

Welcome to 30th Undergraduate Symposium!

This day of presentations of scholarly research and creative activities by our undergraduate students is a signature event at Eastern Michigan University and, for its host, the College of Arts and Sciences. The Undergraduate Symposium represents the culmination of a selection process for outstanding students and their projects; the presentations and posters exemplify the highest academic standards in the work of our student presenters and their faculty mentors.

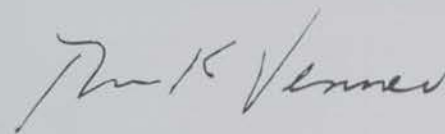
EMU's Undergraduate Symposium, now in its 30th year, is one of the oldest in the country. Ron Collins, the late provost and professor of chemistry, conceived the idea of presenting undergraduate student research to the University community, which was supported by then president John Porter. The event started with a handful of students and faculty mentors from the College of Arts and Sciences. All presidents and provosts since have supported the Undergraduate Symposium and have acted to enhance its stature.

We will see the participation of well over 300 students and almost 200 faculty members in this year's Symposium. Additionally, friends and donors of EMU now support research by 29 Symposium Undergraduate Fellows. I urge you to explore the extraordinary breadth and depth of scholarly and creative engagement that our students have achieved under the expert mentoring of our faculty; the results of the synergy of teaching and learning are evident throughout this year's Symposium program.

Many faculty and staff worked hard toward making the Undergraduate Symposium a success. I gratefully acknowledge the efforts of the volunteer Symposium Planning Committee from across campus, Chair Dennis Beagen, Event Coordinator Wendy Kivi and the staff of the College of Arts and Sciences' Office of the Dean.

The faculty sponsors of the student presenters are the scholarly and creative core of the Symposium. They deserve special recognition for their volunteer efforts. I also want to recognize the families of the students, the many sponsors and guests who provided essential support for this event and who are committed to the success of our students in their academic pursuits.

Congratulations to you, the students, who are presenting today.



Thomas K. Venner, Dean
College of Arts and Sciences



TABLE OF CONTENTS

Schedule of Events

Oral Sessions

ORAL ABSTRACTS

College of Arts and Sciences

Department of African American Studies
Department of Art
Department of Chemistry
Department of Communication, Media & Theatre Arts
Department of Computer Science
Department of Economics
Department of English Language and Literature
Department of Geology and Geography
Department of History and Philosophy
Department of Mathematics
Department of Music and Dance
Department of Physics and Astronomy
Department of Political Science
Department of Psychology
Department of Sociology, Anthropology and Criminology
Department of Women's and Gender Studies
Department of World Languages

College of Business

Department of Management
Department of Marketing

College of Education

Department of Special Education
Department of Teacher Education

College of Health and Human Services

School of Health Promotion and Human Performance
School of Nursing
School of Social Work

College of Technology

School of Technology Studies

POSTER ABSTRACTS

College of Arts and Sciences

Department of Art
Department of Biology
Department of Chemistry
Department of Communication, Media & Theatre Arts
Department of English Language and Literature
Department of Geology and Geography
Department of History and Philosophy
Department of Physics and Astronomy
Department of Psychology

College of Education

Department of Special Education

College of Health and Human Services

School of Health Promotion and Human Performance
School of Health Sciences
School of Social Work

College of Technology

School of Engineering Technology
School of Technology Studies

CAS

COB

COE

CHHS

COT

CAS

COE

CHHS

COT

Our appreciation is extended to the following Eastern Michigan University offices and individuals who contribute annually to the success of the event:

Chris Bramer and Charles Szczygiel, graphic design students, Art
Amy Clark Bearinger, Susan Anderson, JillAnne Bauer and Kate Ballentine
John Cooper, Steve Martin and students of Communication, Media & Theatre Arts
Steve Dotson, Leslie Rzeznik and the CAS technology support staff
Gayle Green and students of University Honors College
Augustine Ikeji and Pam Moore, Computer Science
Paul Lehman, Music and Dance
Paul Majeske and students of Technology Studies
University Catering and Dining Services staff
Event Planning staff at the EMU Student Center
Marketing and Communications staff
Public Safety and Parking

We extend a special thank you to Steinway Piano Gallery of Detroit for their support to provide a Steinway piano for student performances.

Schedule of events

Session A oral presentations 8:30 - 9:45 a.m.

Second floor auditorium, student art gallery and room 204
Third floor rooms 300, 301, 302, 304, 320, 330, 350, 352 and Kiva

Group 1 poster presentations 8:30 - 10:15 a.m.

Room 310 A/B

Session B oral presentations 10 - 11:15 a.m.

Second floor auditorium, student art gallery and room 204
Third floor rooms 300, 301, 302, 304, 320, 330, 350, 352 and Kiva

Group 2 poster presentations 10:45 a.m. to 12:30 p.m.

Room 310 A/B

Session C oral presentations 11:30 a.m. to 12:45 p.m.

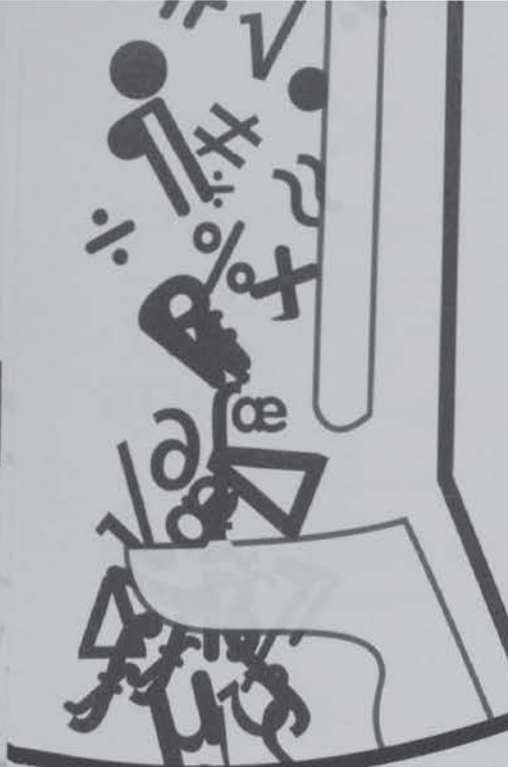
Second floor auditorium, student art gallery and room 204
Third floor rooms 300, 301, 302, 304, 320, 330, 350, 352 and Kiva

Symposium luncheon 1 - 2:30 p.m.

Ballroom

Keynote speaker: Dave Coverly
"Speed Bump" Cartoonist
EMU and Symposium Alumnus

Student emcee: Amanda Van Dort
Health Promotion and Human Performance



SESSIONS

SESSION A

Room 204

Moderator: Tsai-Shan Shen

- 1 8:30 a.m. Sarah Peterhans
Professor Giri Jagaratnam, sponsor
Managing Guest Expectations in Luxury Hotels
Technology Studies

- 2 8:45 a.m. Jon Maravelias
Professor Liza Cerroni-Long, sponsor
Study Abroad Dynamics: Anthropological Perspectives
Sociology, Anthropology and Criminology

- 3 9:00 a.m. William Zurenko
Professor John McCurdy, sponsor
Fanhood and Manhood: The Development of Male Identity within the Cult of Fandom of Professional Football
History and Philosophy

- 4 9:15 a.m. Erin Accomando
Professor John Cooper, sponsor
The New Auteurs: 20th Century Theory/ 21st Century Application
Communication, Media & Theatre Arts

- 5 9:30 a.m. Hannah Marie Zinn
Professor Tsai-Shan Shen, sponsor
Courtesy Wave on the Negative Perceptions of Road Rage Incidents
Communication, Media & Theatre Arts

Auditorium

Moderator: John Dorsey

- 6 8:30 a.m. Kristen Tranchida
Professor Julie Stone, sponsor
Women in Music: Contributions of Female Composers
Music and Dance

- 7 8:45 a.m. Adrienne Clark
Professor Joel Schoenhals, sponsor
A Contest between the Head and Heart: Beethoven's 27th Piano Sonata op. 90, in e-minor
Music and Dance

- 8 9:00 a.m. Jonathan Edwards
Professor Nelson Amos, sponsor
Prelude and Fugue (BWV 998)
by Johann Sebastian Bach
Music and Dance
- 9 9:15 a.m. Bailey Ahles and Stephanie Havenstein
Professor Joanna McNamara, sponsor
Dance Compositions
Music and Dance
- 10 9:30 a.m. Emma Grabarczyk, Valerie Street
and LaMario Carson
Professor Joanna McNamara, sponsor
Dance Compositions
Music and Dance

Student Art Gallery
Moderator: Chris Mayda

- 11 8:30 a.m. Lois Vasquez
Professor Chris Mayda, sponsor
**Go Green: Sustainability and the Eastern Michigan
University Curriculum**
Geography and Geology
- 12 8:45 a.m. Patrick Thomas Davis
Professor Kemper Moreland, sponsor
**A City of Ypsilanti Job Training Program:
A Cost-Benefit Analysis**
Economics
- 13 9:00 a.m. Timothy Everett
Professor David Crary, sponsor
**Modeling the Impact of Supply Shocks
on a Macroeconomy**
Economics
- 14 9:15 a.m. Luke Sprinkle
Professor Barbara Foster, sponsor
Networking through Professional Organizations
Management
- 15 9:30 a.m. Rebecca Sprague
Professor Christine Day, sponsor
**Lights, Camera, Action Incentives
(Hollywood in Michigan)**
Management

Room 300
Moderator: Sheila Sasser

- 16 8:30 a.m. Stephanie Thom, Allison Penney
and Monica Herman
Professor Sheila Sasser, sponsor
Bump-Its
Marketing
- 17 8:45 a.m. Nathan Lewis Buelow, Christina Stein
and Rebecca Smith
Professor Sheila Sasser, sponsor
**How to Mainstream the Use of
Non-alcoholic Beer in America**
Marketing
- 18 9:00 a.m. Michelle L. Hletko
Professor Sheila Sasser, sponsor
**State Farm Renters Insurance Integrated Marketing
Campaign: It's Fast, It's Easy and It's Affordable!**
Marketing
- 19 9:15 a.m. Grant James and Anna Podsiadlo
Professor Shiri Vivek, sponsor
Community Music Academy at EMU
Marketing
- 20 9:30 a.m. David Austin Gomez
Professor Elisabeth Däumer, sponsor
**The Media after 9/11: How They Interpret Honesty and
Freedom of Speech in the New National Security State**
English Language and Literature

Room 301
Moderator: Christine Clark

- 21 8:30 a.m. Christie Ann Girard, Mariano Ezequiel Marks
and Benjamin Michael Milkovich
Professor Ernest Behringer, sponsor
**Understanding Quantum Physics with a Classical
Device Visualizing Atomic Behavior with Springs**
Physics and Astronomy

- 22 8:45 a.m. Naseem Rayyan, Richard Roe and Audelia Wittbrodt
Professor Ernest Behringer, sponsor
Using Masses and Springs to Simulate Quantum Mechanical Behavior
Physics and Astronomy
- 23 9:00 a.m. Riley Ellis
Professor James Carroll, sponsor
Using a Residual Gas Analyzer in a Plasma
Physics and Astronomy
- 24 9:15 a.m. Tonia Fernandez
Professor Christine Clark, sponsor
Analysis of Feldspar for (OH)⁻ using ATR/FTIR Spectroscopy
Geography and Geology
- 25 9:30 a.m. Jacob Richardson
Professor Christine Clark, sponsor
Infrared Spectroscopy of Niobium-tantalum Oxides
Geography and Geology

Room 302

Moderator: Mary Margaret Sweeten

- 26 8:30 a.m. Meghan Kristine Stimmel
Professor Stewart Tubbs, sponsor
Disruptive Behavior and Miscommunication in Healthcare Settings
Management
- 27 8:45 a.m. Heather McCurdy
Professor Heidi Dejninger, sponsor
What Nursing Intervention Improves Self-care Capabilities in Patients with Liver Cirrhosis?
Nursing
- 28 9:00 a.m. Kristin R. Neville
Professor Barry Pyle, sponsor
The Insanity Defense: A Comparative Analysis
Political Science
- 29 9:15 a.m. Deana Maureen Patterson
Professor Mary Margaret Sweeten, sponsor
Conditioning Anyone? Hair? Body? Oh Yes, That's Right ... The Mind
Teacher Education

- 30 9:30 a.m. Barbara Lynne Markell
Professor Mary Margaret Sweeten, sponsor
Small Business in America: Economics in Your World
Teacher Education

Room 304

Moderator: Geoff Hammill

- 31 8:30 a.m. Jill Cusumano
Professor Martha Baiyee, sponsor
Do You See What I See?
Teacher Education
- 32 8:45 a.m. Katelin Bonk
Professor Gary Evans, sponsor
Leadership in Film
Communication, Media & Theatre Arts
- 33 9:00 a.m. Alexandra Stoddart, Greg Owen and Ashley Bartley
Professor Daniel Seely, sponsor
Morphology and Slang in Society
English Language and Literature
- 34 9:15 a.m. Marie L. Miller
Professors Solange Simoes and Suzanne Gray, sponsors
Sexual Harassment Education: Future Offenders or Future Role Models?
Women's and Gender Studies
- 35 9:30 a.m. Kristin Davenport, Abigayil Hannah Kooy and Alexis Michelle Sebastian
Professor Natalie Dove, sponsor
The True Nature of the Relationship between Self-Esteem and Aggression
Psychology

Room 320

Moderator: Ann Orr

- 36 8:30 a.m. Erin Marie Kanouse
Professor Derrick Fries, sponsor
Expanding Recreational Activities to the Blind and Visually Impaired
Special Education

- 37 8:45 a.m. Megan Pidgeon
Professor Alicia Li, sponsor
Math Learning Sets for Students with Severe Visual Impairments
Special Education
- 38 9:00 a.m. Kate Dirks
Professor Linda Williams, sponsor
Bibliotherapy for the Inclusive Classroom
Teacher Education
- 39 9:15 a.m. Leandra Edwards
Professor Ann Orr, sponsor
Silence Isn't Always Golden: Augmentative/Alternative Communication for Steven
Special Education
- 40 9:30 a.m. Nicholas Estep
Professor William Sverdlik, sponsor
TREADS: Third Time's the Charm
Computer Science

Room 330
Moderator: Robert Duke

- 41 8:30 a.m. Paul Larry
Professor Robert Duke, sponsor
The Value of Peanut Products during World War II
History and Philosophy
- 42 8:45 a.m. Kevin Thomas Kretschmer
Professor Walter Moss, sponsor
The Fate of Reason in 20th Century Philosophy and Social Theory: The Dialectic of the Frankfurt School
History and Philosophy
- 43 9:00 a.m. Kellie Lois Cohoon
Professor Robert Duke, sponsor
The Cheeses of Britain and Their Wartime Survival
History and Philosophy
- 44 9:15 a.m. Sarah Anne Brigham
Professor Joseph Engwenyu, sponsor
Ugandan Coffee in Depression, War and Post-war Boom, 1930s-50s
History and Philosophy

- 45 9:30 a.m. Aaron Luedtke
Professor Robert Duke, sponsor
Food for the Taking
History and Philosophy

