

2014 UNIVERSITY EXPOSITION

Complete schedule of events, abstracts, and other information is FRIDAY, MARCH 21 available at http://www.mtsu.edu/research/scholarsWeek/

Centers, Institutes, and Programs

- Interdisciplinary Microanalysis and Imaging Center (MIMIC)
- 2 **Center for Health and Human Services**
- 3 Master of Science in Professional Science (MSPS)
- 4 Forensic Institute for Research and Education (FIRE)
- 5 Honor's College - Scientia et Humanitas
- 6 Media Studies Program (School of Journalism)
- **Access and Diversity Board**

Faculty Posters

- 100 THE SPATIAL EFFECTS ON THE RATE OF ECONOMIC GROWTH: EVIDENCE FROM SUB-SAHARAN AFRICA. Bichaka Fayissa, Christian Nsiah, Chen Wu
- 101 RESPONSES TO STUDENT ERRORS IN CHINESE AND US MATHEMATICS CLASSROOMS. Rongjin Huang, Teresa Schmidt, **Kyle Prince**
- 102 INFLUENCE OF TEACHING EXPERIENCE ON FACULTY PERCEPTIONS OF ON-LINE & TRADITIONAL COURSES. Becky Alexander, Carol Boraiko, Tim Graeff, Joey Gray, Ryan Otter, Kim Sadler, Karen Petersen, Scott Seipel
- 103 MATHEMATICS AS A FIRSTSTEP TO SUCCESS IN STEM. Tom Cheatham, Donald Nelson, Ginger Holmes Rowell, Chris Stephens, Elaine Bouldin Tenpenny, Jennifer Yantz, Brittany Smith
- 104 MODULES FOR TEACHING STATISTICS WITH PEDAGOGIES USING ACTIVE LEARNING. Ginger Holmes Rowell, Lisa Green, Scott McDaniel, Nancy McCormick, Jeremy Strayer, Natasha Gerstenschlager
- 105 TRADITION, POWER, AND DIALOGUE: A HERMENEUTIC **EXPLORATION OF WORKING-CLASS YOUTH MEDIA IN PALESTINE** AND ISRAEL. Sanjay Asthana
- 106 "IT WAS FUNNY, BUT DISGUSTING" THE IMPACT OF ENTERTAINMENT TELEVISION ON BREASTFEEDING ATTITUDES. Katie Foss, Ken Blake
- 107 WHOLE TRANSCRIPTOME PROFILING OF THE RAINBOW TROUT PINEAL GLAND: RNA-SEQ APPROACH. Mohamed Seda, Jesse Chambers, Mohamed Salem
- 108 CHARACTERIZATION OF RAINBOW TROUT (ONCORHYNCHUS MYKISS) SPLEEN TRANSCRIPTOME AND IDENTIFICATION OF

- IMMUNE-RELATED GENES. Ali Ali, Yniv Palti, Caird E. Rexroad, Jianbo Yao, Gregory Wiens, Gary Thorgaard, Mohamed Salem
- 109 EQUINE EXTRACURRICULAR ACTIVITIES AFFECT STUDENT SUCCESS IN A UNIVERSITY HORSE PROGRAM. Lacey Johnston, Dr. Rhonda Hoffman, Dr. Warren Gill, Anne Brzezicki

