CONTRIBUTE TO COLONY COLLAPSE DISORDER. Anna Neal
- 206 INVESTIGATION OF LIQUID FILM DURING SPIN-COATING. Andy Black
- 207 ELUCIDATING THE MOLECULAR MECHANISMS THAT CONTROL THE SWITCH BETWEEN REPAIR AND DESTRUCTION AFTER MITOCHONDRIAL DAMAGE. Andrew Nolin, Logan Bowling, Larissa Wolf, Rachel Yates
- 208 COMPLETING THE CIRCLE: DONOR-PI-ACCEPTOR POLYENE DYES WITH AZACYCLOALKYL DONORS. Gabrielle Ashley, Donnan Keith, Andrienne Friedli
- 209 PRINCIPLES OF TELEROBOTICS USING AN ENGINEERED ROBOTIC HAND. Alex Mitthivong, Justin McIntosh
- 210 3D MODELING DESIGN AND DEVELOPMENT PROCESS. Aaron Taylor Kelsey, Joseph Cannella, Zachary Armento, Tiana Stigall, Taylor Carrick, Patrice Porter, Miles Baer, Zachary Armento
- 211 INK INC.: BODY MODIFICATIONS IN THE WORKPLACE. Brooke Griffin, Taylor Shelton, Dominic Bruch
- 212 EXPERIMENTAL REALIZATION OF EXTRAORDINARY ACOUSTIC TRANSMISSION USING HELMHOLTZ RESONATORS. Brian Crow, Jordan Cullen, William McKenzie, Vijay Koju
- 213 FASHION STYLE IN BABY BOOMER WOMEN. Brittany Conatser
- 214 #NOMEANSNO: SEXUAL ASSAULT IN THE MILITARY. Brandon Reed, Ravina Xayvong, Isabella Orozco
- 215 RESEARCH AND DESIGN OF A BETTER, FASTER MOONBUGGY. Boston Weisgerber, Donte Kirk, Ruth Tan, Samuel Rector, Daniel Childers, Jeremy Posey
- 216 MTSU LUNAR ROVER TEAM. Beau Hallavant
- 217 DEFEATING ISIL: THE LEAST BAD OPTION? Brian Flynn, Brad Leininger, Joshua Mitchell
- 218 WITHDRAWN
- 219 USE OF GEOTAGGED TWITTER DATA TO ANALYZE THE SPATIAL DISTRIBUTION OF ROLE PLAYING GAMING IN THE MIDDLE TENNESSEE REGION. Arthur Reed, Jeremy Aber
- 220 WITHDRAWN
- 221 A SYSTEMATIC REVIEW OF THE IMPACT OF LONG-TERM VERSUS SHORT-TERM CONSUMPTION AND SUPPLEMENTATION OF OMEGA-3 FATTY ACIDS ON CARDIOVASCULAR DISEASE. Carrie Hopson

- 222 TRANSPOSABLE RIPARIAN ENCLOSURES. Connor Olson, Gale Beaubien, Mohammad Ali
- 223 FEMINISM COMMUNICATION PROJECT. Cody Lester, Xiaowei Shi
- 224 MODERN-DAY SLAVERY IN AMERICA: A RHETORICAL ANALYSIS OF TINA FRUNDT'S "ENSLAVED IN AMERICA". Chelsea Babin, Faith Costner, Ali Cooper
- 225 MEDIA INFLUENCE: WATTS RIOTS OF 1965. Chelsea Baez-Johnson, Dallas Adams, Darrell Martin, Sam Edwards
- 226 THE EFFECT OF HERBAL EXTRACT USED IN TRADITIONAL CHINESE MEDICINE ON BREAST CANCER CELLS. Christopher Adereti, Justice Adewumi, Arol Zague, Brittne Miles, Daria Covington, Keidra Freshwater, Caleb Walls, James DuPois, Joel Lowry, Tianna Grant, Nicole Walker, Joey Clifton, Josie Lyon, Bryan Overbey, Charlie Brown, Rance Solomon, Dr. Ying Gao
- 227 TO INFINITY AND BEYOND! Christopher Cunningham, Alexis Patrykus