Room 350
Moderator: Heather Neff

- 46 8:30 a.m. Heather M. Dziurka
Professor Caroline Gould, sponsor
The Historic, Yet Tragic Impact of Media on Body Image for Women and Girls
Teacher Education
- 47 8:45 a.m. Cherie Perez Edmonds
Professor Sheila Most, sponsor
What Happy Ending? The Celestial Maiden and Why Her Ending is Bittersweet
English Language and Literature
- 48 9:00 a.m. Chelsee Harris
Professor Abby Coykendall, sponsor
The Gothic Female: Twilight of Change
English Language and Literature
- 49 9:15 a.m. Anthony Duane Gillum
Professor Heather Neff, sponsor
Painting the Patriarchal Self-Portrait: Objectified Women from Vermeer's Attic to Casablanca
English Language and Literature
- 50 9:30 a.m. Marybeth Kinnell
Professor Heather Neff, sponsor
Female Sexuality in *The Lover*, *Fortune's Rocks* and *Girl with a Pearl Earring*
English Language and Literature

Room 352
Moderator: Shel Levine

- 51 8:30 a.m. Alisha Adleman
Professor Lori Parks, sponsor
Brain Gym®: Cognitive Stimulation for the Developing Mind
Special Education

- 52 8:45 a.m. Daniel Cichoracki
Professor Brigid Beaubien, sponsor
Brain Development in Early Childhood, From Birth to Age Three
Teacher Education
- 53 9:00 a.m. Annie W. Robbins
Professor Michael Williams, sponsor
The Mechanism by which Cranberries Prevent Urinary Tract Infections (UTIs)
Nursing
- 54 9:15 a.m. Zachary J. Maino
Professor Stephen McGregor, sponsor
The Comparison of Running Mechanics between Highly Trained Endurance Athletes and Collegiate Runners
Health Promotion and Human Performance
- 55 9:30 a.m. Jasmyne Small
Professor Shel Levine, sponsor
Rezulin: The Miracle Pill?
Health Promotion and Human Performance
- Kiva
Moderator: Jeff Duncan
- 56 8:30 a.m. Sean Elliott O'Donohue
Professor Jeff Duncan, sponsor
Bartleby at the Pearly Gates
English Language and Literature
- 57 8:45 a.m. Lindsay Joy Anderson
Professor Christine Hume, sponsor
The Bear: A Portrait of My Father
English Language and Literature
- 58 9:00 a.m. Amy Rose Sasinowski
Professors Suzanne Gray and Solange Simoes, sponsors
Seeing, Believing and Becoming: The Influences and Content of Children's Literature
Women's and Gender Studies

- 59 9:15 a.m. Rachael Anne Bancroft, Sean Elliott O'Donohue, Robert, Andrew Bolog, Karlton Lee Dardio, Andrew Maureen Fick, Matthew Ryan Koester, Andrew Philip Mosquera, Caroline Aubrey Tipton and Sarah Tompkins
Professor Jeff Duncan, sponsor
Poetry Ensemble: Variations on a Poem from Whitman
English Language and Literature

SESSION B

Room 204
Moderator: William Sverdlik

- 60 10:00 a.m. Scott Michael Loper
Professor Michael Zeiger, sponsor
Rootkits: A Closer Look
Computer Science
- 61 10:15 a.m. Garret Paul Johnson
Professor Michael Zeiger, sponsor
Wireless Security: Cracking WEP
Computer Science
- 62 10:30 a.m. Alexander Christian Quenon
Professor Suchindran Maniccam, sponsor
Opinion Formation among Heterogeneous Players
Computer Science
- 63 10:45 a.m. Brian Johnson, Nicholas Handran and Nathan Thomas Mentley
Professor William Sverdlik, sponsor
An Operating System from Scratch
Computer Science
- 64 11:00 a.m. Karl Schuttler
Professor Skip Lawver, sponsor
Hacking Voice Over IP (VoIP): Is Your Corporate Phone System Secure?
Technology Studies

Auditorium

Moderator: John Dorsey

- 65 10:00 a.m. Dustin Douglas Miller
Professor Jeremy Hopgood, sponsor
**Theatrical Sound Design and Engineering:
Angels in America**
Communication, Media & Theatre Arts
- 66 10:15 a.m. Kelly Renee Garland
Professor Roberta Justice, sponsor
Music Therapy and Cancer: A Personal Journey
Music and Dance
- 67 10:30 a.m. Lindy Brown
Professors Roberta Justice and John Dorsey, sponsors
**Traditional African Instruments and Uses in
Music Therapy**
Music and Dance
- 68 10:45 a.m. Anthony David-Joseph Marchese
Professor Diane Winder, sponsor
**Concerto No. 1 in A Minor, Op. 33 by
Camille Saint-Saens: Performance Solutions**
Music and Dance
- 69 11:00 a.m. Sarah Christine Hamilton
Professor Gary Pedersen, sponsor
**Dynamic Patterns in Beethoven's
Piano Sonata Op. 2, No. 3**
Music and Dance

Student Art Gallery

Moderator: Ken Stevens

- 70 10:00 a.m. Kendra N. Jaynes
Professor Shel Levine, sponsor
Depression among Diabetic Children
Health Promotion and Human Performance
- 71 10:15 a.m. Sherstin Celeste Harrison
Professor Sandra Nelson, sponsor
**Mental Illness During Pregnancy:
Considerations for Treatment**
Nursing

- 72 10:30 a.m. Charles Jabour
Professor Ken Stevens, sponsor
**A Tree Called Hope: The Role of the Arts in
the Revitalization of Harlem**
Communication, Media & Theatre Arts

- 73 10:45 a.m. Amanda Ann Beck
Professor Pam Cardell, sponsor
Arts and Entertainment in Our Community
Communication, Media & Theatre Arts

- 74 11:00 a.m. Chelsea Sarah Kotula
and Katherine McKenna
Professor Susan Booth, sponsor
CanArt: Academic Service-Learning in the Arts
Communication, Media & Theatre Arts

Room 300

Moderator: Sheila Sasser

- 75 10:00 a.m. Teresa Whitaker and Christian Gerlitz
Professor Sheila Sasser, sponsor
**Advertising Agency and Campaign:
Small Steps in the Right Direction**
Marketing
- 76 10:15 a.m. Shaun Welchko
Professor Christopher Robbins, sponsor
**Bert and Ernie Visit the Golden Arches: PBS Kids,
Corporate Sponsorship and Branding**
Teacher Education
- 77 10:30 a.m. Katherine L. Sessoms, Joy S. Rabideau
and Kathleen Gibbons
Professors Sheila Sasser and Sam Fullerton, sponsors
**Proud to be an Eagle: Marketing Idol
EMU Basketball Campaign**
Marketing
- 78 10:45 a.m. Leeza Moser, Holly Grunn
and Alexandre Duscio
Professor Sheila Sasser, sponsor
**Men's and Women's Basketball 2009-10
Marketing Proposal**
Marketing

79 11:00 a.m. Kyle Cogswell and Emily A. Smith
Professors Sheila Sasser and Sam Fullerton, sponsors
EMU Men's and Women's Basketball Marketing Plan
Marketing

Room 301
Moderator: Bradley Ensor

80 10:00 a.m. Colin Lewis MacLeod
Professor Bradley Ensor, sponsor
An Analysis of Chipped Stone Artifacts from a
Prehistoric Site in Wayne County
Sociology, Anthropology and Criminology

81 10:15 a.m. Sarah Tehranipour
Professor Bradley Ensor, sponsor
Site 20WN1099: Archival Research on Land Use and
Change at a 19th Century Farmstead
Sociology, Anthropology and Criminology

82 10:30 a.m. Laura Torok and Richard Chapman
Professor Bradley Ensor, sponsor
Archaeological Investigations at a 19th Century
Farmstead in Southeast Michigan
Sociology, Anthropology and Criminology

83 10:45 a.m. Louis Lello
Professor Maria Milletti, sponsor
Computational Investigation of an aza-Cope
Mannich Reaction
Chemistry

84 11:00 a.m. Melissa Cordes
Professor Hedeel Guy Evans, sponsor
Catalytic Mechanism of Dihydroorotase
Chemistry

Room 302
Moderator: Marilyn Wedenoja

85 10:00 a.m. Mitchell P. Radelt, Sr.
Professor Julie Slack, sponsor
A Self-efficacy Study of Level III Nursing Students in
Teaching Health Promotion to Children
Nursing

86 10:15 a.m. Kristina Schaefer
Professor Marilyn Wedenoja, sponsor
Using Daily Behavior Report Cards as an Intervention
in Primary School Students with ADHD
Social Work

87 10:30 a.m. Shalyn D. Yandura and Ashley Krawczyk
Professor Marita Baiyee, sponsor
Meeting the Individual Needs of All Children: A Look
at an Assessment in Early Childhood
Teacher Education

88 10:45 a.m. Allen John Marry
Professor Mary Margaret Sweeten, sponsor
Sex Will Change Your Life: A Unit on Sexuality
Education for 9th Grade Health Students
Teacher Education

89 11:00 a.m. Jacqueline Elyse Pruder
Professor John Palladino, sponsor
Using Research-based Intervention Strategies in a
Full-inclusion Setting
Special Education

Room 304
Moderator: Lee Stille

90 10:00 a.m. Kasey Leigh Everly
Professor Jeff Duncan, sponsor
What is a Suburbanite? And How Would Hector
St. John de Crevecoeur Say It?
English Language and Literature

91 10:15 a.m. Angi Becker
Professor Abby Coykendall, sponsor
Interrogations of the Heteronormative in Isak
Dinesen's "The Monkey"
English Language and Literature

92 10:30 a.m. Austin M. Tracy
Professor Lee Stille, sponsor
The Theatrics of Feet: The Importance of Walking in
Noh and Kabuki Theatre
Communication, Media & Theatre Arts

- 93 10:45 a.m. Brian Keough
Professor Natasa Kovacevic, sponsor
Finding Intention in the Absurdity of Daniil Kharms
English Language and Literature
- 94 11:00 a.m. Doug Crandall
Professor Craig Dionne, sponsor
"Lascivious Goth": Tamora's Sexual Power and Gender in Titus Andronicus
English Language and Literature

Room 320

Moderator: Dennis Patrick

- 95 10:00 a.m. Michele Ruth Alvarez
Professor Karen Carney, sponsor
Students with Disabilities: Can Canines Make a Difference in Academic Achievement?
Special Education
- 96 10:15 a.m. Deborah Chung
Professor Derrick Fries, sponsor
High School Dropouts? The Impact of Michigan Merit Curriculum Reform on Special Education Students
Special Education
- 97 10:30 a.m. Antonio Rafael Cosme
Professor Jeffrey Bernstein, sponsor
Civic Engagement: Chronicling Higher Education Advocacy and Student Action
Political Science
- 98 10:45 a.m. Kristen Cater
Professor Larry Kolopajlo, sponsor
e-volving Student Learning in Chemistry via the Flip Video Camera
Chemistry
- 99 11:00 a.m. Alexis Alexander
Professor Dennis Patrick, sponsor
An Exploratory Investigation of EMU Youth Who have Aged Out of the Foster Care System
Communication, Media & Theatre Arts

Room 330

Moderator: Sayuri Kubota

- 100 10:00 a.m. Daniel Gutman
Professor Kathleen Stacey, sponsor
Stereotyping in Situation Comedies
Communication, Media & Theatre Arts
- 101 10:15 a.m. Mark Altman
Professor Margrit Zinggeler, sponsor
The Use of Sexual Imagery in German Advertisements Versus in the U.S. and Its Ethical and Moral Implications
World Languages
- 102 10:30 a.m. Paul Kimball Fales
Professor Sayuri Kubota, sponsor
Hikikomori: Japanese Youth and Social Withdrawal
World Languages
- 103 10:45 a.m. Alexander Gordon Nelson
Professor Sayuri Kubota, sponsor
Keigo: Japanese Polite Language Today
World Languages
- 104 11:00 a.m. Justin Jacobs
Professor Jo Ann Aebersold, sponsor
Diacritics: Purpose, Meaning and Use Evolving through Time
World Languages

Room 350

Moderator: Barry Pyle

- 105 10:30 a.m. Cynthia Bedrosian
Professors Barry Pyle and Richard Stähler-Sholk, sponsors
Social Movements and Democratization in Latin America
Political Science
- 106 10:00 a.m. Rachel Renee Newland
Professor Alfonso Illingworth-Rico, sponsor
Mexican Literature and the Feminist Viewpoint: Comparing the Works of Elena Garro and Rosario Castellanos
World Languages

- 107 10:15 a.m. Danielle Renee Patterson
Professor Alfonso Illingworth-Rico, sponsor
A Study of the Immigration Boom in Spain
World Languages
- 108 10:45 a.m. Eden McPherson
Professor Victor Okafor, sponsor
Gender and Economic Development in Post-colonial Africa
African American Studies
- 109 11:00 a.m. Madison Elizabeth Pelt
Professor Victor Okafor, sponsor
Modern Africa
African American Studies
- Room 352
Moderator: Lolita Cummings Carson
- 110 10:00 a.m. Gaber Burnik
Professor John Curran, sponsor
The Speed of Gossip in Social Networks
Mathematics
- 111 10:15 a.m. Allison Penney, Stephanie Thom,
Sarah Craig, Michelle L. Hletko
and Amanda Luthanen
Professor Elizabeth Edwards, sponsor
The Effects of Social Network Sites on Eastern Michigan University Students
Marketing
- 112 10:30 a.m. Cherese Elizabeth Colston
Professor Lolita Cummings Carson, sponsor
Social Media in Business: Innovative Ideas and Outcomes
English Language and Literature
- 113 10:45 a.m. Kelly Robinson and Douglas Brown
Professor Frank Fedel, sponsor
Lecture Capture Systems (LCS): A Real Solution for Today's Student
Health Promotion and Human Performance

- 114 11:00 a.m. Sandra Jones and Mackenzie Gilmore
Professor Frank Fedel, sponsor
Unlimited Opportunities in a World of Information: Successful Students = Successful Universities
Health Promotion and Human Performance
- Kiva
Moderator: Lori Burlingame
- 115 10:00 a.m. Jasmine Appolonia Zweifler
Professor Lori Burlingame, sponsor
Leaving Home: The Native American Vision of Home in Louise Erdrich's *Love Medicine*
English Language and Literature
- 116 10:15 a.m. Jason G. Storey
Professor Robert Duke, sponsor
Feeding Freedom
History and Philosophy
- 117 10:30 a.m. Michael K. Hegarty
Professor Steven Ramold, sponsor
Attorney at War: William Speed and the 24th Michigan
History and Philosophy
- 118 10:45 a.m. Stephen Lund
Professor Joellen Vinyard, sponsor
Michigan State Normal College at War: "Education is War Work in a Democracy"
History and Philosophy
- 119 11:00 a.m. Lucy Elizabeth Carnaghi
Professor Charles Cunningham, sponsor
Poems in Memorium of Mark Kidd
English Language and Literature

SESSION C

Auditorium

Moderator: John Dorsey

- 120 11:30 a.m. Jeffrey R. Grant
Professor John Dorsey, sponsor
Caméléon for Solo Marimba by Eric Sammut
Music and Dance
- 121 11:45 a.m. Samuel Joshua
Professor Gary Pedersen, sponsor
Nikolai Kapustin: Concert Etude Op. 40, No. 6
Music and Dance
- 122 Noon Vanessa Nicole Gilbreath
Professor Kimberly Cole, sponsor
Russell Riepe: Three Studies on Flight for Unaccompanied Clarinet
Music and Dance
- 123 12:15 p.m. Erin Lanigan, Meghan Grau,
Matthew Konopacki, Daniel Dyer,
Sarah Engmark and Tyler Knauf
Professor Robert Peavler, sponsor
Songs of Hope: Rethinking the Standard Voice Recital
Music and Dance