Undergraduate Posters

- 200 HOW DOES THE AMINE LIGAND AFFECT NANOPOROUS MATERIAL AFFINITY FOR AN EXPLOSIVES MODEL? Gabrielle Ashley, Ja'be G. Kiri, Andrienne C. Friedli
- 201 A NEW HEMOGLOBIN QUANTITATION TECHNIQUE FOR EFFECTIVE TREATMENT OF SICKLE CELL DISEASE. James Cooper
- 202 WHAT'S WRONG WITH BLACK? Deidre Lattimore, Alexis Williams, Lamekia Steele
- 203 NEEDS ASSESSMENT FOR HEALTH LITERACY IN MIDDLE TENNESSEE. Hailey Lawson, Hannah Todd, Kaitlyn Hawkins
- 204 THE EFFECT OF FAT SUPPLEMENTATION ON GLYCEMIC RESPONSE AND BEHAVIOR IN HORSES. Kendall Martin, Rhonda Hoffman, **Holly Spooner**
- 205 THE EFFECTS OF SULFURIC ACID SCARIFICATION AND SEED COAT REMOVAL IN THE GERMINATION OF MIRACLE BERRIES (SYNSEPALUM DULCIFICUM DANIELL). Carly Schall, Nate Phillip, **Eric Limbird**
- 206 DOES SUGAR HELP YOU RUN? Kelsey Branstetter, Katelen Robertson, Emily Hartshorn, Brian Ridge, Dominique Duncan
- 207 THE EFFECTS OF FEMALES ON MUSCULAR STRENGTH AND ENDURANCE. Zack Brazzell, Lindsey Stevens, Sunny Lavender, Chris Renegar, Justin Judge, Timothy Johnson
- 208 KNEES OF THE TREES AND EYES IN THE SKY. Megan Burnham, **Bridget Carlson, Stephanie Ellis, Constance Graves**
- 209 EFFECTS OF CAFFEINE ON MUSCULAR ENDURANCE IN FEMALE ATHLETES. Jordan Burroughs, Kim Ploof, Kelsie Roberts, Chris Chiarot, Kameron Rory, Ryan Foley
- 210 DOES ACUTE CONSUMPTION OF GLUCOSE EFFECT MUSCLE **ENDURANCE DURING EXERCISE? Hailie Cochran, Andy Hart, Josh** Bustamante, Aaron Davis Jr., Todd Ozment
- 211 DETAILED STUDY OF PB(II)/CD(II) CATION EXCHANGE REACTIONS IN PBS QUANTUM DOTS. Amanda Evans, Alexander Morris, Jason Gurchiek, Wayne Tilluck, Morgan Brewer, Hannah Alsup, Badri Mainali, Clay Mings, Greg Van Patten