- 228 FROM HOLIDAYS TO THE HOLY LAND: EXPLORING JEWISH IDENTITY IN MIDDLE TENNESSEE. Cheyenne Plott
- 229 GREEN GIRLS: LEARNING OF SCIENCE AND CIVIC ENGAGEMENT. Caleb Hough, Sierra Shipley
- 230 EXHAUST EMISSIONS COMPARISON OF GLYCEROL DERIVED ADDITIVES FOR DIESEL AND BIODIESEL. Christopher Moore, Joseph Close
- 231 THE EFFECT OF SOCIAL VERSUS PERSONAL EXPRESSION ON COMMITMENT TO CAMPUS RECYCLING. Carter Gibson, Krista Wilson
- 232 TEACHING METHODS RESEARCH. John McCaghren
- 233 AUTOMATED EKG DIAGNOSTIC SYSTEM USING NI LabVIEW. Dallas Trahan, Jason Pavlik
- 234 FEATURE EXTRACTION FROM LIDAR POINT CLOUDS USING EVOLUTIONARY COMPUTATION. Evan Snapp, Ian Murray
- 235 WITHDRAWN
- 236 ASSESSMENT OF SOMATIC CELL COUNT, MILK PRODUCTION, AND HYGIENE IN DAIRY COWS HOUSED IN A COMPOST-BEDDED PACK BARN. Emily Grosskreutz, Song Cui, Jessica Carter
- 237 CHLOROFORM EXPOSURE AFFECTS ALTERNATIVE MRNA SPLICING OF UNC-9. Erin Herbstova, Destiny Donald
- 238 THE IMPACT OF TEMPERATURE ON DAIRY PRODUCTION, A REGRESSION APPROACH. Eryn Rogers, Justin Gardner
- 239 TEAM TENNESSEE SOLAR DECATHLON. Elizabeth Kurtz, Team Tennessee
- 240 KNOCKOUT OF THE SNF3 GENE IN *CRYPTOCOCCUS NEOFORMANS*. Gavyn Stys, Erin McClelland
- 241 EFFECTS OF TEMPERATURE ON LIFE HISTORY TRAITS OF MALE *DAPHNIA LUMHOLTZI*. Hunter Morrow, Amanda Fox, Melissa Pompilius, Robert Fischer
- 242 WHITENESS: AN EXAMINATION OF THE CULTURE WITHIN A MIDDLE CLASS NEIGHBORHOOD. Hailey Lawson
- 243 ANALYSIS OF THE EFFICACY OF A HEALTH LITERACY INTERVENTION IN MIDDLE TENNESSEE. Hannah Told
- 244 TEAMWORK: PARTNERING FOR A CANCER FREE TENNESSEE. Jasmine Stevenson, Emily Klingensmith
- 245 TAILGATE ALERT. Jeremy Jackson
- 246 POLITICAL EXHAUST: THE RHETORIC OF BUMPER STICKERS. Joseph Dennis
- 247 "NOTHING TASTES AS GOOD AS SKINNY FEELS." Jennah Wilkes, Whitney Smith, Tayler Webb
- 248 A COMPARISON OF GARBAGE COLLECTED IN TWO LIMITED INCOME COMMUNITIES. Joey O'Dell, Sydney Whitlock
- 249 CRIME RATES IN LATIN AMERICAN COUNTRIES. Jodi Shockney
- 250 DEVELOPMENT OF LIVE CELL MARKERS TO INVESTIGATE HOW THE PATHOGEN, *CRYPTOCOCCUS NEOFORMANS*, ALTERS THE INTRACELLULAR ARCHITECTURE OF MACROPHAGES. Joy Fihosy, Jonathan Bowling, James Hayes, Erin McClelland
- 251 SNOW BIRDS AND REGENCY: AN EXAMINATION OF NEGATIVE AGENCY AND STRUCTURAL POWER IN THE AMERICAN SOUTHWEST. Jessica O'Neill
- 252 THE EFFECTS OF COLOR ON FLAVOR IDENTIFICATION ACCURACY. John Murphy, Brianna Werner
- 253 USING OPTICAL TWEEZERS TO MEASURE THE ELASTICITY OF BREAST CANCER CELLS TREATED WITH TRADITIONAL CHINESE MEDICINE. Josie Lyon