Student Art Gallery

Moderator: Katie Ballentine

- 124 11:30 a.m. Justin Frahm
Professor Patrick Koehn, sponsor
Reaching into Interstellar Space: Voyager 1 and 2
Physics and Astronomy
- 125 11:45 a.m. Shannon Colleen Bourke
Professor Joseph Lowry, sponsor
Visualizing Standing Waves in Musical Instruments
Physics and Astronomy
- 126 Noon Donald Hamilton Ellison
Professor Patrick Koehn, sponsor
EMU Radio Astronomy: Reaching Out with Interferometry
Physics and Astronomy

- 127 12:15 p.m. Riley Ellis
Professor Jay Ramanathan, sponsor
Primes and the Conjectures of Giuga and Agoh
Mathematics
- 128 12:30 p.m. Chantelle Lonsdale
Professor Thomas Kovacs, sponsor
Correlation between the Saharan Aerosol Layer and the Progression of Tropical Wave Development
Geography and Geology

Room 300

Moderator: Raymond Rosenfeld

- 129 11:30 a.m. Mary Colleen Casey
Professor Raymond Rosenfeld, sponsor
Uninsured in America: An Evaluation of the Baucus White Paper Solutions
Political Science
- 130 11:45 a.m. Gerald Kevin Paulovich
Professor Raymond Rosenfeld, sponsor
Tort Reform as a Component of Health Policy Reform
Political Science
- 131 Noon Muayad Fayez Mahmoud
Professor Raymond Rosenfeld, sponsor
Illegal Immigrants and Healthcare Reform
Political Science
- 132 12:15 p.m. Anita R. Brauckmuller
Professor Frank Fedel, sponsor
WIMPi: Whiteboard+Information Management+Panopto+i>Clicker = Student Retention, Engagement and Learning
Health Promotion and Human Performance
- 133 12:30 p.m. Jacqueline Marie Ellis
Professor Tony Moreno, sponsor
Comparison of Stride Technique and Injury Rate among Intercollegiate Runners
Health Promotion and Human Performance

Room 301

Moderator: Ernest Behringer

- 134 11:30 a.m. Greg Abernathy
Professor Cory Emal, sponsor
Gallate-containing Compounds and Their Role in PAI-1 Inhibition
Chemistry
- 135 11:45 a.m. Jacob Richardson
Professor Christine Clark, sponsor
Volcanoes on Mars: Evolution of a Large Vent Field
Geography and Geology
- 136 Noon Robieh A. Bou-Fakreddine,
Nickolas Alan Miller
and Kyle Steven Zachrich
Professor Ernest Behringer, sponsor
Simulating Two-state Atomic Transitions
Visualizing the Quantum World
Physics and Astronomy
- 137 12:15 p.m. Louis Lello, John Motley McKinnon
and Marian L. Mayville
Professor Ernest Behringer, sponsor
Manipulating Coupled Pendula to Visualize the Behavior of Quantum Mechanical Systems
Physics and Astronomy

Room 302

Moderator: Mark Wenzel

- 138 11:30 a.m. Kwablah Kuma Gordon
Professor Mark Whitters, sponsor
The Willie Lynch Letter
History and Philosophy
- 139 11:45 a.m. Brandon Mitchell
Professor Mark Wenzel, sponsor
On the Liberation of the Subject (Woman)
History and Philosophy
- 140 Noon Chelsea Carter
Professor Mark Wenzel, sponsor
Prostitution: Issues of Morality in Radical Feminism
History and Philosophy

- 141 12:15 p.m. Aissa Laouan Wandarama
Professor Victor Okafor, sponsor
A Partial Democracy Leans toward Authoritarianism: Will the Military Intervene?
African American Studies

- 142 12:30 p.m. Paul Felix Umlauf
Professor Alfonso Illingworth-Rico, sponsor
The Literature of the Pinochet Regime
World Languages

Room 304

Moderator: Margaret Crouch

- 143 11:30 a.m. Erin Christine Stratos
Professor Robin Lucy, sponsor
Words Mean Things: An Exploration of Language in Toni Morrison's *Song of Solomon*
English Language and Literature
- 144 11:45 a.m. Justin Petro, Kent Tucker, Megan Smith
and Erin Casey
Professor Daniel Seely, sponsor
The Language of Humor: A Linguistic Analysis
English Language and Literature
- 145 Noon Fatemeh Abdollahi
Professor Daniel Seely, sponsor
Language Attitudes: Possible Correlations between Educational Focus and Judgments
English Language and Literature
- 146 12:15 p.m. Tricia Anne Saab
Professor Charles Cunningham, sponsor
War in Modern Country Music
English Language and Literature
- 147 12:30 p.m. Alex Reed Upham
Professor Margaret Crouch, sponsor
Genre in Film
History and Philosophy

Room 320

Moderator: Robert Orrange

- 148 11:30 a.m. Scott C. Opfermann
Professor Joellen Vinyard, sponsor
**Religion, Reconstruction and Rationale:
Michigan Teachers in the Post-Civil War South**
History and Philosophy
- 149 11:45 a.m. Kristina Renee Ruthven
Professor Elizabeth Ament-Pudloski, sponsor
The Connections Artists Make
Art
- 150 Noon John Kenneth Lindstedt
Professor Dennis Delprato, sponsor
Forgetting: More Than Just Sitting There?
Psychology
- 151 12:15 p.m. Eric Leo
Professors Robert Orrange and Ron Westrum, sponsors
**Pluralistic Ignorance: The Effects of Media
Consumption on the American Public's
Perception of War**
Sociology, Anthropology and Criminology
- 152 12:30 p.m. Jennifer Nitz
Professor Mary Margaret Sweeten, sponsor
**The Renaissance: A Unit Designed for
a Multi-cultural Classroom**
Teacher Education

Room 330

Moderator: Gary Evans

- 153 11:30 a.m. Jon Maravelias
Professor Denise Reiling, sponsor
**LSD Therapy: Irrational, Sensational and
Possibly a Cure**
Sociology, Anthropology and Criminology

- 154 11:45 a.m. David Benjamin Rogers, Amanda Luthanen,
Renee Szewczyk and Jordan Stothers
Professor Sheila Sasser, sponsor
Study Abroad: The Spanish Experience
Marketing
- 155 Noon Li Li
Professor Robert Twells, sponsor
**Globalization of the NBA - From U.S.
to International Market**
Marketing
- 156 12:15 p.m. Danielle Marie Sebranek
Professor Genevieve Peden, sponsor
Les Français: A Culture Study
World Languages
- 157 12:30 p.m. Cynthia S. Klement
Professor Gary Evans, sponsor
Intercultural Competence for the Nutritionist
Communication, Media & Theatre Arts

Room 350

Moderator: Ron Delph

- 158 11:30 a.m. Colleen Anne Marquis
Professor Ron Delph, sponsor
**Unlocking the Secrets of Pagan Wisdom and the Occult
in the Renaissance**
History and Philosophy
- 159 11:45 a.m. Jon Tropf
Professor Ron Delph, sponsor
Pope Clement VII and the Sack of Rome
History and Philosophy
- 160 Noon Matthew Thomas Silvis
Professor Robert Duke, sponsor
Egoism or Sound Tactics?
History and Philosophy
- 161 12:15 p.m. Brittany Lynne Mrozek
Professor Geoffrey Voght, sponsor
**Muslims Caught in the Quest for Catholic Unity in the
Golden Age of Spain**
World Languages

162 12:30 p.m. Matthew Morin
Professor Margrit Zinggeler, sponsor
**The Effects of the Black Plague in Europe during
the Middle Ages**
World Languages

Room 352
Moderator: Ed Sidlow

163 11:30 a.m. Kimberly Ann Zavicar
Professor Mary Ann Watson, sponsor
**What is a Picture Worth? A Documentary of
Women Portrayed in Advertising**
Communication, Media & Theatre Arts

164 11:45 a.m. Mark Anthony Wheeler
Professor Betty Brown-Chappell, sponsor
**Stereotypes: Ageism, Racism and Sexism's Effects on
the 2008 Presidential Election and Our Citizens**
Social Work

165 Noon Mark David Ferrall
Professor Nina David, sponsor
**An Evaluation of Michigan's Regional
Planning Legislation**
Geography and Geology

166 12:15 p.m. Katherine Rogers
Professor Nina David, sponsor
How do Elected Officials Determine the Public Interest?
Geography and Geology

167 12:30 p.m. Michael James Harris
Professor Ed Sidlow, sponsor
**Human Capital through Single Payer Healthcare:
Investment or Expense?**
Political Science

Kiva
Moderator: Sheila Most

168 11:30 a.m. Lindsay Joy Anderson
Professor Alexandra Norton, sponsor
**More Than Just a Love Story: Gender Issues in
Wuthering Heights**
English Language and Literature

169 11:45 a.m. Jasmine Appolonia Zweifler
Professor Joseph Csicsila, sponsor
Girl Talk: The Feminine Voice in Cooper and Twain
English Language and Literature

170 Noon Mariel Hamson
Professor Sheila Most, sponsor
**"The Origin of Love": (Super)queering Plato's
Symposium in a Modern-day Rock-Opera**
English Language and Literature

171 12:15 p.m. Sr. Maria Fatima Nunes
Professor Sheila Most, sponsor
**Move Over Cinderella: Ella and Edna have
Something to Say!**
English Language and Literature



COLLEGE OF ARTS AND SCIENCES

Department of African American Studies

Aissa Laouan Wandarama

Professor Victor Okafor, sponsor

A Partial Democracy Leans toward Authoritarianism: Will the Military Intervene?

Every country's political system is shaped by its history and ongoing events. Successions of juntas as well as civilian governments were the foundation of Niger's regime. Affected by a weak economic and financial system as well as poverty, corruption, lack of grassroots education, resources, etc., Niger is on the verge of political instability. The legitimacy of the current government is in doubt. I will explore the political background of Niger as well as the major events that shaped its political system. I will also compare Niger's regime with those of West African countries in order to find similarities and differences. Is Niger's political system still a democracy or is it leaning toward an authoritarian system?

Session C – Number 141 – Room 302.

Eden McPherson

Professor Victor Okafor, sponsor

Gender and Economic Development in Post-colonial Africa

I will explore the impact of economic underdevelopment on women in Africa, specifically focusing on the post-colonial period in Sub-Saharan Africa. The economic and sociocultural aspects of women's lives in Africa have been negatively affected in a variety of ways by post-colonial independence, the policies of the World Bank, IMF, and WTO, and rapid globalization and modernization. I will use examples from several African nations to describe influences and consequences, particularly emphasizing the role of women in rural and urban economies. I will summarize attempts to improve the situation of women in Africa by governmental and non-governmental organizations, as well as grass roots women's movements, and the prospects for Africa's future development with regard to gender.

Session B – Number 108 – Room 350.

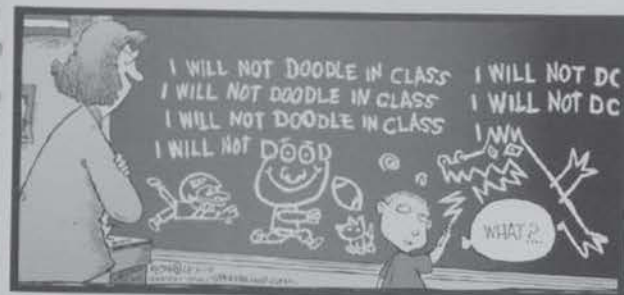
Madison Elizabeth Pelt

Professor Victor Okafor, sponsor

Modern Africa

It is important that the entire world be made aware of, acknowledge and understand the history, current issues and prospects of development in Africa. It is then that we possess the ability to positively contribute our efforts to assist in ensuring the future and welfare of all people of the African continent. The further development of Africa should focus on growth, change, transformation, empowerment, and the strong ability and potential of Africans to sustain their development progress.

Session B – Number 109 – Room 350.



ORAL ABSTRACTS

Department of Art

Kristina Renee Ruthven

Professor Elizabeth Ament-Pudloski, sponsor

The Connections Artists Make

This unit plan can be implemented in an art classroom and is based on the concept of using an enduring idea, or theme, to teach about art history and art making techniques. Enduring ideas are complex, as are human ideas and issues that relate to the lives of students. This unit focuses on the connections that artists make in their work, including connections to their traditions, environment, society and movements within the art world. As students create their own art about the personal connections in their lives, they learn lessons about life and thus demonstrate art's relevance when communicating about the most complex and vital aspects of life.

Session C – Number 149 – Room 320.

Department of Chemistry

Greg Abernathy

Professor Cory Emal, sponsor

Gallate-containing Compounds and Their Role in PAI-1 Inhibition

Over-expression of the serine protease inhibitor PAI-1 has been linked to health conditions such as sepsis, myocardial infarction, cancer, atherosclerosis and type-2 diabetes. It is believed that selective inhibitors of PAI-1 will aid in the treatment of these conditions. From initial tests of PAI-1 inhibition, a number of gallate-containing compounds have been observed as potent inhibitors of PAI-1. The synthesis and implications of gallate derivatives as PAI-1 inhibitors will be discussed.

Session C – Number 134 – Room 301.

Kristen Cater

Professor Larry Kolopajlo, sponsor

e-volving Student Learning in Chemistry via the Flip Video Camera

Although several studies have questioned the efficacy of using technology to promote content learning in the science classroom, using technology in the chemistry classroom can make the subject more interesting to students and can influence student learning in a positive way. This presentation will explore the use of the flip video camera to create safety and prelab videos for the general chemistry laboratory. The advantages and disadvantages of using this technology will be compared and contrasted.

Session B – Number 98 – Room 320.

Melissa Cordes

Professor Hedeel Guy Evans, sponsor

Catalytic Mechanism of Dihydroorotase

Dihydroorotase catalyzes the interconversion of dihydroorotate and carbamoyl aspartate in pyrimidine biosynthesis. Quantum mechanics suggests that Asp305 participates in proton transfer. Solvent isotope exchange studies were conducted and showed that the rate of the enzyme catalyzed reaction was significantly slower when water was replaced by D₂O. The ratio of the velocity in water to that in D₂O was found to be 2.2, in good agreement with the ratio of 1.8 predicted by the postulated mechanism.

Session B – Number 84 – Room 301.

Louis Lello

Professor Maria Milletti, sponsor

Computational Investigation of an aza-Cope Mannich Reaction

Density Functional methods are used to model the tandem aza-Cope rearrangement – Mannich cyclization reaction leading to substituted acylpyrrolidines. The ultimate goal is to determine optimum reaction conditions that maximize stereoselectivity, as the synthesis of a single stereoisomer is typically more desirable for chemical and medical applications. The relative stability of reactants, intermediates and products is calculated for four differently-substituted acylpyrrolidines. In addition, activation barriers for each step of the reaction are calculated. The results are used to identify the preferred size and electronic character of substituents.

Session B – Number 83 – Room 301.