- 212 EFFECTS OF CREATINE MONOHYDRATE ON MUSCULAR ENDURANCE AND RPE. Kylie Flowers, Josh Graves, Jessica Odigie, Gabrielle Odeneal, Ginny St. Lawrence
- 213 THEIR EYES WERE WATCHING THE BOONDOCKS. Donovan Holt, Victoria Jones, Darren Collins, Ukyeye Wilt, Rebekah Dawson
- 214 ROLE MODELS MATTER AT THE MTSU EXPANDING YOUR HORIZONS CONFERENCE. Caleb Hough, Sierra Shipley, Lorrie Pruett, Mehreen Fatima
- 215 ""AS IS"": REDESIGN OF AN EXISTING SPACE. Koree Madewell, Marcus Byers, Kaitlyn Daniel, Mary K. Harrell, Paige Jenkins, Molly Norris, Lesley Robinson, Shelby Stone
- 216 SHOW ME HOW TO DO LIKE YOU: AN ANALYSIS OF AUTHOR-CHARACTER PARALLELS IN THE WORKS OF ZORA NEALE HURSTON AND ALICE WALKER. Chloe Madigan, Amy Cheatham, Melody Cook, Katherine Smith
- 217 INCIDENCE AND THERMAL BIOLOGY OF AN INVASIVE CLADOCERAN, *DAPHNIA LUMHOLTZI*. Jessica Marcy-Quay, Jeffrey White, Melissa Pompilius, Robert Fischer
- 218 SYNTHESIS OF PBS QUANTUM DOTS USING THIOACETAMIDE AS A SULFUR SOURCE. Alexander L. Morris, Amanda D. Evans, Jason Gurcheik, Wayne Tilluck, Morgan Brewer, Hannah Alsup, Badri Mainali, Clay Mings, P. Gregory Van Patten
- 219 BURN, BABY, BURN. Mary Powell, Janie Jefferson, Leigh Gardner, Kristen Bezner
- 220 ARE ATTITUDES TOWARD GENETICALLY MODIFIED CROPS IMPACTED BY COLLEGE MAJOR? Cristie Sanborn, Eleanor Ellis, Angela Bowman, Heather Jimenez
- 221 THE EFFECTS OF CARDIORESPIRATORY FITNESS ON VERTICAL JUMP FOLLOWING A STANDARD STRETCHING REGIMENT. Jayda Singleton, Monica Brown, Elizabeth Mikhail, Gary Mitchell, Jauwon Cain
- 222 CONTEMPORARY ISSUES IN SCIENCE: CLASS PROJECTS BY THE HONORS COLLEGE. Alison Taylor, Wesley Alexander, Morgan Murphy, Katherine Stubblefield
- 223 EVALUATION OF SELECTED PLANT EXTRACTS FOR ANTI-HERPES SIMPLEX VIRUS ACTIVITY. Lauren Whaley, Megan House, Matthew Wright, Stephen Wright
- 224 ISOLATION OF BIOACTIVE COMPONENTS FROM PLANTS. Shannon Allen, Chelsea Harmon
- 225 CLIMATE CONTROLLED GREEN HOUSE. Bryan Armstrong
- 226 CHEMICAL AND PHYSICAL CHARACTERISTICS OF SUCRALOSE VERSUS SUCROSE. Otilia Bilauca
- 227 BARIUM OXIDE AS A CATALYST IN BIODIESEL PRODUCTION.
 Angela Blevins
- 228 A COMPUTATIONAL INVESTIGATION WITH CONSIDERATION TO THREE DIMENSIONAL FLOW OVER ROTATING CYLINDRICAL AND SPHEROID BODIES. Brett Bornhoft, Nicodemus Myhre
- 229 THE ART OF DIRECTING. Stephanie Bottum
- 230 THE EFFECTS OF CHLORINE DIOXIDE ON LYSOZYME ACTIVITY. Sharon Branning
- 231 GARDNERELLA VAGINALIS: INFLAMMATORY IMPACT ON AMNIOTIC CELLS AND IMMUNE INTERACTIONS. Matt Brooks
- 232 DETECTION OF ENTAMOEBA GINGIVALIS AND TRICHOMONAS TENAX USING QUANTITATIVE PCR. Cameron Crawford
- 233 SYNTHESIS & MICROSTRUCTURAL CHARACTERIZATION OF HIGH ENERGY DENSITY PIEZOELECTRIC CERAMIC COMPOSITIONS. Ryan Daugherty, Vishwas Bedekar
- 234 MACRO PHOTOGRAPHY. Chanelle Despins
- 235 WORKING MEMORY CAPACITY AND INATTENTIONAL BLINDNESS IN INDIVIDUALS WITH AND WITHOUT DEPRESSION. Jonathan Driver

- 236 ANALYSIS OF NITROANILINE ISOMERS VIA SURFACE ENHANCED RAMAN SPECTROSCOPY (SERS). Yvonne Ejorh, Chelsey Williams-Miles
- 237 ISOLATION OF COMPOUNDS FROM PLANT SOURCES, INCLUDING TRADITIONAL MEDICINES. Yvonne Ejorh, Ariel Stephenson
- 238 ANALYSIS OF HALOGENATED DERIVATIVES OF ANILINE USING SURFACE ENHANCED RAMAN SPECTROSCOPY. Chelsey Williams-Miles
- 239 RADIO FREQUENCY IDENTIFICATION (RFID) DOOR LOCK AND INTRUDER ALERT. Zachary Goforth
- 240 MIDDLE TENNESSEE STATE UNIVERSITY: PRINT MEDIA NEEDS ON CAMPUS. Allison Griffin, Melissa McGuire
- 241 JUPITER'S DECAMETRIC RADIO SOURCES CHANGING OVER TIME.
 John Griffith
- 242 CYCLOPROPYL PEPTIDOMIMETICS AS POTENTIAL HCV NS3
 PROTEASE AND BACE-1 INHIBITORS. Brandon Hazlett, Michael
 Lampley
- 243 FOCUSING AND DAMPING OF FLEXURAL WAVES IN A VARIABLE THICKNESS PLATE. Jonathan Herlan
- 244 ANALYSIS OF ATTITUDES AND BELIEFS OF PREVENTABLE FALLS IN THE ELDERLY. Meredith Holt
- 245 HOW CHILDHOOD UPBRINGING AFFECTS STUDENTS' VIEW ON FAMILIES. Sara Johns, Caroline Busbey
- 246 SOLAR FLARES IN THE RADIO SPECTRUM. Joe Kimball
- 247 A COMPARISON OF REST-PAUSE AND TRADITIONAL RESISTANCE TRAINING ON BENCH PRESS. Steven Kneisel, Jack Singleton
- 248 LITERACY RATES IN PREDOMINANTLY ISLAMIC NATIONS. Kayla McCrary
- 249 INTERIOR DESIGN PERSPECTIVE DRAWINGS. Haifa Mhanna, Kaitlin Styer
- 250 EFFECTS OF A SMART-PHONE APPLICATION ON PSYCHOLOGICAL, PHYSIOLOGICAL, AND PERFORMANCE VARIABLES IN COLLEGE-AGED INDIVIDUALS WHILE RUNNING. Martin Moran, John Coons
- 251 DEVELOPMENT OF A NOVEL FLUORESCENT TOOL FOR PROTEIN SECRETION AND DETECTION, SACCHAROMYCES CEREVISIAE.