- 254 SYNTHESIS & MICROSTRUCTURAL CHARACTERIZATION OF HIGH ENERGY DENSITY PIEZOELECTRIC CERAMIC COMPOSITIONS. Ryan Daugherty, Vishwas Bedekar
- 255 MULTIMODAL ENERGY HARVESTING. Kayla Cowan, Charles Michael Soto, Anna Moore, Kenneth Cobble, Ethan Miller, Ryan Daugherty
- 256 USING PHOTOMETRY TO CALIBRATE AGGIECAM FOR EXOPLANET SEARCHES. Katelyn Stringer, Ryan Oelkers, Lucas Macri
- 257 CHILD LABOR. Kelsey Beal
- 258 INTRODUCTION TO INTERNAL COMBUSTION ENGINES. Kayla Arthurs, Kristelle Blake, Cody Elliott
- 259 WHAT DOES BCAT DO IN *CRYPTOCOCCUS NEOFORMANS*? Kathryn Brittain
- 260 DETERMINING THE EFFECT OF NEUROINFLAMMATION ON MITOCHONDRIAL QUALITY CONTROL IN PARKINSON'S DISEASE. Larissa Wolf, Jonathan Bowling
- 261 REGULATION OF NF- κ B NUCLEAR TRANSLOCATION BY *CRYPTOCOCCUS NEOFORMANS* CAPSULAR POLYSACCHARIDES. Lauren Heusinkveld, James Hayes, David Nelson, Erin McClelland
- 262 INVESTIGATION OF FECAL BACTERIA AND NUTRIENT LEVELS IN LEES SPRING BRANCH, RUTHERFORD COUNTY, TN. Lara Jarnagin, Euvelisse Jusino-DelValle, An Nguyen, Victoria Kremer, Gale Beaubien, Megan Stallard, Frank Bailey
- 263 THE HINDENBURG DISASTER COVERAGE. Landy Tate, Atlanta Northcutt, Victoria Thompson, Aaron Overton, Rachel Dobbs, Daniel Kriepe
- 264 MOLECULAR EPIDEMIOLOGY OF ERYTHROMYCIN RESISTANCE IN *STREPTOCOCCUS PYOGENES*. Lenzie Howell, Stephen Wright
- 265 FEMINIST CRITIQUE OF THE VIDEO GAME INDUSTRY STARTING FROM MS. PAC-MAN. Manuelle Lempin
- 266 RHETORIC OF THE CREATION MUSEUM. Mitchell Brisbon
- 267 ARTIFACT ANALYSIS OF FEATURES 6 AND 7, MAGNOLIA VALLEY (40RD314), TENNESSEE. Megan Merrick, Tanya Peres
- 268 ARTIFICIAL RIPARIAN CONTAINMENT SYSTEM: BUILD IT THEY'LL COME. Muhammad Ali, Gale Beaubian, Connor Olson
- 269 CONSTRUCTION OF A LIVE CELL MODEL TO SIMULATE THE EFFECTS OF LEWY BODY FORMATION ON INFLAMMATORY SIGNALING PATHWAYS IN PARKINSON'S DISEASE. Martha Fonseca, Alexis Johnson, Olivia Slayton, Taylor Norris, Sarah Ragsdale, Rachel Yates
- 270 FOCUS ON FALLACY: JIM DALY'S "THE DALY FOCUS" VIEWED THROUGH A BURKIAN LENS. Michaela Edwards
- 271 HEALTH LITERACY COMPREHENSION IN RUTHERFORD COUNTY. Michaela Edwards, Stuart Bernstein, Catherine Crooks
- 272 CHEMICAL DEGRADATION BY CHLORINE DIOXIDE. Madison Toney
- 273 RECONSTITUTION OF PRO1 IN *CRYPTOCOCCUS NEOFORMANS*. Martina Ramos, Erin McClelland
- 274 DO YOU WANT TO DIE? PHYSICIAN-ASSISTED SUICIDE. Sarah Monroe, Madison Michael, Stacy Finley
- 275 SYNTHESIS OF BETA-LACTAM ANALOGS OF BELACTOSIN A. Nikita Shokur, Jonathan Byrd, Anuradha Pathiranga