Department of Communication, Media & Theatre Arts

Erin Accomando

Professor John Cooper, sponsor

The New Auteurs: 20th Century Theory/21st Century Application

The auteur theory of critical analysis has evolved from film to television studies. As the content of electronic media has matured, the nature of production has shifted as well. This paper analyzes the change in the concepts of "media authorship" as television has changed from a sit-down appointment experience to one that embraces media consumption via a number of presentation platforms.

Session A – Number 4 – Room 204.

Alexis Alexander

Professor Dennis Patrick, sponsor

An Exploratory Investigation of EMU Youth Who have Aged Out of the Foster Care System

Every year there are a number of youth in Michigan and across the country who age out of the foster care system without a permanent placement and who are forced to live independently. Despite the challenges they face, some of these youth successfully transition to college, but they often lack the resources and support systems that are typically in place for other students. This study is an exploratory investigation of EMU students who have aged out of the foster care system, with a focus on their past and present experiences. Recommendations for change are made based on interviews with these students.

Session B – Number 99 – Room 320.

Amanda Ann Beck

Professor Pam Cardell, sponsor

Arts and Entertainment in Our Community

Whether for education, inspiration, art or entertainment, creativity plays dozens of different roles in our society. To many, arts and entertainment is the very essence of culture and the heart and soul of their communities. Others may argue that there is little proof to document this claim. This assessment, using gathered qualitative research, should provide evidence about the specific positive outcomes arts and entertainment has on our community.

Session B – Number 73 – Student Art Gallery.

Katelin Bonk

Professor Gary Evans, sponsor

Leadership in Film

It is hypothesized that students learn better with visual support and more up-to-date examples. This project focuses on the utility of films as a way of teaching students concepts related to the study of leadership. Both award-winning movies as well as popular mainstream movies are analyzed. It is predicted that students will better understand and be able to apply course material when films are used as an instructional method.

Session A – Number 32 – Room 304.

Daniel Gutman

Professor Kathleen Stacey, sponsor

Stereotyping in Situation Comedies

This presentation examines stereotypes presented in situation comedies. It highlights the increasing role that stereotypes play in the creation of humor within this genre during prime time and the groups that tend to be the primary targets.

Session B – Number 100 – Room 330.

Charles Jabour

Professor Ken Stevens, sponsor

A Tree Called Hope: The Role of the Arts in the Revitalization of Harlem

Harlem was once the setting for an era of artistic abundance that we now refer to as the Harlem Renaissance. Today's perception of the community, however, is distorted by high rates of crime and poverty. Fortunately, recent efforts toward revitalization have included a focus on the community's abundant cultural history. This research uses Harlem as a model for advocating the arts as an instrumental public policy. By evaluating the artistic and cultural assets of Harlem's past and the present, arts policy and investment will emerge as an innovative solution that addresses current issues such as employment, healthcare, education, public safety and economic stimulus.

Session B – Number 72 – Student Art Gallery.

Cynthia S. Klement

Professor Gary Evans, sponsor

Intercultural Competence for the Nutritionist

Diversity training for healthcare professionals is essential in order to provide patients with culture-specific strategies that allow them to succeed with their health program. Nutritionists are faced with the challenge of understanding the dietary preferences of their cross-cultural patients, as well as appreciating a patient's religious beliefs regarding dietary selections to identify foods that will or won't support a prescribed nutritional program. Knowledge of intercultural nonverbal and verbal behaviors is becoming increasingly necessary, as is who ultimately makes medical decisions for the patient.

Session C – Number 157 – Room 330.

Chelsea Sarah Kotula and Katherine McKenna

Professor Susan Booth, sponsor

CanArt: Academic Service-Learning in the Arts

AMPLifying the Arts is an annual two-day, campus wide arts festival created by the arts management and administration program. CanArt, introduced in 2008, has been an integral element in making the festival not only rewarding for the campus, but to the students behind it all. The 2009 CanArt project grew by over 100% this fall and became a major marketing and development tool, as well as a fundraiser. CanArt also provided valuable experiences in leadership, business partnership, student collaboration and community outreach. Students were successfully able to utilize academic service-learning to better understand the field of arts management and administration.

Session B – Number 74 – Student Art Gallery.

Dustin Douglas Miller

Professor Jeremy Hopgood, sponsor

Theatrical Sound Design and Engineering: *Angels in America*

The Pulitzer prize-winning plays *Angels in America Part 1 (Millennium Approaches)* and *Part 2 (Perestroika)* demand strong attention to both the technical and performance aspects of theatre. The plays span over six-and-one-half hours with breath-taking visuals and technical feats. For the 2009 EMU Theatre production of these shows over 400 sound cues were created in collaboration with composer R. Mackenzie Lewis to design a rich soundscape for these two epic pieces. This presentation examines and demonstrates the process of using a digital audio workstation for creating and compiling sound cues for the stage.

Session B – Number 65 – Auditorium.

Austin M. Tracy

Professor Lee Stille, sponsor

The Theatrics of Feet: The Importance of Walking in Noh and Kabuki Theatre

While Western theatre tends to de-emphasize the significance of walking, Eastern traditions of theatre, such as Noh and Kabuki theatre, hold walking in high regard. Japanese Noh theatre is actually known as the "Art of Walking." This presentation examines how and why feet and foot placement carry such privilege in Eastern theatre conventions and how such knowledge can prove invaluable to Western theatre practice.

Session B – Number 92 – Room 304.

Kimberly Ann Zavicar

Professor Mary Ann Watson, sponsor

What is a Picture Worth? A Documentary of Women Portrayed in Advertising

Advertising uses powerful techniques to persuade people to buy products. Many advertisers intentionally cause consumer insecurity that can supposedly be cured by the advertised product. Other techniques involve attention-getting sexual content to reach consumers. For this documentary, advertisers, psychologists, professors and consumers were interviewed to find out what they thought about advertising techniques, with a specific focus on the advertising world's portrayal of women.

Session C – Number 163 – Room 352.

Hannah Marie Zinn

Professor Tsai-Shan Shen, sponsor

Courtesy Wave on the Negative Perceptions of Road Rage Incidents

Although there are beliefs about who is most often committing aggressive driving behaviors and why, Lupton (2002) suggests all drivers are incipient "road ragers" and have a potential for losing control of their emotions while driving. Furthermore, people generally understand the precarious emotional state that stressful urban life often produces (Lupton, 2002). The cognitive dissonance generated by the "other" mentality and the isolated driving environment can be addressed using the dissonance-attribution model of interpersonal forgiveness (Takau, 2006). It is hypothesized that a motion that establishes apology and regret may elicit empathy and patience on the roadways.

Session A – Number 5 – Room 204.

Department of Computer Science

Nicholas Estep

Professor William Sverdlik, sponsor

TREADS: Third Time's the Charm

TREADS (Text Readers and Summarizer) is a Web-based computer program that automatically summarizes Web pages or user supplied files. It was originally designed for individuals with reading disabilities, but may be useful to anyone wishing to summarize large volumes of text. Work this year has focused on the user interface and output design. We anticipate human subjects testing of TREADS shortly.

Session A – Number 40 – Room 320.

Brian Johnson, Nicholas Handran and Nathan Thomas Mentley

Professor William Sverdlik, sponsor

An Operating System from Scratch

An operating system provides the interface between end-users and computing hardware. Examples include Windows, OS X and Linux. In this project, we implement a simple operating system from scratch. To date, we have implemented a simple multitasking environment. In the future we anticipate adding such features as graphical user interface (GUI), network protocols and virtual memory.

Session B – Number 63 – Room 204.

Garret Paul Johnson

Professor Michael Zeiger, sponsor

Wireless Security: Cracking WEP

Wireless Internet is everywhere. One of the most popular methods of securing these wireless signals is called WEP, and this method has several severe security flaws. WEP, an acronym for Wired Equivalent Privacy, was a method first debuted with 802.11/a. Its initial intent was to provide a secure path for users to transfer data securely via wireless communication. It is now known for its ability, or really inability, to keep people from connecting to a wireless access point. The objective of my presentation is to convey the inherent weakness of this outdated security method. I provide a step-by-step breakdown, as well as tools necessary to properly crack a WEP-secured access point.

Session B – Number 61 – Room 204.

Scott Michael Loper

Professor Michael Zeiger, sponsor

Rootkits: A Closer Look

In 2006, Sony/BMG Records had a class action lawsuit filed against them because of software that some CD titles installed to curb piracy. The filed copy protection used was called XCP that protects the CD by installing a piece of software called a rootkit that changes the way that the operating system works. Since there is a prefix the rootkit uses to hide that the piece of software is running, the program can run the check to see if the CD is being used in an appropriate context. Unfortunately, there is a downside to this rootkit. Machines whose security is compromised by the rootkit can have spyware exploit that vulnerability.

Session B – Number 60 – Room 204.

Alexander Christian Quenon

Professor Suchindran Maniccam, sponsor

Opinion Formation among Heterogeneous Players

Opinion formation is a dynamic process that occurs in many social and economic systems. In many systems the opinion of some players count more or less than the opinion of others. Different players have varying levels of influence that affect the formation of opinion among the population. Here we study the opinion formation among such heterogeneous players. The study is based on computer modeling and simulation.

Session B – Number 62 – Room 204.

Department of Economics

Patrick Thomas Davis

Professor Kemper Moreland, sponsor

A City of Ypsilanti Job Training Program: A Cost-Benefit Analysis

Southeastern Michigan has suffered from a high rate of unemployment for several years caused primarily by layoffs by the large auto companies. Job training programs may be a partial solution to the struggles of so many people from this area. Using cost-benefit techniques, this project evaluates a fictitious program centered in the city of Ypsilanti to train entry-level office workers in the hope that they will obtain and retain such positions.

Session A – Number 12 – Student Art Gallery.

Timothy Everett

Professor David Crary, sponsor

Modeling the Impact of Supply Shocks on a Macroeconomy

This project explores the impact of supply shocks, such as oil price changes, and how they impact a country's economy as a whole. It considers various methods to analyze supply shocks, with particular attention to the development and criticism of a simulation and calibration methodology. Calibrated simulations are most often associated with Real Business Cycle (RBC) analysis, and the RBC methods of simulation and model construction supply much of the basis of this project. However, this project uses the RBC methods to model the impact of exogenous supply shocks.

Session A – Number 13 – Student Art Gallery.

Department of English Language and Literature

Fatemeh Abdollahi

Professor Daniel Seely, sponsor

Language Attitudes: Possible Correlations between Educational Focus and Judgments

The study of language attitudes (positive, negative or neutral judgments about language use) has become increasingly important as globalization brings us into frequent contact with other speech varieties. This presentation looks at whether language attitudes vary between linguistics students with experience studying languages and dialects and non-linguistics students. Linguistics and non-linguistics students listened to recordings from different dialects and rated each dialect on features of status and attractiveness. The results were analyzed to determine if any significant difference exists between the groups on the basis of language attitudes and stereotyping.

Session C – Number 145 – Room 304.

Lindsay Joy Anderson

Professor Christine Hume, sponsor

The Bear: A Portrait of My Father

This creative writing project's purpose was two-fold: first, to re-imagine existing nonfiction text and language in a new context by blending and contrasting it with my original writing, and second, to create a revealing portrait of my father through both this nonfiction language and my own. I chose to create this portrait of my father using – in part – nonfiction texts about bears. The nonfiction texts and my own writing work together to push beyond the typical information and language of biography and memoir to create a narrative that blurs the lines between history, memory, fact, fantasy, and the distinction between human and animal.

Session A – Number 57 – Kiva.

Lindsay Joy Anderson

Professor Alexandra Norton, sponsor

More Than Just a Love Story: Gender Issues in *Wuthering Heights*

Emily Bronte's *Wuthering Heights* is often reflected, particularly in film, as an epic love story. Though Heathcliff and Catherine's love is undeniably central to Bronte's novel, woven within their love story are complicated portrayals of relevant issues, issues that reach across time to remain relevant today. Bronte also deftly reflects in the story a glimpse into the complicated gender constraints imposed on the novel's female characters. But this presentation's main focus is on the true genius of both the novel and the author: the way Bronte creates a stunning glimpse as well into gender constraints on the male characters of *Wuthering Heights*, the factors that cause these constraints, and the resulting powerlessness of these individuals.

Session C – Number 168 – Kiva.

Rachael Anne Bancroft, Sean Elliott O'Donohue, Robert Andrew Bolog, Karlton Lee Dardio, Andrew Maureen Fick, Matthew Ryan Koester, Andrew Phillip Mosquera, Caroline Aubrey Tipton and Sarah Tompkins
Professor Jeff Duncan, sponsor

Poetry Ensemble: Variations on a Poem from Whitman

If imitation is the sincerest form of flattery, parody is nothing short of adoration. Accordingly, in this series of short presentations the students absolutely adore Walt Whitman. Professor Jeff Duncan reads Whitman's Poem, "I saw in Louisiana a Live-Oak Growing," and then nine of his students follow with their parodies (of Whitman, not Duncan).

Session A – Number 59 – Kiva.

Angi Becker

Professor Abby Coykendall, sponsor

Interrogations of the Heteronormative in Isak Dinesen's "The Monkey"

Isak Dinesen's *Seven Gothic Tales* was sometimes criticized for being too much of a throwback to earlier literary styles. Even Dinesen's use of a male pseudonym has been viewed as an approval of the patriarchal structure. This presentation argues that, in her story "The Monkey," Dinesen utilizes Gothic tropes not to romanticize the past but to challenge the present, deploying gender inversion in a carnivalesque fashion in order to interrogate the heteronormative social structure rather than to reinforce it.

Session B – Number 91 – Room 304.

Lucy Elizabeth Carnaghi

Professor Charles Cunningham, sponsor

Poems in Memorium of Mark Kidd

Many scholars and critics have drawn comparisons between the Vietnam War and those in Afghanistan and Iraq because all lack a traditional "front." This situation has wholly complicated what it means to be a soldier, creating disjointed and difficult experiences not only for those who have served, but also for their families. Inspired by the literature of the Vietnam era, this work combines poetry and prose to memorialize Mark Kidd, a Marine corporal who died in Iraq. Seeking to interrogate the relationships between loss, guilt and idealism, the poems become soldiers themselves – sometimes brave, sometimes not.

Session B – Number 119 – Kiva.

Cherese Elizabeth Colston

Professor Lolita Cummings Carson, sponsor

Social Media in Business: Innovative Ideas and Outcomes

Social media has become a major part of society. It can be found anywhere and used by anyone. In this presentation the close relationship between social media and the business industry will be explored. Particular emphasis will be placed on the innovative ways businesses now incorporate social media into their communication strategies. The research collected will include publications, personal observations and interviews with Michigan business professionals.

Session B – Number 112 – Room 352.

Doug Crandall

Professor Craig Dionne, sponsor

"Lascivious Goth": Tamora's Sexual Power and Gender in *Titus Andronicus*

Shakespearean women often command some measure of sexual power that they use to seduce and manipulate their male counterparts. However, the female lead in *Titus Andronicus*, Tamora, Queen of the Goths, undermines these assumptions in her pursuit of Aaron. This presentation examines the forest scene in the play (Act II, Scene III) and the issues raised by Tamora's courtship of the Moor. Specifically, Tamora challenges the conventions of courtly love and forfeits the sexual power normally accorded her gender. Additionally, this presentation explores how Shakespeare uses this scene to comment on female sexuality.