 Joseph Mosqueda
- 252 GRATING ENHANCED ELECTROMAGNETIC FIELDS IN PHOTONIC BAND-GAP MULTILAYERS. Daniel Murphy
- 253 THE EFFECTS OF COLOR ON FLAVOR IDENTIFICATION ACCURACY.

 John Murphy, John Pennington
- 254 DYNAMIC BEHAVIOR OF THE POLARIZATION OF JOVIAN RADIO WAVES. Corbin Osborne
- 255 HOW ONLINE COMMUNITIES CAN PRODUCE SOCIAL CAPITAL. Jimmy Peters
- 256 A SYSTEMATIC REVIEW OF THE EFFECT OF CHROMIUM ON FASTING BLOOD GLUCOSE LEVELS IN TYPE 2 DIABETIC PATIENTS. Kanwal Qureshi
- 257 DRUG DISCOVERY: PRIMARY SCREENING OF TRADITIONAL CHINESE MEDICINES FOR ANTI-CANCER ACTIVITY USING HIGH-THROUGHPUT SCREENING. Amy Ridings
- 258 SLEEP QUALITY. Brittany Rimer
- 259 THE EVOLUTION OF DISNEY PRINCESSES. Claire Rodgers
- 260 PROM NIGHT IN MISSISSIPPI: A LOOK INTO THE CONTROVERSY OF INTERRACIAL DATING. Emily Russell
- 261 FORAGE NUTRITIVE VALUES OF THREE GRASS SPECIES AFFECTED BY DAIRY MANURE OR N FERTILIZER. Michelle Shelly, Song Cui
- 262 RESPONSE OF TOMATO SEEDLINGS TO JUGLONE TOXICITY. Michelle Shelly
- 263 INVESTIGATION OF ANTIBIOTIC RESISTANCE IN STREPTOCOCCUS PYOGENES. Logan Smith

- 264 DEVELOPMENT OF A NEW TEST METHOD FOR DETERMINING THE SURFACE INFILTRATION RATE OF PERMEABLE UNIT PAVEMENT SYSTEMS. Michael Smith
- 265 ORGANIZATIONAL COMMUNICATION PEER MENTORING PROGRAM. Rebecca Smith
- 266 THE CHANGE IN PITCH OVER TIME. Seth Smith
- 267 ALTERNATIVE NEW APPROACHES TO EARLY DETECTION AND EFFECTIVE TREATMENTS OF CANCER. Rance Solomon
- 268 S.M.A.R.T MOMS. Jasmine Stevenson
- 269 SYNTHESIS OF AURONES. Zachary Taylor, Scott Handy
- 270 ART PORTFOLIO. Alicia Washer
- 271 THE ASSOCIATION BETWEEN STUDENT WELL-BEING AND STUDENT-TEACHER RELATIONSHIPS. William Feck
- 272 A PETROLOGICAL AND GEOCHEMICAL INVESTIGATION OF TERTIARY TO QUATERNARY MAGMA EVOLUTION IN THE MOUNT HOOD REGION, CASCADE RANGE, NORTH AMERICA. Victoria Worrell
- 273 SYNTHESIS OF PIPERIDINYL DONOR-ACCEPTOR POLYENE DYE.
 Donnan Keith