- 276 DELETION OF FOLATE BIOSYNTHESIS GENE, ABZ1, PRODUCES TRANSIENT LIFE-SPAN EXTENSION IN BUDDING YEAST. Nausheen Qureshi
- 277 STOP LYING TO ME! A RHETORICAL ANALYSIS OF JOHANN HARI'S "JUST YOU WAIT UNTIL I GROW UP." Olivia Agostinho, Silas Broden
- 278 CHLOROPLAST LIPID COMPOSITION OF BROWN ALGAE. Katie Press, Jeff Leblond
- 279 SYNTHESIS OF ANTIMICROBIAL COMBINATORIAL PEPTOID LIBRARY TO BE SCREENED AGAINST *E. COLI*. Ashley Corson
- 280 MODELING THE EBOLA EPIDEMIC WITH POPULATION MOBILITY. Samantha Pulido, Chris Murphy, Wyatt Goff, Rachel Leander

- 281 VARYING INSTRUCTIONAL METHODS FOR TEACHING WEIGHT AND BALANCE AND AIRCRAFT PERFORMANCE. Stephanie Arcamuzi
- 282 TOBACCO-FREE CAMPUS INITIATIVE. Sarah Killets, Bryan Killets
- 283 THE IMPACT OF *BIRTH OF A NATION* AND *GONE WITH THE WIND*. Sara Snoddy
- 284 PREHISTORIC COOKING TECHNOLOGY UNCOVERED: ANALYSIS OF A 5,000 YEAR OLD EARTH-OVEN FEATURE FROM RUTHERFORD COUNTY, TENNESSEE. Sara Northcutt, Tanya Peres
- 285 INTERMOLECULAR INTERACTIONS IN MONO-UNSATURATED FATTY ACIDS: AN ATOMS-IN-MOLECULES COMPARISON OF *CIS* AND *TRANS* CONFORMATIONS. Sydney Smith
- 286 THEY WILL NEVER BE BLUE: AN EXAMINATION OF IDENTITY AND PRESERVATION THROUGH CHEROKEE WOMEN OF THE 1820S. Sherry Teal
- 287 UNDERSTANDING THE MONSTER. Shelby Weeks, Shelby Terry, Aeriell Tidd
- 288 IDENTIFICATION OF *CRYPTOCOCCUS NEOFORMANS* VIRULENCE FACTORS BY MEANS OF A *CAENORHABDITIS ELEGANS* KILLING ASSAY. Travis Rush
- 289 THE CLOCK STOPS TODAY: A RHETORICAL ANALYSIS OF KIM SCHOENHALS' "TURN BACK TIME". Al'leta Ector, Shonda Clanton
- 290 DEVELOPMENT OF A LIVE CELL MODEL TO STUDY IMPAIRMENT OF MACROAUTOPHAGY AND MITOPHAGY IN SPORADIC PARKINSON'S DISEASE. Tiara Rainer, Jonathan Bowling, Andrew Nolan, David Nelson
- 291 ANTARES LAUNCH VEHICLE ENVIRONMENTAL IMPACT STUDIES AT NASA GODDARD SPACE FLIGHT CENTER. Tammy Sheppard
- 292 WORKFORCE DEVELOPMENT INTERNSHIP AT NASA. Tammy Sheppard
- 293 THERMAL TOLERANCE OF INVASIVE AND NATIVE *DAPHNIA* SPECIES FROM THE ALABAMA RIVER DELTA. Thuy Huynh, Cara Vielhauer, Melissa Pompilius, Robert Fischer
- 294 ASSESSMENT OF TRADITIONAL CHINESE MEDICINE HERBAL EXTRACT'S POTENTIAL TO INHIBIT HERPES SIMPLEX VIRUS TYPE 1. Trang Huynh
- 295 GEOGRAPHICAL INFORMATION SYSTEMS (GIS) MAPPING AND ANALYSIS OF A HISTORIC AFRICAN AMERICAN COMMUNITY NEAR MURFREESBORO, TENNESSEE. Wm. Matthew Whitten
- 296 INCORPORATION OF TRANSITION METAL CATIONS INTO PBS QDS VIA CATION EXCHANGE. Wayne Tilluck, Amanda Evans, Jason Gurchiek, Clay Minge, Alexander Morris