Session B – Number 94 – Room 304.

Cherie Perez Edmonds

Professor Sheila Most, sponsor

What Happy Ending? The Celestial Maiden and Why Her Ending is Bittersweet

The Tennyo, or celestial maiden, is a mysterious being with a strange story in the Japanese culture, as well as other cultures around the world. She is a deity rendered powerless without her celestial robes, and she abandons her husband and children for a life in heaven. This presentation will take an in-depth look into the origin of the Japanese Tennyo, consider what the celestial maiden represents among different cultures, and explore why her story is so strange, yet valued by so many.

Session A – Number 47 – Room 350.

Kasey Leigh Everly

Professor Jeff Duncan, sponsor

What is a Suburbanite? And How Would Hector St. John de Crevecoeur Say It?

This presentation is written in the turgid, antiquated prose style of Hector St. John de Crevecoeur's "What is an American?" – the third letter of his famous series, *Letters from an American Farmer*. Here indeed, in this presentation, suburbia is de Crevecoeur's "The Great American Asylum" because, as the presenter makes clear in this parody, "where there is bread, there is my suburb."

Session B – Number 90 – Room 304.

Anthony Duane Gillum

Professor Heather Neff, sponsor

Painting the Patriarchal Self-Portrait: Objectified Women from Vermeer's Attic to Casablanca

Many feminist philosophers reject the Cartesian definition of the "Self" because of its intrinsic privileging of the Mind over the Body. Tracy Chevalier's *Girl with a Pearl Earring* and Heather Neff's *Leila: The Weighted Silence of Memory* present impoverished women who replace the patriarchal mind-body dilemma with a Pluralistic ideology that finds power in the relational self, therefore positing that social interactions are deeply significant in defining who and what we are. The young women in these novels are culturally primed for the subjugation they experience, illustrating a continuum of oppression from 17th century Holland to modern-day Morocco.

Session A – Number 49 – Room 350.

David Austin Gomez

Professor Elisabeth Däumer, sponsor

The Media after 9/11: How They Interpret Honesty and Freedom of Speech in the New National Security State

This presentation examines the changes in mainstream media after 9/11. The First Amendment was included in our Constitution to prevent corruption and abuse of power in our government. However, media scholars Robert McChesney and Norman Solomon believe that after 9/11 the press failed in their role as watchdog and regurgitated false or partial information that led the U.S. into two unpopular wars in the Middle East. The presentation will also explore if the press has continued these practices under the Obama administration.

Session A – Number 20 – Room 300.

Mariel Hamson

Professor Sheila Most, sponsor

"The Origin of Love": (Super)queering Plato's *Symposium* in a Modern-day Rock-Opera

This paper compares Aristophanes' speech about love in Plato's *Symposium* with the eloquent retelling by John Cameron Mitchell and Stephen Trask in *Hedwig and the Angry Inch*. The song, "Origin of Love," recontextualizes the myth of two people in one as a mirror for Hansel/Hedwig's search for his/her sexual identity. Myth complicates narrative in answering this age-old question: "Do I have an other half", "can two people become one", and "if we're driving on the Autobahn when it happens, can we still use the diamond lane?"

Session C – Number 170 – Kiva.

Chelsee Harris

Professor Abby Coykendall, sponsor

The Gothic Female: Twilight of Change

The construction of the gothic female attempts to represent what defines the free, new woman culturally; however, she is constantly forced to repress vibrant feeling and the climax of desire. The limitation that society places upon the thoughts and fantasies of women continually defers the freedom of women, suggesting that her primal purpose on Earth is to serve man's desire and create the crowning of his pleasure. Stephenie Meyer's explosive *Twilight* series exemplifies writing that is repressive to modern adolescent females as it displays to the reader the possibilities with which women are presented to better their lives in modern society, but quickly snatches these dreams away as her heroine falls back into the stereotypical roles of mate and mother.

Session A – Number 48 – Room 350.

Brian Keough

Professor Natasa Kovacevic, sponsor

Finding Intention in the Absurdity of Daniil Kharms

Daniil Kharms was a Russian absurdist writer and member of the leftist artistic group OBERIU. His writing is full of humorous and bizarre situations that seemingly make no sense at all. But although Kharms' work is said to be completely absurdist, this presentation will show that Kharms was in fact very ideological and wrote with great philosophical and political intention. His writing challenges core Western ideologies of logic and reason, Kant's theory of causality, Stalin's socialism and rapid industrialization.

Session B – Number 93 – Room 304.

Marybeth Kinnell

Professor Heather Neff, sponsor

Female Sexuality in *The Lover*, *Fortune's Rocks* and *Girl with a Pearl Earring*

Historically, female sexuality has either been suppressed or mystified by men, leading to a wide range of practices designed to dominate and objectify it. This commodification of women is worsened when a young woman finds herself romantically involved with a much older man, as seen in Marguerite Duras' *The Lover*, Anita Shreve's *Fortune's Rocks* and Tracy Chevalier's *Girl with a Pearl Earring*. This paper posits that the popular trope of young women in relationships with older men should be re-interpreted as a feminine search for autonomy, using the only power a patriarchal society allows: her sexuality.

Session A – Number 50 – Room 350.

Sr. Maria Fatima Nunes

Professor Sheila Most, sponsor

Move Over Cinderella: Ella and Edna have Something to Say!

The Cinderella tale has come down through many generations and countless scholars have argued its meanings. While scholars are arguing, authors are writing. *Move Over Cinderella: Ella and Edna Have Something to Say!* explores the children's books *Ella's Big Chance* by Shirley Hughes and *Cinder Edna* by Ellen Jackson. The paper describes how the stories are adapted in the areas of setting, characterization and outcome, and how the "new Cinderella" exemplifies a more authentic femininity.

Session C – Number 171 – Kiva.

Sean Elliott O'Donohue

Professor Jeff Duncan, sponsor

Bartleby at the Pearly Gates

This work offers an epilogue to and re-imagining of Herman Melville's short story, "Bartleby, the Scrivener: a Story of Wall Street." It finds the mysteriously passive Bartleby, after his death at the end of Melville's story, explaining his side of the narrative to Saint Peter, and in the process, providing some answers to the many questions readers of Melville's original are left pondering. The work will be presented as a dramatic monologue.

Session A – Number 56 – Kiva.

Justin Petro, Kent Tucker, Megan Smith and Erin Casey

Professor Daniel Seely, sponsor

The Language of Humor: A Linguistic Analysis

Although humor is itself a very subjective concept, the act of encoding a humorous message into an utterance often relies on consistent principles within a language that are exploited in order to create the proper effect. This presentation will examine linguistic principles and their use in sarcasm, puns and preexisting joke templates within the English language, as well as demonstrate the difficulties that arise while attempting to 'translate' humor across languages.

Session C – Number 144 – Room 304.

Tricia Anne Saab

Professor Charles Cunningham, sponsor

War in Modern Country Music

After examining 20 popular "patriotic" country songs, several patterns (or tactics) emerge suggesting that the lyrics imply the necessity of war. These songs fall into six categories, the most significant being threats, songs from family members and inspirational patriotic lyrics. In addition, three types of stock characters emerge: the dutiful country soldier, the patient wife and the weak "other." Recurring themes that arise include a "band of brothers" loyalty, the enforcement of traditional gender roles, and the acceptance that sacrifices must be made in order for America to survive. After looking at the various types of songs, and the characters and themes they present, one realizes that the lyrics leave out any ambiguity about the politics of wars.

Session C – Number 146 – Room 304.

Alexandra Stoddart, Greg Owen and Ashley Bartley

Professor Daniel Seely, sponsor

Morphology and Slang in Society

What does that word mean? And how did someone come up with that? As society and technology continue to develop, speech has also experienced dramatic alterations. This presentation examines how we speak and how we have come to communicate, using real-life data from advertising and food products. From a history of slang to your thoughts on morphology (the construction of words), the presenters analyze those words that you were too afraid to ask about.

Session A – Number 33 – Room 304.

Erin Christine Stratos

Professor Robin Lucy, sponsor

Words Mean Things: An Exploration of Language in Toni Morrison's *Song of Solomon*

This paper examines the use of language, specifically word choice, in Toni Morrison's *Song of Solomon*. It focuses on the transformations that the characters Pilate and Milkman undergo because of their attention to language and also explores the vast impact on our lives of naming, labeling and assumptions. Throughout the novel, Morrison pushes us to recognize that our language matters, and that careful attention to word choice has the power to change our lives.

Session C – Number 143 – Room 304.

Jasmine Appolonia Zweifler

Professor Lori Burlingame, sponsor

Leaving Home: The Native American Vision of Home in Louise Erdrich's *Love Medicine*

For Native American populations the idea of "home" has always been somewhat mercurial. In the past many of the tribes were nomadic, and consequently home became defined (among other things) by communication and contact with the natural world. As time has passed, the link to nature has become increasingly tenuous as "home" became the reservations onto which Native Americans were relocated. This forced a redefinition of home that centered on family units and links between members of the community. We see both of these topics, these links to both nature and people, very powerfully presented in Louise Erdrich's *Love Medicine*.

Session B – Number 115 – Kiva.

Jasmine Appolonia Zweiffer

Professor Joseph Csicsila, sponsor

Girl Talk: The Feminine Voice in Cooper and Twain

Contrary to the accepted criticism concerning female characters in James Fenimore Cooper's *The Pioneers* and Mark Twain's *Adventures of Huckleberry Finn*, this presentation offers a skeptical view of the conventional thinking that these two masterful writers have neglected to create female characters of any depth. Though these novels are thickly written with male characters and are centered on the actions and thoughts of men, this presenter contends that both of these authors have constructed in their female characters, full-blooded, vital, intelligent and compelling individuals. In support, examples of just such female types in Cooper's and Twain's classic novels are explored.

Session C - Number 169 - Kiva.

Department of Geography and Geology

Tonia Fernandez

Professor Christine Clark, sponsor

Analysis of Feldspar for (OH)⁻ using ATR/FTIR Spectroscopy

Feldspar is the most common rock-forming mineral on Earth. By analyzing the water content of a mineral, one can better understand the geochemical conditions of formation, as well as draw conclusions about the parent magma. This study analyzed the water content of four feldspars from different zones of two Colorado pegmatites using ATR/FTIR with the goal of gaining insight into the conditions of pegmatite zonation.

Session A - Number 24 - Room 301.

Mark David Ferrall

Professor Nina David, sponsor

An Evaluation of Michigan's Regional Planning Legislation

Policy, business and academic leaders in Michigan have urged regional land use collaboration for its potential benefits in growth management, economic development, environmental protection and farmland preservation. This study seeks to provide a comprehensive evaluation of Michigan laws passed to enable collaboration. More specifically, this study will evaluate whether the tools available under Michigan's planning laws are adequate in terms of promoting regional land use planning on the ground. From this study, recommendations can be made for improving Michigan's planning legislation and to enable communities to collaborate more effectively.

Session C - Number 165 - Room 352.

Chantelle Lonsdale

Professor Thomas Kovacs, sponsor

Correlation between the Saharan Aerosol Layer and the Progression of Tropical Wave Development

African easterly waves are known to form over the western portion of Africa and also known to eventually form into tropical cyclones. Also associated with this area is the Saharan Aerosol Layer (SAL). Through the use of Skew-T diagram information from the weather station at Cape Verde, tropical waves were identified and tracked across the Atlantic Ocean. Using both visible and infrared imaging from the satellite MODIS, the correlation between the thickness of the Saharan Aerosol Layer and the progression of tropical waves into tropical depressions, and ultimately tropical cyclones, is analyzed.

Session C - Number 128 - Student Art Gallery.

Jacob Richardson

Professor Christine Clark, sponsor

Infrared Spectroscopy of Niobium-tantalum Oxides

Niobium-tantalum oxides are economically important ore minerals that form in coarse-grained granitic rocks known as pegmatites. In order to understand the environment of formation of pegmatites we look at physical properties of these minerals, including chemical composition and cation ordering within their crystal lattice. Using Fourier Transform Infrared Spectroscopy (FTIR) we are able to identify bonds within minerals ferrocolumbite and wodginite. FTIR enables us to quickly observe and further understand their composition and cation ordering.

Session A - Number 25 - Room 301.

Jacob Richardson

Professor Christine Clark, sponsor

Volcanoes on Mars: Evolution of a Large Vent Field

Recent missions to Mars have enabled scientists to develop a better understanding of its volcanic history. Fields of volcanic vents have been located on the surface of Mars that might offer insight into the evolution of the planet. One such field is Syria Planum, a plateau long recognized as a volcanic center in the Tharsis province. Using new imagery from current missions and recent topographic data of the surface of Mars, a new volcanic feature in north Syria Planum is identified. Its presence suggests that the formation of Syria is more complex than once thought as it represents a migration of volcanism or a unique magma production event.

Session C - Number 135 - Room 301.

Katherine Rogers

Professor Nina David, sponsor

How do Elected Officials Determine the Public Interest?

The Ann Arbor City Council currently is in the process of deciding whether to repair or remove the Huron River's Argo Dam. Proponents of dam removal argue that a more free-flowing river would improve the ecological health of the river, while opponents argue that recreational losses would be too great. With both sides deadlocked, this issue has emerged as one of the more controversial issues in Ann Arbor's planning history. The Argo Dam issue will be used as a single case study to form questions about how elected officials mediate between personal preferences, public concerns, and expert recommendations to determine the public interest, and the role of learning in decision making.

Session C - Number 166 - Room 352.

Lois Vasquez

Professor Chris Mayda, sponsor

Go Green: Sustainability and the Eastern Michigan University Curriculum

Many higher education institutions are incorporating sustainability ideals into their core values. In order to do this, sustainability issues must be fully integrated into the academic curriculum. The purpose of this study is to survey faculty about the current level of sustainability focus in their courses and research, and gauge their interest in advancing sustainability as a priority at Eastern Michigan University.

Session A - Number 11 - Student Art Gallery.

Department of History and Philosophy

Sarah Anne Brigham

Professor Joseph Engwenyu, sponsor

Ugandan Coffee in Depression, War and Post-war Boom, 1930s-50s

Colonial Uganda experienced a cash crop "miracle" in general, and in the case of coffee in particular. This paper assessed the success of the coffee economy in Uganda against the background of the hazards of the Great Depression, the special burdens of World War II, and the post-war boom, spanning from the 1930s to the 1950s. Ecological factors at the level of production will also be covered.

Session A – Number 44 – Room 330.

Chelsea Carter

Professor Mark Wenzel, sponsor

Prostitution: Issues of Morality in Radical Feminism

Radical feminism opposes prostitution in that it reinforces and perpetuates the degradation and oppression of women. Generally, feminists endeavor to be supportive of sex workers while condemning the work itself as "wrong." Radical feminists do not view prostitutes as free agents, but rather as victims of coercion. The feminist's well-intentioned, though emotionally charged, arguments become riddled with fallacies brought about by their own personal feelings, not allowing them to recognize prostitution as a life choice instead of a life sentence. Prostitutes may have any number of reasons for pursuing their profession. Though exceptions exist, prostitution today is ultimately an individual's attempt to survive by whatever means possible.

Session C – Number 140 – Room 302.