Performance

- 400 GRACEFUL STORM. StarShield Lortie
- 401 THE WILDS. StarShield Lortie
- 402 BEASTS. David Dial
- 403 FIRST LOOK. Edward Bowen
- 404 GOING DOWN. Patrick Woodruff
- 405 SINS OF THE FATHERS. Jordan Powell
- 406 SUNDAY MORNING AND OTHER THOUGHTS. Joseph Stokes
- 407 THE BIRDMAN. Scotty Wright, Sam Wiley
- 408 THE ONE. Mark Lukas Tallent

Graduate Posters

- 500 3-D PLANT CELL ARCHITECTURE OF ARABIDOPSIS THALIANA
 (BRASSICACEAE) USING FOCUSED ION BEAM-SCANNING
 ELECTRON MICROSCOPY. Bhawana, Joyce Miller, Bruce Cahoon
- 501 RNA-SEQ IDENTIFIES GENETIC MARKERS FOR MUSCLE FAT CONTENT IN RAINBOW TROUT. Fatima Abdouni, Bam Paneru, Imtiyazuddin Mohammed
- 502 IMPROVING ATTITUDES AND SELF-EFFICACY IN A LIFE SCIENCE COURSE FOR PRE-SERVICE TEACHERS. Heather Barker, Cindi Smith-Walters, Thomas Brinthaupt
- 503 SYNTHETIC APPROACH TO ANALOGS OF BELACTOSIN A. Kara Dawson-Cole, Anuradha Pathirinage, Nikita Shokur
- 504 VALIDATING THE SENSEWEAR® ARMBAND AS A MEASURE OF SEDENTARY BEHAVIOR. James Farnsworth, Youngdeok Kim, Minsoo Kang
- 505 ROLES OF LOCAL ADAPTATION AND POLLINATOR SELECTION IN THE MAINTENANCE OF FLOWER COLOR POLYMORPHISM IN LEAVENWORTHIA STYLOSA. Mahaguruge Thilina Fernando, Chris Herlihy, Jeffrey Walck
- 506 MEASUREMENTS OF TEAM COGNITION, TEAM PROCESSES AND PERFORMANCE IN A HIGH-FIDELITY SIMULATION. Amber Fritsch, Morgan Pearn, Evan Lester,
- 507 DYE-DOPED POLYMER THIN FILMS TO TEST NONLINEAR FLUORESCENCE ENHANCEMENT. Peter Haddix, Andrienne Friedli, William Robertson
- 508 COMPARATIVE STUDY OF BETAINE LIPID COMPOSITION OF CHROMERIDS AND RED ALGAE USING ELECTROSPRAY IONIZATION TANDEM MASS SPECTROMETRY. Manoj Khadka, John Carter, Jeffrey Leblond
- 509 IS DOING KNOWING? ELEMENTARY STUDENT VIEWS ABOUT SCIENTIFIC INQUIRY. Jennifer Parrish, Kim Sadler, Stephen Bartos