- 297 ENHANCEMENT OF RAMAN SIGNALS FOR NITROANILINES ADSORBED ONTO GOLD SUBSTRATES. Yvonne Ejorh, Dr. Beng Ooi, Dr. William Ilsley
- 298 AURONE X INHIBITS *CRYPTOCOCCUS NEOFORMANS*. Yusra Mohammed, Danielle Araujo, Erin McClelland
- 299 CROSS COUPLING OF IODO-SUBSTITUTED AURONES. Zachary Taylor, Scott Handy
- 300 EFFECTS OF TEMPERATURE ON *DAPHNIA LUMHOLTZI* LIFE HISTORY TRAITS. Zach Grimes, Samantha Fann, Melissa Pompilius, Bud Fischer
- 301 THE EFFECTS OF REGULARLY PLAYING VIDEO GAMES ON STRESS MANAGEMENT. Allison Helton (high school)
- 302 ACADEMIC SUCCESS IN ECONOMICALLY DISADVANTAGED AND ENGLISH LANGUAGE LEARNER STUDENTS. Lauren Grizzard (high school), Robyn Sharp (high school)
- 303 COLOR IS DECEIVING. Katelyn Walls (high school), Jasmin Laurel (high school)
- 304 PROTOTYPICALITY AND PUNISHMENT. Leigh Stanfield
- 504 CGA - A CONTIG GENERATION ALGORITHM THAT PRODUCES CONTIGS WITH QUALITY SCORES. Awa Sisay
- 505 IDENTIFICATION OF SINGLE NUCLEOTIDE POLYMORPHISM (SNP) MARKERS FOR MUSCLE YIELD AND QUALITY IN RAINBOW TROUT USING RNA SEQ. Ali Ali, Bam Paneru, Rafet Al Tobasei, Mohamed Salem
- 506 HOW EFFECTIVE IS MOTIVATION IN THE RETENTION OF COLLEGE STEM MAJORS? Ameneh Kassaei, Ginger Rowell
- 507 LEAN MANUFACTURING- MTSU TEAM AT NISSAN PLANT. Ane Marie Harb
- 508 THE RELATIONSHIP BETWEEN RUNNING MILEAGE AND PERCEIVED STRESS LEVELS. Angela Fachini, Norman Weatherby
- 509 LONG NON-CODING RNAs (LNCRNAs) ASSOCIATED WITH DISEASE RESISTANCE IN SELECTIVELY BRED CONTROL, SUSCEPTIBLE AND RESISTANT RAINBOW TROUT LINES. Bam Paneru, Rafet Tobasei
- 510 THE EFFECTS OF TECHNOLOGY AND HANDS-ON ACTIVITIES HAVE ON STUDENT UNDERSTANDING AND MOTIVATION IN SCIENCE. Brooke Penrod
- 511 WOMEN'S PARTICIPATION IN A PILL SHARING NETWORK. Cynthia Bass-Thomas, Amber Dorsey
- 512 CORRELATIONS BETWEEN SCHIZOTYPY, TRANSLIMINALITY, PARANORMAL BELIEF AND EXPERIENCE. Christina Miller, William Langston
- 513 MTSU SOLAR BOAT TEAM. Cary Woodson
- 514 PHYSICAL ASPECTS OF DRUMS AND THEIR SONIC IMPLICATIONS. Daudi Fletcher
- 515 LIVING WELL WITH DIABETES EDUCATION. Dorothy Simmons
- 516 THE IMPLEMENTATION OF SAFETY MANAGEMENT SYSTEMS IN MAINTENANCE OPERATIONS. Daniel Siao
- 517 INTEGRATING THE SHELTERED INSTRUCTION OBSERVATION PROTOCOL MODEL. Edward Dillard
- 518 INFLUENCE OF WHOLE BODY VIBRATION ON BONE DENSITY IN THE STALLED HORSE. Emily Hulak, Holly Spooner
- 519 ASSOCIATION BETWEEN OBJECTIVELY MEASURED SEDENTARY TIME AND HEPATIC STEATOSIS AMONG U.S. ADULTS. Heontae Kim, Junbae Mun, James Farnsworth, Brian Ragan, Minsoo Kang
- 520 ELECTROPHYSIOLOGICAL NEURAL BASIS OF THE NOUN/VERB DISTINCTION IN ENGLISH STRESS HOMOGRAPHS. Heechun Moon, Cyrille Magne