Kellie Lois Cohoon

Professor Robert Duke, sponsor

The Cheeses of Britain and Their Wartime Survival

World War II had an undeniable impact on the gastronomy of the British people. The war not only had irrevocable effects on the food industry's infrastructure but also on the peoples' attitudes and expectations toward their sources of nourishment. Cheese, as a major staple in the nation's diet, provides a dramatic example as to how World War II ruptured this aspect of the nation's economy and culture.

Session A – Number 43 – Room 330.

Kwablah Kuma Gordon

Professor Mark Whiffers, sponsor

The Willie Lynch Letter

This paper discusses the controversial speech allegedly given by a plantation owner in the late 1700s. It outlines the methodology behind the "slave breaking" techniques created to assert control over rebellious slave populations. If authentic, the letter reveals that the horrors inflicted upon black slaves were inhumane, systematic, and worst of all, deliberate. This could prove insightful in interpreting the damaging effects slavery has had on black-white relations in American culture. Using other historical examples, the paper illustrates that what the document asserts is theoretically consistent with the patterns of European colonialism.

Session C – Number 138 – Room 302.

Michael K. Hegarty

Professor Steven Ramold, sponsor

Attorney at War: William Speed and the 24th Michigan

An attorney in Detroit, William Speed recruited his own company for the 24th Michigan Infantry Regiment during the American Civil War. Speed corresponded with his sister throughout the war. His letters offer an insight into a company commander's mind during a tragic period in American history. From the original muster of his company to the penultimate week before his demise at Willoughby Run, Speed writes an enthusiastic story. Housed at the William Clements Library on the University of Michigan's campus in Ann Arbor, Speed's letters tell a gripping tale regarding the march of the regiment's Company D to war.

Session B – Number 117 – Kiva.

Kevin Thomas Kretschmer

Professor Walter Moss, sponsor

The Fate of Reason in 20th Century Philosophy and Social Theory: The Dialectic of the Frankfurt School

As philosophers and historians, we find in the Frankfurt School of Critical Theory an opportunity to trace—by way of an unbroken lineage—prominent contemporary movements in social, cultural and political theory back through the better part of the 20th century. This paper is a preliminary investigation into the dialectical relationship between the early Frankfurt School theorists and the contemporary critical theory of Jurgen Habermas: pathological modernity begets reactionary post modernity, and together they beget a healthy synthesis.

Session A – Number 42 – Room 330.

Paul Larry

Professor Robert Duke, sponsor

The Value of Peanut Products during World War II

The development of the peanut industry was important to civilian and military efforts of the United States during World War II. In fact, peanut oil was considered to be a major alternative to scarce, fuel-based oils and lubricants. This paper analyzes the impact of the peanut industry despite contradictory views of civilian and military consumers and proposes that greater reliance on peanut products would have greatly reduced World War II shortages.

Session A – Number 41 – Room 330.

Aaron Luedtke

Professor Robert Duke, sponsor

Food for the Taking

The French and Indian War is a vital period of history that is often presented primarily as a building block to the American Revolution. This presentation argues that a stronger emphasis on farming among British colonists served as a pivotal factor in determining the outcome of the French and Indian War.

Session A – Number 45 – Room 330.

Stephen Lund

Professor Joellen Vinyard, sponsor

Michigan State Normal College at War: "Education is War Work in a Democracy"

During World War II, while Michigan State Normal College (MSNC) prepared to receive recruits for the U.S. Army Officer Training program, Henry Ford's factory at Willow Run was bursting at its seams with workers who could not be accommodated by available local housing. Due to the waning student population at MSNC that can be attributed to enlistment into the U.S. Army, the dormitories at MSNC seemed a plausible solution to the housing crisis. The problem with this solution was that it would require MSNC to shut down. What followed was an onslaught of support for MSNC to remain open and chronicled Michigan's intense love for MSNC.

Session B - Number 118 - Kiva.

Colleen Anne Marquis

Professor Ron Delph, sponsor

Unlocking the Secrets of Pagan Wisdom and the Occult in the Renaissance

The 17th century began with the public execution of the occult philosopher Giordano Bruno (d. 1600) in Rome. This was a drastic change from the previous two centuries where a complex philosophy designed to use pagan wisdom to enhance and deepen the human experience of Christianity flourished. Renaissance humanists believed that God had revealed himself to ancient pagan sages in varying degrees, and thus adumbrations of Christian truth were to be found in their works. This paper explores why this philosophical approach to pagan thought became viewed as heretical in the Reformation.

Session C - Number 158 - Room 350.

Brandon Mitchell

Professor Mark Wenzel, sponsor

On the Liberation of the Subject (Woman)

Part one of a two-part exploration of power, subjectivity, liberation and authenticity set about in the continental style of philosophical investigation. This work examines Foucaultian themes of power, post-Hegelian themes regarding the transformation of human consciousness through time and phenomenological and existential themes of freedom and authenticity, all in their relationship to feminist themes regarding internalized sexism, gender construction, and the cultural reproduction of sexist oppression. A fresh and original philosophical method is introduced, geared toward the initiation of a radical liberatory process born at the intersection of the above-mentioned themes.

Session C - Number 139 - Room 302.

Scott C. Opfermann

Professor Joellen Vinyard, sponsor

Religion, Reconstruction and Rationale: Michigan Teachers in the Post-Civil War South

The aftermath of the American Civil War left its citizens with an important task: educational reform. In an attempt to reconstruct the South and restore stability to the Union, American institutions sent an army of teachers from the North into various areas of the South to provide formal education to Southerners, particularly the newly freed slave population. Included among this army was a Michigan brigade, comprised of educators who joined the ranks to support the post-war effort. This paper exposes the motivations and connectivity of a sampling of 19th century Michigan teachers who undoubtedly changed the face of education.

Session C - Number 148 - Room 320.

Matthew Thomas Silvis

Professor Robert Duke, sponsor

Egoism or Sound Tactics?

In 1812 Napoleon invaded Russia with his *Grand Armee* that numbered over 500,000 men. It was the largest invasion force that the Western world has ever witnessed. Superiority in numbers was not the only advantage this army had. It was also better trained, equipped and initially better supplied than its enemy. Why then, was the crown jewel of French military might shattered against an enemy of inferior training and material? Was it the genius of Field Marshal Kutuzov's defensive action or the logistical miscalculations of Napoleon that led to his army's defeat?

Session C - Number 160 - Room 350.

Jason G. Storey

Professor Robert Duke, sponsor

Feeding Freedom

During the American Revolution, the Continental Army and the Congress struggled to keep the fledgling American military supplied with food. An examination of correspondence from George Washington and his contemporaries reveals how the dire circumstances jeopardized the independence movement. This paper examines the many problems revolving around the army's common ration and its inability to procure food items. It attributes such problems to congressional inexperience and follows Washington's attempts to maintain the health of the soldiers.

Session B - Number 116 - Kiva.

Jon Tropf

Professor Ron Delph, sponsor

Pope Clement VII and the Sack of Rome

On May 6, 1527 Spanish and German soldiers working for the German Emperor Charles V stormed the city walls of Rome and began murdering, raping and pillaging for several days, unleashing an unprecedented horror upon the citizens of Rome. Pope Clement VII was able to reach safety in the papal fortress of the Castel Sant' Angelo where he would be besieged for another six months. Many contemporaries and later historians blame the Medici pope Clement VII for the sack of Rome. This paper will examine why Clement and the Medici were indeed responsible for this atrocity.

Session C - Number 159 - Room 350.

Alex Reed Upham

Professor Margaret Crouch, sponsor

Genre in Film

In film, genre plays an immense role, whether it is through production, creation, viewing or even analysis. As it is now, genre is largely a term that has gone undefined, though not for lack of definitions. In this paper, the role of genre is explored through its relevance to four groups of people and their generic interest in film: the producer, the filmmaker, the audience member and the film theorist. It argues that genre means necessarily different things to each of these generic individuals, as opposed to more encompassing and traditional views that genre can be a shared term.

Session C – Number 147 – Room 304.

William Zurenko

Professor John McCurdy, sponsor

Fanhood and Manhood: The Development of Male Identity within the Cult of Fandom of Professional Football

Of the four major American sports – football, basketball, baseball and ice hockey – football, the great Sunday spectacular, has ingrained itself the quickest into the lives of American men. But what is to be made of this sudden impassioned engagement to the sport of football? Drawing on historical patterns regarding the ongoing crisis of masculinity and references in popular culture, this paper attempts to answer the question: Why are men drawn so vehemently to the sport and culture of American professional football?

Session A – Number 3 – Room 204.

Department of Mathematics

Gaber Burnik

Professor John Curran, sponsor

The Speed of Gossip in Social Networks

The problem posed is to determine what technical conditions ensure that news spreads quickly in a social network. The methodology begins with computer simulations of different social networks. The findings are derived by applying graph theory and Markov chains to the characteristics of the simulated networks. These outcomes have the potential for use in economics, sociology, mathematics, computer science and physics.

Session B – Number 110 – Room 352.

Riley Ellis

Professor Jay Ramanathan, sponsor

Primes and the Conjectures of Giuga and Agoh

Prime numbers are one of the oldest and most explored topics in mathematics. Though millions are known, there is no formula to identify prime numbers and testing a large number for primality is complicated. The history and importance of prime numbers will be presented, culminating in a discussion of the conjectures of Giuga and Agoh, necessary and sufficient conditions for a number to be prime.

Session C – Number 127 – Student Art Gallery.

Department of Music and Dance

Bailey Ahles and Stephanie Havenstein

Professor Joanna McNamara, sponsor

Dance Compositions

Dance majors in Elements of Dance Composition selected a meaningful idea then developed a unique movement vocabulary to express that idea while closely attending to the inherent spatial and rhythmic possibilities of the idea. "Bound," by Bailey Ahles (music unknown). "(un)Balanced," by Stephanie Havenstein, to music by Zoe Keating.

Session A – Number 9 – Auditorium.

Lindy Brown

Professors Roberta Justice and John Dorsey, sponsors

Traditional African Instruments and Uses in Music Therapy

Percussion instruments indigenous to West African countries, a hand drum (Djembe), and a xylophone (gyil), will be presented with demonstration of characteristic native playing styles. An explanation of classic uses in West African cultures will be given, with a demonstration and explanation of ways these instruments and traditional pieces could be used in music therapy settings.

Session B – Number 67 – Auditorium.

Adrienne Clark

Professor Joel Schoenhals, sponsor

A Contest between the Head and Heart: Beethoven's 27th Piano Sonata op. 90, in e-minor

Ludwig van Beethoven (1770-1827) remains one of history's most influential composers. His music, characteristically bold, passionate and profound in nature, has been a source of inspiration to generations of musicians, artists and people from all walks of life. Written in two movements, the 27th piano sonata suggests a struggle between the intellectual mind and the heart. The opening theme is a statement of firm resolve, but is immediately followed by a poignant, questioning response. This work represents Beethoven's ability to expose the fundamental nature of the human being through his music, thus its lasting appeal.

Session A – Number 7 – Auditorium.

Jonathan Edwards

Professor Nelson Amos, sponsor

Prelude and Fugue (BWV 998) by Johann Sebastian Bach

Johann Sebastian Bach (1685-1750) composed several works for lute, all of which are playable on the modern guitar. Unlike many of his works, the Prelude and Fugue (BWV 998) exists only for the lute and therefore is less known than other guitar works derived from cello and violin music.

Session A – Number 8 – Auditorium.

Kelly Renee Garland

Professor Roberta Justice, sponsor

Music Therapy and Cancer: A Personal Journey

In the developing area of music therapy in cancer treatment, music therapists are able to reach patients on a personal level working with instruments, singing and songwriting. The journey of a terminal cancer patient through music therapy will be discussed, beginning with roots in songwriting and ending with a polished, final recording and the realization of a lifelong dream. Participants will gain an understanding of the music therapy process, how music is used in cancer treatment and personal responses to music.

Session B – Number 66 – Auditorium.

Vanessa Nicole Gilbreath

Professor Kimberly Cole, sponsor

Russell Riepe: *Three Studies on Flight* for Unaccompanied Clarinet

Three Studies on Flight for unaccompanied clarinet is a remarkable work that showcases the many abilities of the clarinet. Movement one, titled *Your laughter frees me and lends me wings*, features mixed meter. Movement two, *I wandered lonely as a cloud*, is somber and features many quarter tones. The final movement, *Wild spirit...moving everywhere*, is very fast and spirited. The composer requests that the movements should be identified by this poetry rather than standard musical terms. Russell Riepe is currently the professor of composition at Texas State University.

Session C – Number 122 – Auditorium.

Emma Grabarczyk, Valerie Street and LaMario Carson

Professor Joanna McNamara, sponsor

Dance Compositions

Dance majors in Elements of Beginning Dance Composition selected a meaningful idea then developed a unique movement vocabulary to express that idea, while closely attending to the inherent spatial and rhythmic possibilities of the idea. "Cowardice," by Emma Grabarczyk, to music by Zoe Keating. "Defective," by Valerie Street, to music by Aphex Twin. "Forever Misunderstood," by LaMario Carson, to music by Philip Glass.

Session A – Number 10 – Auditorium.

Jeffrey R. Grant

Professor John Dorsey, sponsor

***Caméléon* for Solo Marimba by Eric Sammut**

Eric Sammut has been a serious competitor in the percussive and compositional world for over a decade. In 1995, he won the Leigh Howard Stevens International Marimba Competition and began touring shortly thereafter. He is currently teaching in Europe and has published compositions for solo marimba and large ensembles throughout the world. *Caméléon* is a virtuosic marimba solo that challenges the performer with many technical intricacies, along with serious harmonic and melodic content, illustrating Sammut's jazz overtones.

Session C – Number 120 – Auditorium.

Sarah Christine Hamilton

Professor Gary Pedersen, sponsor

Dynamic Patterns in Beethoven's Piano Sonata Op. 2, No. 3

In Beethoven's piano music there are always patterns, whether they are melodic, harmonic, rhythmic or another musical quality. In his Opus 2 No. 3, second movement, the second theme group establishes a pattern in the dynamics that appears to be broken in measure 35. The performer has the option to continue the pattern or take what is also a Beethovenesque approach and change it. This presentation will illuminate different options performers and editors have chosen and why, using historic and current recordings, and various published editions as well as a facsimile of the manuscript.

Session B – Number 69 – Auditorium.

Samuel Joshua

Professor Gary Pedersen, sponsor

Nikolai Kapustin: Concert Etude Op. 40, No. 6

Nikolai Kapustin is arguably one of the world's greatest unnoticed composers of the jazz-classical style. He currently lives a private and reserved life in his Moscow apartment, composing and recording his own music. He prefers not to indulge in the prestige of a public career; however, his music shows a different side of his personality. Kapustin's Concert Etude No. 6 from Op. 40 shows his jovial and youthful spirit. Written in the jazz style with classical idioms, Kapustin charms us with his delightful melodies and rhythmic syncopations.

Session C – Number 121 – Auditorium.

Erin Lanigan, Meghan Grau, Matthew Konopacki, Daniel Dyer, Sarah Engmark and Tyler Knauf

Professor Robert Peavler, sponsor

Songs of Hope: Rethinking the Standard Voice Recital

The standard voice recital comprises multiple sets of music covering a variety of languages and styles, presented in the traditional format of only the singer and pianist on stage. *Songs of Hope*, a multimedia recital, is a new way of thinking about the traditional art song recital, by introducing and engaging younger audiences through the use of technology and related literature. The performance includes singing, spoken readings and accompanying visual images that the students have chosen to enhance their performances.