- 510 AN ANALYSIS OF SECONDARY VOCABULARY INTERVENTION PROGRAMS. Esther Clark, Leticia Skae-Jackson, Sang Hee Jung, Tyra Pickens
- 511 USING THE CORPUS OF CONTEMPORARY AMERICAN ENGLISH TO DEVELOP MORPHOLOGICAL AWARENESS TASKS. Joanne Coggins, Zachary Barnes, Laura Briggs, Sara Hays, Weon Kim, Perry Louden, Heechun Moon, Anne Phillips, Tyra Pickens, Summer Talbert, Deana Wildish
- 512 AMPEROMETRIC DETECTION WITH A DENDRIMER-ENCAPSULATED PLATINUM NANOPARTICLE-CARBON NANOTUBE COMPOSITE.
 Anup Deb, Anita Saha, Shawtik Das, Charles C. Chusuei
- 513 AN EXAMINATION OF BARRIERS TO CONDOM USE AMONG GHANAIANS. Amber Dorsey, Andrew Owusu, Brittney Oliver, Amanda Cole
- 514 THE DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS ON PRINTER TOUCHSCREENS AND KEYBOARDS. Sade Dunn, Melissa Shelby, Fatimah Al Abbass, Fatmah Hani
- 515 INFLUENCE OF RHYTHM AWARENESS ON SINGLE WORD READING.
 Hershel Eason, Michael Pridmore, Nicole Brunas, Cyrille Magne
- 516 OUTCOMES OF TREATMENT FOR SUBSTANCE ABUSE AND CO-OCCURING MENTAL HEALTH CONDITIONS: EVALUATION OF THE MY RECOVERY PROGRAM. Vickie Harden, Greg Lewis, Tammy Holmes, Shelba Hodges, Niki Payne, Chris Wyre, Norman Weatherby
- 517 IN-PERSON VERSUS DVD EXERCISE IN COLLEGE AGE FEMALES. Lauren Killen, John Coons, Vaughn Barry, Cathy Cooper
- 518 A PRELIMINARY ANALYSIS OF GK-12 GRADUATE FELLOW CLASSROOM INTERACTIONS ON SECONDARY STUDENTS' PERCEPTIONS OF SCIENCE. Rachel Lytle, Kim Sadler, Anthony Farone, Mary Farone, Ginger Rowell
- 519 CHARACTERIZATION OF TWO NOVEL BACTERIA INFECTING THE NUCLEUS OF EUKARYOTIC CELLS. Yohannes T. Mehari, Anthony L. Farone, Mary B. Farone, Sharon G. Berk, John H. Gunderson
- 520 MUSIC FOR SENIORS WEB APPLICATION. Ross Mohsenzadeh, Reema Kurani, Keith Tennant, Lee Lester, Nick Miakysh
- 521 RASCH PARTIAL CREDIT MODEL ANALYSIS OF THE BINGE EATING SCALE. Tracy Morris, Amanda Cole, Norman Weatherby, Minsoo Kang
- 522 MARKETING STRATEGY: THE CORPORATE PERSPECTIVE OF CAUSE RELATED MARKETING AND SPORTS SPONSORSHIP. Tyler Finch
- 523 RNA SEQ IDENTIFIES SINGLE NUCLEOTIDE POLYMORPHISM (SNP)
 ASSOCIATED WITH MUSCLE YIELD AND SHEAR FORCE OF FLESH IN
 RAINBOW TROUT. Bam Paneru, Ashlin Harris, Rhett Layman,
 Timothy D. Leeds, Jianbo Yao, Brett Kenney
- 524 STUDY OF DEVELOPMENT AND TREND OF DOUBLE WISHBONE SUSPENSION. Wenbo Dong
- 525 DETERMINATION OF THE CONFORMATION OF SPECIFIC RESIDUES IN A MODEL PEPTIDE BY ¹³C ISOTOPE EDITED ATR-FTIR IN H₂O. Olaa Alharbi, Chengshan Wang
- 526 THE EXAMINATION OF SCHEDULING AND ENGLISH AT ELS. Sattam Alkhuleeb
- 527 IDIOT, INTELLIGENT, ARROGANT OR GOOD? ONE-WORD DESCRIPTIONS OF PRESIDENTIAL CANDIDATES AND SECOND-LEVEL AGENDA SETTING. Aileen Bennett, Jason Reineke
- 528 A NOVEL HIGHER ORDER ETD SCHEME FOR SYSTEM OF COUPLED NONLINEAR SCHRÖDINGER EQUATIONS. Harish Bhatt
- 529 EFFECTIVENESS OF A GUIDED LEARNING TOOL IN AN UNDERGRADUATE MICROBIOLOGY LABORATORY COURSE. Jeffery Bonner, Jeannie M. Stubblefield
- 530 THE RELATIONSHIP BETWEEN DISCOURSE-LEVEL PROSODIC SENSITIVITY AND READING SKILLS: AN ELECTROPHYSIOLOGICAL INVESTIGATION. Melissa Brock