- 521 NUMERICAL SIMULATION OF MULTIDIMENSIONAL NONLINEAR REACTION-DIFFUSION SYSTEMS WITH LOCALLY EXTRAPOLATED ETD-LOD SCHEME. Harish Bhatt, Abdul Q. M. Khaliq
- 522 MODULATION OF MACROPHAGE INFLAMMATORY NF-KAPPA B SIGNALING BY INTRACELLULAR *CRYPTOCOCCUS NEOFORMANS*. James Hayes, Lauren Heusinkveld, Rachel Leander, Wandu Ding, David Nelson, Erin McClelland
- 523 DNA METHYLOME ANALYSIS IN IMPROVED RAINBOW TROUT BROODSTOCKS FOR RESISTANCE TO DISEASES AND FAST GROWTH: A PLAN OF STUDY. Jesse Chambers
- 524 DETERMINING CONFORMATION AND GEOMETRY OF SPECIFIC RESIDUES IN A MODEL PEPTIDE BY ¹³C ISOTOPE-EDITED ATR-FTIR IN H₂O. Joseph Combs, Chengshan Wang
- 525 MULTI-GROUP FMRI DATA ANALYSIS USING TENSOR PROBABILISTIC ICA WITH AN OPTIMIZATION BACK-RECONSTRUCTION METHOD. Jingsai Liang
- 526 PILOT STUDY: THE EFFECT OF MUSIC ON INFANTS FROM THE MOTHER'S PERSPECTIVE. Jessica Scruggs
- 527 USING LIVE CELL IMAGING TO MEASURE THE EFFECT OF ALPHA-SYNUCLEIN ACCUMULATION ON MITOCHONDRIAL DYNAMICS AND MITOPHAGY IN PARKINSON'S DISEASE. Jonathan Bowling, David Nelson
- 528 THE EFFECT OF DRY VERSUS SOAKED HAY ON GLYCEMIC RESPONSE IN HORSES. Josie Collins, Rhonda Hoffman, Holly Spooner
- 529 COMPARATIVE ANALYSES OF ADOLESCENT READING COMPREHENSION ASSESSMENTS USING ITEM RESPONSE THEORY

GRADUATE POSTERS

- 500 ENCRYPTION AND DECRYPTION USING CELLULAR AUTOMATA. Stephen Faulkenberry
- 501 AN EXPLORATION OF MUSIC PRODUCTION AND ARTIST DEVELOPMENT IN THE DIGITAL ERA. Andrew Riehle
- 502 CULTURE INTEGRATION IN THE COLLEGE LANGUAGE CLASSROOM: INSTRUCTORS' VIEWS AND STUDENTS' EXPERIENCES. Ahmad Jeddeeni
- 503 THE EFFECT OF EDUCATION ON HEALTH: EVIDENCE FROM TURKEY. Asli Kars, Karen Mulligan

- (IRT) AND CLASSICAL TEST THEORY (CTT). Joanne Coggins, Jennifer Cooper, Jwa Kim
- 530 INVESTIGATING THE LINK BETWEEN UNDERGRADUATE MICROBIOLOGY STUDENTS' CONCEPTUAL UNDERSTANDING OF KEY DISCIPLINARY CONCEPTS AND THEIR SHIFT TOWARD A MORE EXPERT-LIKE PERCEPTION ABOUT BIOLOGY. Jeffery Bonner
- 531 THE ROLE OF THE RTA1 GENE IN THE PATHOGENICITY OF *CRYPTOCOCCUS NEOFORMANS*. Kourtney Kizer
- 532 DEVELOPMENT OF A GENE REGULATION CONCEPT INVENTORY. Katherine Stefanski, Grant Gardner, Rebecca Seipelt-Thiemann
- 533 COMPARISONS OF READABILITY FORMULAS AND TEXT COMPLEXITY MEASURE. Laura Briggs
- 534 EFFECT OF CAFFEINE ON NEAR MAXIMAL BLOOD PRESSURE AND BLOOD PRESSURE RECOVERY IN PHYSICALLY-ACTIVE, COLLEGE-AGED FEMALES. Laura Connahan
- 535 HOW PHYSICAL EDUCATION IMPACTS BEHAVIOR. Lisa Butts