Session C – Number 123 – Auditorium.

Anthony David-Joseph Marchese

Professor Diane Winder, sponsor

Concerto No. 1 in A Minor, Op. 33 by Camille Saint-Saens: Performance Solutions

Camille Saint-Saens (1835-1921) wrote a wide variety of music—operas touched by exoticism, music for children (*Carnival of the Animals*), standard concerti, as well as what is considered to be the first musical score for film. The Concerto in A Minor, Op. 33 for cello, begins with energetic dialogue between soloist and orchestra. The main theme of this first movement recurs in both transitions throughout the work, and in the closing Coda. Performance challenges include long musical lines, long double-stop passages and unusual bowings for the wide gamut of mood and character changes.

Session B – Number 68 – Auditorium.

Kristen Tranchida

Professor Julie Stone, sponsor

Women in Music: Contributions of Female Composers

Clara Schumann, recognized as being one of the first female composers, was once quoted as saying, "I once believed that I possessed creative talent, but I have given up this idea; a woman must not desire to compose – there has never yet been one able to do it." Although there have been significant changes to the political and social structure since the early 1900s, there are still very few recognized female composers. Musical contributions by these women, and the challenges they faced, will be examined.

Session A – Number 6 – Auditorium.

Department of Physics and Astronomy

Robieh A. Bou-Fakreddine, Nickolas Alan Miller
and Kyle Steven Zachrich

Professor Ernest Behringer, sponsor

Simulating Two-state Atomic Transitions — Visualizing the Quantum World

As part of the PHY 420 Capstone Project, we will construct and utilize coupled pendula to simulate the dynamical behavior of the two-state Landau-Zener atomic model. By slowly changing the length of one pendulum, we will alter the relative energies of the pendula. The resulting energy transfer corresponds to transitions between the ground and excited states of a quantum system. We will use video analysis to measure the angular motion of the pendula that can be compared to motions predicted by the theoretical model. Finally, we discuss how this model is used in modern technology such as in nanomagnetism.

Session C – Number 136 – Room 301.

Shannon Colleen Bourke

Professor Joseph Lowry, sponsor

Visualizing Standing Waves in Musical Instruments

Visualizing waves in musical instruments is vitally important to understanding how these instruments work, but visualization can be very difficult for many students. Because these waves are dynamic, an animated computer model is ideal for showing what is happening inside the instrument with time. A computer model was created to demonstrate a standing wave in a cylindrical open pipe instrument in order to increase student understanding.

Session C – Number 125 – Student Art Gallery.

Riley Ellis

Professor James Carroll, sponsor

Using a Residual Gas Analyzer in a Plasma

This presentation will describe the operation of a residual gas analyzer (RGA) to measure plasma particles created in the EMU Plasma Physics Laboratory. Similar devices are used on spacecraft to measure the solar and planetary plasma particles and in the fabrication of semiconductors to measure the sputtered particles being deposited on a substrate. The RGA is now a basic tool of plasma physics. We operate the RGA in a hollow-anode argon plasma and analyze the data captured by the device via LabView to study the characteristics of the plasma.

Session A – Number 23 – Room 301.

Donald Hamilton Ellison

Professor Patrick Koehn, sponsor

EMU Radio Astronomy: Reaching Out with Interferometry

Construction of a 10-foot 1.42-GHz radio telescope is underway at EMU. This custom built telescope is nearing completion and when finished will eventually be integrated into the EARTHS project. The EARTHS project will incorporate radio telescopes in place at local high schools with the EMU dish in order to establish an interferometer array. Specifically, the radio telescope in place at Grosse Pointe North H.S. will hopefully serve as the first link in this array. The EMU dish will serve as a prototype for constructing additional dishes on EMU's campus and dishes for high schools that do not have a radio telescope but wish to participate in the project.

Session C – Number 126 – Student Art Gallery.

Justin Frahm

Professor Patrick Koehn, sponsor

Reaching into Interstellar Space: Voyager 1 and 2

The Voyager missions were launched over 32 years ago, yet each probe is continuing to supply scientists with valuable data about our solar system. The missions have provided astronomers with excellent data about the gas giants, and have also visited the outer edges of the solar system. However, Voyager 1 and 2 are beginning to reach a new and exciting region never before entered by any spacecraft – interstellar space. I will discuss a brief history of the missions, including major discoveries, as well as provide an outlook for the future travels of the Voyager space missions. I will also research the outer areas of the heliosphere, including the termination shock, heliosheath and heliopause, comparing theoretical concepts to Voyager's data.

Session C – Number 124 – Student Art Gallery.

Christie Ann Girard, Mariano Ezequiel Marks
and Benjamin Michael Milkovich

Professor Ernest Behringer, sponsor

Understanding Quantum Physics with a Classical Device — Visualizing Atomic Behavior with Springs

As part of the PHY 420 Capstone Project, we will construct an oscillating spring system to represent a two-state atom experiencing a rapid transition from its ground state to an excited state. We will show the relationship between a classical spring system and a two-state quantum system by comparing their respective equations of motion. Finally, we discuss the ability of our apparatus to simulate a two-state quantum system and the relation of the apparatus to real-world application, including quantum computing.

Session A – Number 21 – Room 301.

Louis Lello, John Motley McKinnon and Marian L. Mayville

Professor Ernest Behringer, sponsor

Manipulating Coupled Pendula to Visualize the Behavior of Quantum Mechanical Systems

As part of the PHY 420 Capstone Project, our team will model the motion of coupled pendula, whose approximate equations of motion match the equations governing transitions in a two-state quantum mechanical system. By gradually changing the length of one pendulum, we change the energy of each pendulum and that is analogous to changing the probability of passage between quantum states. Although quantum mechanical descriptions of systems can make visualization difficult, this model facilitates the visualization and manipulation of such an abstract system and its behavior.

Session C – Number 137 – Room 301.

Naseem Rayyan, Richard Roe and Audelia Wittbrodt

Professor Ernest Behringer, sponsor

Using Masses and Springs to Simulate Quantum Mechanical Behavior

As part of the PHY 420 Capstone Project, our team will simulate the energy transfers within a spring system that act as a mechanical analog to the changing probabilities associated with the transition of an electron from its ground state to an excited state. The transfer of energy within this spring system corresponds to electron transitions in two-state atoms as predicted by the Landau-Zener model. We will simulate the behavior of the ideal spring system and compare it to the predictions of the theoretical model. Through this work, we can develop a better understanding of the changing excitation probability of two-state atoms for applications in quantum computing.

Session A - Number 22 - Room 301.

Department of Political Science

Cynthia Bedrosian

Professors Barry Pyle and Richard Stahler-Sholk, sponsors

Social Movements and Democratization in Latin America

This paper will analyze the impact of different types of social movements on democratization in Latin America. I will examine case studies that fall into three categories: social movements that are independent of the state and organized by civilians for the advancement of civil or human rights in a democracy; social movements that are independent of the state and organized by civilians for the eradication of tyranny, corruption or other elements that hinder the development of democracy; and social movements that are organized by the state for the advancement of democracy through civilian political participation. I hypothesize that social movements that are independent of the state and initiated by civilians will prove most successful in promoting democratization in Latin America.

Session B - Number 105 - Room 350.

Mary Colleen Casey

Professor Raymond Rosenfeld, sponsor

Uninsured in America: An Evaluation of the Baucus White Paper Solutions

The plight of Americans without health insurance has come to the forefront of our national political arena in the last year. The number of uninsured is estimated at 50 million, and the impact on insurance premiums, healthcare costs and health outcomes of the uninsured are staggering. Using a criterion set forth by the Institute of Medicine, this paper examines current policy solutions as the means to reforming the American healthcare system.

Session C - Number 129 - Room 300.

Antonio Rafael Cosme

Professor Jeffrey Bernstein, sponsor

Civic Engagement: Chronicling Higher Education Advocacy and Student Action

With an unemployment rate hovering around 15%, Michigan's economy is approaching rock bottom. Education must play a vital role in the reconstruction of this state's economy. The Michigan State Legislature continues to show disregard for its 15 public universities. College students must organize and act both to ensure education is a priority among legislators and students' civic competency is a priority among universities. The project will chronicle activities surrounding student engagement and how to overcome the implicit problems that accompany such an inscrutable and transient group.

Session B - Number 97 - Room 320.

Michael James Harris

Professor Ed Sidlow, sponsor

Human Capital through Single Payer Healthcare: Investment or Expense?

Advocates of single payer healthcare have not effectively refuted the concerns posited by detractors of the single payer system with regard to total cost of such a system. The framework for this debate is largely the contrast of economic cost against public health benefit. This study seeks an understanding of the actual economic value gained and expended by the various views for the future of healthcare infrastructure.

Session C - Number 167 - Room 352.

Muayad Fayez Mahmoud

Professor Raymond Rosenfeld, sponsor

Illegal Immigrants and Healthcare Reform

The plight of illegal immigrants within America's healthcare system is the subject of this policy analysis. As Congress and the Obama Administration fashion the most significant reforms ever to the U.S. healthcare system, one of the challenges is to determine how to provide healthcare services for this population of some 15 million individuals. This paper explores existing policies for illegal immigrants, potential solutions, and the politics behind reforming a broken healthcare system to consider the needs of illegal immigrants.

Session C - Number 131 - Room 300.

Kristin R. Neville

Professor Barry Pyle, sponsor

The Insanity Defense: A Comparative Analysis

The insanity defense is a tactic that is rarely used and rarely successful. Generally states fall into three categories: those who use the M'Naghten rule of law, those who use the American Law Institute (ALI) Model Penal Code, and those who have abolished the use of the insanity defense. This research compares states from each category to investigate whether or not the type of rule used affects the outcome in a homicide case. In order to determine whether these categories matter, the paper compares similar homicide case outcomes in New Jersey and North Carolina, Michigan and Oregon, and Utah and Nevada. The expectation is that different insanity defense laws will have a marginal impact.

Session A - Number 28 - Room 302.

Gerald Kevin Paulovich

Professor Raymond Rosenfeld, sponsor

Tort Reform as a Component of Health Policy Reform

Controlling healthcare costs has become a central policy challenge for the Obama Administration and Congress as they consider healthcare reform. The current healthcare crisis has reinvigorated debate on tort law due to the high cost of medical malpractice insurance. Thus, tort reform has become one of the central talking points to control costs by many politicians and lobbyists. "Tort law" addresses civil wrongs not arising from a contract. With the current set of laws, juries occasionally award extremely large punitive damages that some consider are unreflective of the actual wrongdoing. Reforming the tort system would aim to lower the costs of this system and provide a fairer system for both consumers and businesses.

Session C - Number 130 - Room 300.

Department of Psychology

Kristin Davenport, Abigayil Hannah Kooy
and Alexis Michelle Sebastian

Professor Natalie Dove, sponsor

The True Nature of the Relationship between Self-Esteem and Aggression

In this era of school shootings, many believe that those with low self-esteem are more likely to be aggressive, but the findings in this area are mixed. Some studies indicate that those with low self-esteem are more aggressive and some suggest that those with high self-esteem are more aggressive. In our research, we investigated the true nature of this relationship, hypothesizing that self-esteem and aggression would be negatively correlated in our sample. Results supported this hypothesis. Self-esteem and aggression were moderately negatively correlated ($r = -.378, p = .011$). We discuss implications of this finding and reasons for the discrepancy that exists in this literature.

Session A - Number 35 - Room 304.

John Kenneth Lindstedt

Professor Dennis Delprato, sponsor

Forgetting: More Than Just Sitting There?

Memory researchers have established that interfering events occurring after learning contribute to forgetting. Previous forgetting experiments have used interfering material similar to the originally learned material, with non-similar material serving as a control. Recent research indicates that interference effects occur when various types of non-similar material are presented after learning. This presentation addresses the implications of these non-similar interference experiments and how they come to bear on everyday forgetting.

Session C - Number 150 - Room 320.

Department of Sociology, Anthropology and Criminology

Eric Leo

Professors Robert Orrange and Ron Westrum, sponsors

Pluralistic Ignorance: The Effects of Media Consumption on the American Public's Perception of War

Pluralistic ignorance occurs when there are erroneous beliefs about groups. This presentation explores the media's influence on public opinion through the direct or indirect creation of pluralistic ignorance. The examples used will explain the development of support for the Iraq War. A strong correlation can be found between these events and research conducted by Chia and Lee (2008) that found that the perception of sexuality could be changed by media consumption. The development of support for the Iraq War will then be mirrored to that of the Vietnam War. The evidence provided here suggests that media consumption has the propensity to create pluralistic ignorance in public opinion.

Session C - Number 151 - Room 320.

Colin Lewis MacLeod

Professor Bradley Ensor, sponsor

An Analysis of Chipped Stone Artifacts from a Prehistoric Site in Wayne County

Archaeologists use chipped stone artifacts to study tool manufacturing, trade and material selection in ancient societies. However, there is little research on these artifacts from southeastern Michigan. Recent excavations by the EMU Archaeology Field School at a prehistoric settlement produced a large collection of stone artifacts. An analysis indicates an emphasis on informal tool production and a preference for local materials while traded materials were from other areas of Michigan, Ohio and New York.

Session B - Number 80 - Room 301.

Jon Maravelias

Professor Liza Cerroni-Long, sponsor

Study Abroad Dynamics: Anthropological Perspectives

Cultural reflexivity, or the ability to identify and describe one's own cultural characteristics, is typically lacked by Americans. Most will deny that there is a specific American culture. Cultural reflexivity can be learned, and I am particularly interested in investigating whether study abroad programs enhance the cultural reflexivity of undergraduate students born and raised in the U.S. More generally, I am also interested in studying anthropologically the overall dynamics of the study abroad experience. This presentation will describe the results of an exploratory analysis of this topic.

Session A - Number 2 - Room 204.

Jon Maravelias

Professor Denise Relling, sponsor

LSD Therapy: Irrational, Sensational and Possibly a Cure

The use of LSD-25, lysergic acid diethylamide, is typically associated with deviants, hippies, new-age thinkers and spaced-out loons. Unfortunately, the cultural history of the infamous era within which these labels were created has obscured a rich scientific history that suggested possible cures for depression, alcoholism and repression. The door to the closet marked "The 1960s" has been reopened, however, and scientists are starting over. This presentation seeks to explain the history of LSD therapy, its implications and new research on the effects of LSD for the terminally ill.

Session C – Number 153 – Room 330.

Sarah Tehranipour

Professor Bradley Ensor, sponsor

Site 20WN1099: Archival Research on Land Use and Change at a 19th Century Farmstead

Archaeological site 20WN1099 is a 19th century farmstead discovered by the Eastern Michigan University Field School in 2005. My research focuses on archival records pertaining to the growth and development of the farmstead landscape. This study combines historic data from maps, census rolls and other archival sources, and situates the farmstead within the broader context of agricultural development in southeast Michigan.

Session B – Number 81 – Room 301.