- 531 2-HYDROXYPROPYL-BETA-CYCLODEXTRIN'S POTENTIAL INHIBITORY-LIKE MECHANISM ON LYSOSOMAL ACID SPHINGOMYELINASE. Nicholas Chamberlain
- 532 MODELING AND SIMULATION, OPTIMIZATION OF BIOMORPH FOR VIBRATION ENERGY HARVESTING. Nan Chen, Vishwas Bedekar
- 533 TRIAD IN CHILE: TEACHING, RESEARCH, AND INDUSTRY
 PARTNERSHIPS TO ADVANCE GLOBAL SCIENTIFIC
 UNDERSTANDING THROUGH THE NSF GK-12 PROGRAM. Corbett
 Ouellette, Kim Sadler, Anthony Farone, Mary Farone, Rachel Lytle,
 Nicholas Chamberlain, Eric Vick, Ashley Elliott-Cole, Paola Molina
- 534 ACTIVE SPORT TOURISM: EFFECTS OF AGE AND DISTANCE TRAVELED ON HALF-IRONMAN PARTICIPATION. Jessica Finnerty-Monu
- 535 APPLICATION OF PARALLEL INTERFACING, ROBOTIC VIDEO SURVEILLANCE TOY CAR. Filmon Gebreyesus
- 536 RNA-SEQ ANALYSIS OF THE MAIZE LEAF USING *DE-NOVO* GENOME ASSEMBLIES. Filmon Gebreyesus
- 537 CREATION OF AN ENERGETIC POLYMER 1,2,3-TRIAZOLE FROM ARYL AZIDES. Elsbeth Griffiths, Scott Handy
- 538 THE RELATIONSHIP BETWEEN BULLYING AND SUBSTANCE USE AMONG SENIOR HIGH SCHOOL STUDENTS IN GHANA, WEST-AFRICA. Marquinta Harvey, Andrew Owusu
- 539 BREAKING NEWS: HAS TRADITIONAL MEDIA LOST ITS TOUCH? COLLEGE STUDENTS SPEAK! DeJanel Henry
- 540 Withdrawn
- 541 THE CHALLENGES OF ACQUIRING ENGLISH SPEECH FOR STUDENTS WHO LEARN ENGLISH AS A SECOND LANGUAGE (ESL). Ghaliah Khayyat
- 542 EXTRAORDINARY ACOUSTIC TRANSMISSION MEDIATED BY HELMHOLTZ RESONATORS. Vijay Koju, Ebony Rowe
- 543 CONNECTING WITH THE COMMUNITY: BRIDGING THE GAP BETWEEN SCHOOLS AND ELL PARENTS. Rebecca Kokubun
- 544 RESISTANCE TRAINING RECOVERY: CONSIDERATIONS FOR SINGLE VS. MULTI-JOINT MOVEMENTS AND UPPER VS. LOWER BODY MUSCLES. Adam Korak
- 545 DEVELOPMENT AND INVESTIGATION OF A DUAL-COLOR LUCIFERASE REPORTER IN SACCHAROMYCES CEREVISIAE. Archana Krishnamoorthy
- 546 THE FUTURE OF NANOROBOTICS IN THE MEDICAL FIELD. Scarlett Lanning
- 547 IMPROVING DRIVER EDUCATION. Brittany Leedham, Norman Weatherby
- 548 ABNORMAL FEATURE SELECTION OF CONNECTIONS AMONG BRAIN REGIONS OF AUTISM VIA FMRI. Jingsai Liang
- 549 COUNTY SPECIFIC ELASTICITY OF LABOR DEMAND IN THE UNITED STATES. Abhradeep Maiti, Debarshi Indra
- 550 DOES PARENTING STYLE MATTER FOR LABOR MARKET OUTCOMES? EVIDENCE FROM THE USA. Md. Alauddin Majumder
- 551 LEARNING SIGHT WORDS WITHOUT DRILL OVERKILL: A STUDY OF FIRST GRADE ENGLISH LANGUAGE LEARNERS. Tara McCamey
- 552 SCHOOL READINESS SKILLS: PARENT AND TEACHER PERCEPTIONS.
 Tara Melton
- 553 COMPARISON BETWEEN ARTIFACT REMOVAL METHODS USING ICA ALGORITHM: RUNICA AND SOBI. Heechun Moon, Cyrille Magne
- 554 COLLEGE STUDENTS DO NOT HOLD SEXUAL DOUBLE STANDARDS FOR MEN AND WOMEN. Mary Morrison, Michelle Boyer-Pennington
- 555 CRYPTOGRAPHY VIA CELLULAR AUTOMATA. Daniel Nichols
- 556 INNOVATIVE UNDERGRADUATE RESEARCH AND DEVELOPMENT TO INCREASE RETENTION RATE AT MIDDLE TENNESSEE STATE UNIVERSITY. Jeremy Posey, Saeed Foroudastan