- 536 PHYSICAL ACTIVITY IMPACTS HEALTH AND MEDICAL COST. Marquinta Harvey, Norman Weatherby, Catherine Bass
- 537 GAME-BASED LEARNING'S IMPACT ON MOTIVATION AND PERCEIVED LANGUAGE IMPROVEMENT IN COMPUTER-ASSISTED LANGUAGE LEARNING LABS. Meredith Spencer
- 538 PROSODY SENSITIVITY AND READING SKILLS: EVENT-RELATED BRAIN POTENTIALS AND INDIVIDUAL DIFFERENCES. Melissa Brock, Cara Otte, Heechun Moon, Hershel Eason, Cyrille Magne
- 539 NEW TEACHERS: NAVIGATING THE WORLD OF PLCS. Mary Elizabeth Vest
- 540 CONTRIBUTIONS OF INDIVIDUAL PERFORMANCE ON TEAM PERFORMANCE IN A HIGH FIDELITY FLIGHT OPERATION CENTER. Morgan Pearn, Amanda Beaufore
- 541 THE SURFACE ENHANCEMENT EFFECTS OF SUBSTITUENT GROUPS ON ANILINE DERIVATIVES IN RAMAN SPECTROSCOPY. Maryam Aldoghaim, Ngee Chong
- 542 ADOLESCENT PHYSICAL ACTIVITY OUTCOME EXPECTANCIES: PARENTAL SUPPORT DOES NOT WORK. Mychal Bowling, Norman Weatherby
- 543 MODELING, SIMULATION AND OPTIMIZATION OF PIEZOELECTRIC BIMORPH TRANSDUCER FOR BROADBAND VIBRATION ENERGY HARVESTING. Nan Chen, Vishwas Bedekar
- 544 SUPPLEMENT USE AND PERCEPTIONS: A SURVEY OF U.S. HORSE OWNERS. Nicole Swirsley, Holly Spooner, Rhonda Hoffman
- 545 A REFINED IMPLEMENTATION OF SLICED INVERSE REGRESSION. Ning Zhang
- 546 GENOME-WIDE DISCOVERY OF LONG NON-CODING RNAs IN RAINBOW TROUT AND THEIR POTENTIAL ROLES IN MUSCLE GROWTH AND QUALITY. Rafet Al-Tobasei, Bam Paneru, Mohamed Salem
- 547 INDUSTRY RECOGNIZED CERTIFICATIONS IN DRAFTING AND COMPUTER AIDED DESIGN TECHNOLOGY. Russell White
- 548 USING TPR TO HELP STUDENTS LEARN VOCABULARIES IN JAPANESE LANGUAGE CLASSROOM. Ryoko Fujise
- 549 PASSENGERS' PERCEPTION OF THE SAFETY DEMONSTRATION ON BOARD AN AIRCRAFT. Ratchada Ruenruoy
- 550 HIGH SCHOOL BIOLOGY STUDENT ATTITUDES TOWARD SCIENCE AND CAREER PATH. Rachel Lytle, Kim Sadler, Anthony Farone, Mary Farone, Ginger Rowell
- 551 WHICH GENRES MOTIVATE STUDENTS TO READ INDEPENDENTLY? Rodney Butts
- 552 THE MIXING ENGINEER'S GUIDE TO SURROUND SOUND. Ryan Talbot
- 553 PILOT STUDY: PROFESSIONAL DEVELOPMENT OFFERED TO ELEMENTARY GENERAL MUSIC EDUCATORS IN TENNESSEE. Rebecca Turner
- 554 SYNTHESIS OF METAL NANOPARTICLES SUPPORTED BY GRAPHENE AND THEIR CATALYTIC ACTIVITIES. Rajeh Alotaibi, Sharifah Aleid, Nouf Bedair, Touby Homsombath
- 555 COMPARISON OF THE EMISSIONS OF VARIOUS BIODIESEL FORMULATIONS BY GAS CHROMATOGRAPHY-MASS SPECTROMETRY (GC-MS) AND FOURIER TRANSFORM INFRARED SPECTROMETRY (FTIR). Shruthi Perna, Christopher Moore
- 556 INDIVIDUAL LIFE HISTORY ANALYSIS OF THREE MUSSEL SPECIES: IMPLICATIONS FOR A MUSSEL HEALTH INDEX. Amber Hills, Susan Lanier, David McKinney, Ryan Otter