- 557 ELECTRICAL PROPERTIES AND APPLICATIONS OF GRAPHENE.
 Whitley Rau
- 558 EFFECT OF PYRAMIDALIZATION AT NITROGREN IN A SERIES OF DONOR-PI-ACCEPTOR DYES. Matthew Robinson, Andrienne Friedli
- 559 AN EXAMINATION OF UNDERGRADUATE ESL PREPARATION. Shunda Rodgers
- 560 MERIT-BASED SCHOLARSHIPS AND THEIR IMPACT ON COLLEGE MAJOR CHOICE. Dustin Rumbaugh
- 561 DESIGNING A SWITCHED RELUCTANCE MOTOR FOR ELECTRIC MOTORCYCLES. Milton Sager
- 562 UBIQUITIN- AND PROTEASOME-RICH SPHERES FORM IN RESPONSE TO CELLULAR STRESS. Katherine Sampuda
- 563 SEXUAL ESTIMATION USING COMPLETE AND FRAGMENTARY CUBOID BONES. Amber Schmuhl, Hugh Berryman
- 564 THE RELATIONSHIP BETWEEN SELF-TALK AND FLOW EXPERIENCES IN ENDURANCE ATHLETES. Rachel Taylor, Tom Brinthaupt
- 565 MEASURING PRE-KINDERGARTEN CLASSROOM TEACHERS'
 KNOWLEDGE OF STATE STANDARDS THROUGH PROFESSIONAL
 DEVELOPMENT TRAINING. Penny Thompson
- 566 A STUDY OF SAFETY-RELATED PROBLEMS AND HAZARDS WITHIN THE OIL EXTRACTION INDUSTRY. Mevlut Turkyilmaz
- 567 PREDICTING COLLEGE STUDENTS' POSITIVE PSYCHOLOGY ATTRIBUTES WITH DIMENSIONS OF EXECUTIVE FUNCTIONING. Hanni Watson, Seth Marshall
- 568 IDENTIFICATION OF ANCIENT GREEK PAPYRUS FRAGMENTS USING GENETIC SEQUENCE ALIGNMENT ALGORITHMS. Alex Williams
- 569 THE APPLICATION OF MULTI-TASK LEARNING INTO FMRI. Xin Yang, Qiang Wu
- 570 POOR PERFORMANCE IN ENGLISH OF INTERNATIONAL STUDENTS IN THE UNITED STATES. Ream Ziyad
- 571 ASSOCIATION OF OBJECTIVELY MEASURED SEDENTARY BEHAVIOR WITH OBESITY IN US ADULTS. Junbae Mun, Youngdeok Kim, James Farnsworth, Minsoo Kang
- 572 TRANSCRIPTOME_WIDE DETECTION OF TISSUE_SPECIFIC ALTERNATIVE SPLICING IN RAINBOW TROUT. Rafet Al-Tobasei
- 573 3D PRINTING BODY PARTS: AN OVERVIEW OF HOW ADDITIVE MANUFACTURING IS SHAPING TISSUE ENGINEERING. Grant Cross
- 574 M1 AMINOPEPTIDASES: AN ANALYSIS OF PHYLOGENY AND FUNCTION. Karen Maynard, Shannon Smith
- 575 MTSU'S MASTERS OF SCIENCE IN PROFESSIONAL SCIENCE PROGRAM CONTINUES TO EXPAND WITH THE SUCCESS OF THE ENGINEERING MANAGEMENT AND GEOSCIENCES CONCENTRATIONS. Brigette Prater Thompson

Scholars Week Organizing Committee

Michael Allen, Dean of Graduate Studies and Vice Provost for Research
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