- 557 OFFSHORE NUCLEAR POWERED WATER DESALINATOR. Stephen Porch
- 558 KNOWLEDGE OF BOUND MORPHEMES AS AN INDICATOR OF MORPHOLOGICAL AWARENESS IN ADULTS. R. Stacy Fields, Tess S. Fotidzis, Victoria Gay, Annette Kent, Melanie Maxwell, Karen Reed, Adam Rollins, Kelli Wallace, Joanne Collins, Dehong Luo, Aleka Blackwell
- 559 GENRE ORIENTED MUSIC PRODUCTION AND MIXING. Truman Lusson
- 560 TIME SEQUENCED CITATION ANALYSIS OF SCIENTIFIC LITERATURE ON ENACTED STIGMA BY HEALTH PERSONNEL WHEN TREATING LGBTQIA PATIENTS. Tara Prairie, Bethany A.E. Wrye, Norman Weatherby, Sharon C. Parente
- 561 MARINE-DERIVED N-3 POLYUNSATURATED FATTY ACIDS AND BODY COMPOSITION: A META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS. Tracy Morris, Amanda Cook, Minsoo Kang, Norman Weatherby
- 562 A COMPREHENSIVE STUDY OF THE FUNDAMENTALS OF MIXING MUSIC. Tyler Spratt
- 563 HIGHLY SENSITIVE BIOSENSORS BASED ON GRATING COUPLED BLOCH SURFACE WAVES. Vijay Koju
- 564 FULLY IMPLICIT RUNGE-KUTTA METHODS FOR MULTI-CHANNEL STIFF STOCHASTIC DIFFERENTIAL SYSTEMS WITH JUMPS. Viktor Reshniak
- 565 PSYCHOMETRIC CALIBRATION OF AN EIGHTH-GRADE READING COMPREHENSION TEST. Weon Kim, Amy Elleman
- 566 SPATIAL MULTITASK LEARNING MODELS AND APPLICATION FOR FUNCTIONAL MAGNETIC RESONANCE DATA. Xin Yang, Qiang Wu, Dong Hong
- 567 IS THERE A RELATIONSHIP BETWEEN AFFECTIVE FACTORS AND SECOND LANGUAGE SPEAKING FLUENCY? Yanan Zeng
- 568 WHAT ARE CHALLENGES ENGLISH-SPEAKERS MEET IN LEARNING TO LISTEN, SPEAK, READ AND WRITE CHINESE? Yanan Zeng
- 569 THE IMPACT OF STUDENTS' ART WORK ON THEIR ENGLISH LANGUAGE LEARNING. Munirah Almuawi
- 570 ARE THERE STATISTICALLY SIGNIFICANT DIFFERENCES IN LANGUAGE USE BETWEEN MOTHERS AND FATHERS DURING CHILD INTERACTION? Adam Rollins
- 571 TRAVELING A THOUSAND MILES: THE ROLE OF EDUCATION DIPLOMACY THROUGH STUDY ABROAD. Emily Tinch, Sheila Watkins

March 23-April 3 – First-place posters will be on exhibition in the Walker Library.

Scholars Week Organizing Committee

Brad Bartel, University Provost
 Charlie Baum, College of Business
 Nancy Caukin, College of Education
 Jackie Eller, Interim Dean of Graduate Studies and Vice Provost for Research
 Michael Fleming, College of Mass Communication
 Saeed Foroudastan, Associate Dean, College of Basic and Applied Sciences
 Andrienne Friedli, College of Basic and Applied Sciences
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 Hilary Miller, College of Liberal Arts
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 Jason Vance, Walker Library