Laura Torok and Richard Chapman

Professor Bradley Ensor, sponsor

Archaeological Investigations at a 19th Century Farmstead in Southeast Michigan

Although substantial rural development took place in Southeast Michigan during the 19th century there is little information on farmstead growth and landscapes. Site 20WN1099 is a mid-19th century farmstead discovered by the 2005 EMU Archaeology Field School. Intensive site survey and excavations were used to reconstruct the farmstead's landscape and development over time. The results indicate significant growth of support areas in the late 19th century.

Session B – Number 82 – Room 301.

Department of Women's and Gender Studies

Marie L. Miller

Professors Solange Simoes and Suzanne Gray, sponsors

Sexual Harassment Education: Future Offenders or Future Role Models?

This essay communicates effectively the importance of sexual harassment education in K-12 schools. Sexual harassment was not addressed in primary schools until the 1920s and remains a pressing issue. Females tend to receive the brunt of sexual harassment and therefore suffer increasingly traumatic emotional, behavioral and social repercussions. With similar sexual harassment education and training in primary schools, as provided on college campuses and in most work forces, there will be several positive outcomes and the negative effect that sexual harassment has on adolescent females will be avoided.

Session A – Number 34 – Room 304.

Amy Rose Sasinowski

Professors Suzanne Gray and Solange Simoes, sponsors

Seeing, Believing and Becoming: The Influences and Content of Children's Literature

This research looks into the content of children's literature and into the possible, far-reaching effects of this content on children. This paper was compiled through library literacy research and academic service-learning at Eastern Michigan's Children's Institute. From children's books, boys and girls are learning gender roles as portrayed in the literature and how they should fit in society. An analysis shows this cannot be positive for the gender role development of children, especially females.

Session A – Number 58 – Kiva Room.

Department of World Languages

Mark Altman

Professor Margrit Zinggeler, sponsor

The Use of Sexual Imagery in German Advertisements Versus in the U.S. and Its Ethical and Moral Implications

This presentation focuses on sexual imagery used in German and U.S. advertisements in media, such as the Internet, magazines and public places, and compares the content in the context of what is acceptable in each culture. It also discusses ethical and moral issues raised through the use of sexual imagery and its effect on the consumer.

Session B – Number 101 – Room 330.

Paul Kimball Fales

Professor Sayuri Kubota, sponsor

Hikikomori: Japanese Youth and Social Withdrawal

The recent phenomenon of *hikikomori* (people with acute social withdrawal) is evident in Japan. Many *hikikomori* are left lonesome, sad and with little hope. The topic focuses on *hikikomori* and the possible causes of it. The areas of parenting, *amae* (dependence and presumption upon another), society and education are examined in relation to *hikikomori*. Knowledge of *hikikomori* is important for a better understanding of Japanese society.

Session B – Number 102 – Room 330.

Justin Jacobs

Professor Jo Ann Aebbersold, sponsor

Diacritics: Purpose, Meaning and Use Evolving through Time

Diacritics are written marks used to modify letters so as to provide more information about how letters are pronounced. Diacritics first entered European writing systems thousands of years ago as the alphabet was borrowed by one culture from another. Over time, their purpose, meaning and use both evolved and endured. Today, we see diacritics being used in new and creative ways. This presentation examines the original purpose of diacritics as well as their development and use over time in various languages that use the Roman alphabet.

Session B – Number 104 – Room 330.

Matthew Morin

Professor Margrit Zinggeler, sponsor

The Effects of the Black Plague in Europe during the Middle Ages

The black plague in the Middle Ages is one of the most devastating tragedies of any time period. It was not only destructive to the population of any given people in Europe, but also had effects on the economy, the arts, literature and beliefs of the people of the Middle Ages. The Jewish people have greatly suffered since they were blamed for the catastrophe. This presentation takes a look at the historical implications and at the stigmatized effects of the plague in reference to present day epidemic.

Session C – Number 162 – Room 350.

Brittany Lynne Mrozek

Professor Geoffrey Voght, sponsor

Muslims Caught in the Quest for Catholic Unity in the Golden Age of Spain

After the first Arabic invasion in 711, the Muslims held territories in Spain for nearly 800 years. During their period of influence, they greatly advanced agriculture, the textile industry, mathematics and architecture. With the fall of the last Arab kingdom in Granada in 1492, their dominance ended. Life for the Muslim faithful changed dramatically due to systematic governmental discrimination during the late Middle Ages, Renaissance and Baroque periods. The desire for Catholic homogeneity truly left the followers of Allah caught in between their faith and their government.

Session C – Number 161 – Room 350.

Alexander Gordon Nelson

Professor Sayuri Kubota, sponsor

Keigo: Japanese Polite Language Today

Keigo is a polite language used to show respect in Japanese communication. It is a complex system, and its usage varies widely based on the situation, the subject, the speaker and the listener. In my experience studying in Japan, asking five friends about the normalcy for a certain *keigo* phrase would result in five different answers. By surveying young people about their patterns of *keigo* usage and their demographic information, I have found some of the sources of variation such as age, education level and socio-economic status.

Session B – Number 103 – Room 330.

Rachel Renee Newland

Professor Alfonso Illingworth-Rico, sponsor

Mexican Literature and the Feminist Viewpoint: Comparing the Works of Elena Garro and Rosario Castellanos

Elena Garro and Rosario Castellanos are authors who have dedicated their careers to creating an open discussion of the plight of women within Mexican society. Although their works are similar in scope, each author's treatment of the female experience takes on a distinct form through the creation of a unique literary environment. For Castellanos, feminism is an overt theme while Garro opts for a more indirect approach by centering action on a larger focal point. This presentation explores the effectiveness of each technique for communicating feminist ideology through a comparison of Garro's *Los recuedos del porvenir* and *Leccion de cocina* by Castellanos.

Session B – Number 106 – Room 350.

Danielle Renee Patterson

Professor Alfonso Illingworth-Rico, sponsor

A Study of the Immigration Boom in Spain

In the last few decades, Spain has moved from being a nation of emigration to being a major receiving country. Many people choose to immigrate to Spain for different reasons. This boom has had political, social and cultural consequences, both positive and negative. However, the challenges of integration and assimilation presented by increased immigration in Spain are shared by other European Union States, such as France, Italy and Germany. As a result of immigration, the shape and form of Spain's society and culture is changing, leading to concerns as to the global implications.

Session B – Number 107 – Room 350.

Danielle Marie Sebranek

Professor Genevieve Peden, sponsor

Les Français: A Culture Study

Many Americans have misconceptions regarding the French, believing that they are rude, conceited and stinky. However, this is not the case. The French culture is very different from ours, thus creating many differences in behaviors and values. By researching the French culture from many viewpoints (Frenchmen, Canadians, Americans married into French families, American businessmen living and working in Paris, etc.), I examined why these differences exist. I also reviewed French films and analyzed if any of the French cultural aspects that I researched were present. The goal of my study is to help others to better understand why the French are distinctly French.

Session C – Number 156 – Room 330.

Paul Felix Umlauf

Professor Alfonso Illingworth-Rico, sponsor

The Literature of the Pinochet Regime

The Pinochet regime in Chile was in power from 1973 to 1990. It is widely considered a brutal and totalitarian regime. This long-lasting dictatorship was reflected in the literature of Latin America. Authors like Antonio Skarmeta, Isabel Allende and others provide readers with their perspectives on the military dictatorship. This presentation demonstrates the ways in which Pinochet's rule affected the authors and their work, both directly and indirectly.

Session C – Number 142 – Room 302.

COLLEGE OF BUSINESS

Department of Management

Rebecca Sprague

Professor Christine Day, sponsor

Lights, Camera, Action Incentives (Hollywood in Michigan)

The research consisted of investigating how Michigan is adapting to transitioning from an automotive job-based economy to a more diversified economy, such as encouraging Hollywood to come to Michigan. The focus of the presentation is on tax incentives, newly developed college courses related to the movie industry, and key skills that Hollywood needs for effective productions.

Session A – Number 15 – Student Art Gallery.

Luke Sprinkle

Professor Barbara Foster, sponsor

Networking through Professional Organizations

A key business skill is networking. Professional organizations are an important part of professional life after college and throughout a career. In this session the mission, history, membership, dues, officers, ethical creed, conferences, publications, meeting agendas and other important components will be explored for a representative organization.

Session A – Number 14 – Student Art Gallery.

Meghan Kristine Stimmel

Professor Stewart Tubbs, sponsor

Disruptive Behavior and Miscommunication in Healthcare Settings

Disruptive behavior and miscommunication throughout healthcare settings is a large, problematic issue. The thesis research seeks to understand why these particular actions are occurring and what some recommendations for change may be. Understanding and becoming familiar with these issues is essential to increasing the quality of patient care and satisfaction. According to the JCAHO, hospitals are now responsible for installing protocol procedures for dealing with disruptive behavior and miscommunication.

Session A – Number 26 – Room 302.

Department of Marketing

Nathan Lewis Buelow, Christina Stein and Rebecca Smith

Professor Sheila Sasser, sponsor

How to Mainstream the Use of Non-alcoholic Beer in America

Although the use of beer is very common among Americans, the negative side effects that coincide with it are just as common. Labatt Blue has introduced a non-alcoholic variety of this popular beverage and this presentation is on promoting and increasing awareness about this new product. Not only will sales increase for this niche segment, we will also promote a healthier, more aware consumer of this popular refreshment. This campaign encompasses all forms of current advertising including traditional media and social media to reach the target market.

Session A – Number 17 – Room 300.

Kyle Cogswell and Emily A. Smith

Professors Sheila Sasser and Sam Fullerton, sponsors

EMU Men's and Women's Basketball Marketing Plan

A penetration strategy is utilized to increase attendance at EMU basketball games by promoting greater awareness through building events, alumni engagement, promotional planning, sponsorship enhancement and premium item giveaways. Building communication and collaboration both internally and externally will provide a strong link for implementation of these strategic ideas.

Session B – Number 79 – Room 300.

Michelle L. Hletko

Professor Sheila Sasser, sponsor

State Farm Renters Insurance Integrated Marketing Campaign: It's Fast, It's Easy and It's Affordable!

The State Farm Insurance IMC campaign for renters is designed to increase awareness of the need for insurance to cover personal content in rented dwellings including dorm rooms and apartments. A multimedia campaign using humor and real-life scenarios is targeted at parents, students and other decision-makers to emphasize the risks of uninsured property, particularly around the time of spring break on college campuses.

Session A – Number 18 – Room 300.

Grant James and Anna Podsiadlo

Professor Shiri Vivek, sponsor

Community Music Academy at EMU

We developed a marketing plan to advertise and promote EMU's Community Music Academy music programs. To market this music program you have to stand out from the rest and get the word out that Eastern's program is far superior to the competition. We used an analytical approach to develop the marketing plan for this program and recommended a very creative and fun approach toward marketing this great music program that Eastern offers.

Session A – Number 19 – Room 300.

Li Li

Professor Robert Twells, sponsor

Globalization of the NBA — From U.S. to International Market

The goal of this presentation is to introduce how the National Basketball Association (NBA) is expanding its market internationally. Based on my research, more than 15% of the NBA players are from outside the United States. Twenty-seven of the 30 teams have at least one international player. Today, the NBA wants to gain more attention from the world, especially in the Asian and European market. These international players are not only pursuing their athletic achievement here, but also playing an ambassador role between the NBA and the world market to promote their culture and business mutually.

Session C – Number 155 – Room 330.

Leeza Moser, Holly Grunn and Alexandre Duscio

Professor Sheila Sasser, sponsor

Men's and Women's Basketball 2009-10 Marketing Proposal

The men's and women's basketball teams of Eastern Michigan University are valuable assets to the community. Sadly, the attendance at both the men's and women's games has declined over the years causing a decrease in morale, support and University pride. There have been numerous marketing attempts to help alleviate this problem, however, none have given the desired results. Our marketing plan is designed to achieve the desired results and increase University pride. No one wants to play for an audience of empty seats. It is our job to not only fill those seats, but also keep them full throughout the entire season.

Session B – Number 78 – Room 300.

Allison Penney, Stephanie Thom, Sarah Craig, Michelle L. Hletko and Amanda Luthanen

Professor Elizabeth Edwards, sponsor

The Effects of Social Network Sites on Eastern Michigan University Students

Social networking is a trend that is not going away anytime soon. Its popularity has grown immensely. Social network users have their own language, and those who aren't using them are "out of the loop." Myspace and Facebook are excellent ways for people to stay in touch with friends and families. We developed a survey and used the information gathered to study the effects of social networking sites on our fellow EMU students.

Session B – Number 111 – Room 352.

David Benjamin Rogers, Amanda Luthanen, Renee Szewczyk and Jordan Stothers

Professor Sheila Sasser, sponsor

Study Abroad: The Spanish Experience

Study Abroad: The Spanish Experience was created to encourage students to enroll in the Ávila program where they have a unique opportunity to travel, study and live abroad in a beautiful and welcoming city. This program is affiliated with one of Spain's most prestigious universities. Discussed are the features and benefits to an international education, as well as business logistics to market the program to students.

Session C – Number 154 – Room 330.

Katherine L. Sessoms, Joy S. Robideau and Kathleen Gibbons

Professors Sheila Sasser and Sam Fullerton, sponsors

Proud to be an Eagle: Marketing Idol EMU Basketball Campaign

The "Proud to be an Eagle" campaign focuses on rebuilding student pride and attendance at basketball games while building loyalty and frequency of participation. An IMC campaign consisting of multi-media offerings of print, viral email, commercial taglines and a talent show was designed to build experiential preference and involvement for all attendees including students, faculty and the community.

Session B – Number 77 – Room 300.

Stephanie Thom, Allison Penney and Monica Herman

Professor Sheila Sasser, sponsor

Bump-Its

Advertising for the hair product "Bump-Its" is designed to launch a new product introduction with benefit positioning while increasing awareness with the target audience. The objective of the campaign is to show how the product works in a fun and entertaining manner with commercials and a full campaign that complements the overall tone of the product.

Session A – Number 16 – Room 300.

Teresa Whitaker and Christian Gerlitz

Professor Sheila Sasser, sponsor

Advertising Agency and Campaign: Small Steps in the Right Direction

This advertising campaign's purpose is to educate individuals about small steps to a cleaner environment. The presentation is an overview of our strategy and the specific tactics we used to reach our target market, individuals between the ages of 18 and 24. Our team developed an agency with a mission statement, conducted marketing research and created many media elements including a Facebook site. Group authors include Christian Gerlitz, Teresa Whitaker, Gevennie Sebastian, Jessica Szarma, Joseph Krolling, Linda Dillon, and Sharon DeLuca.

Session B – Number 75 – Room 300.

COLLEGE OF EDUCATION

Department of Special Education

Alisha Adleman

Professor Lori Parks, sponsor

Brain Gym®: Cognitive Stimulation for the Developing Mind

A growing body of research suggests that exercise stimulates the brain to be optimally ready, willing and able to learn. Developed by Dr. Paul Dennison and Gail Dennison, Brain Gym® is a simple set of movements that enhance whole-brain learning as well as integrate the mind with the body. Specifically, these activities are designed to improve concentration, focus, memory, physical coordination, organization, attitude and overall academic achievement. During this presentation, participants will be introduced to some of these exercises through both video and active demonstrations. In addition, research regarding the theoretical foundations of Brain Gym® will be shared.

Session A – Number 51 – Room 352.

Michele Ruth Alvarez

Professor Karen Carney, sponsor

Students with Disabilities: Can Canines Make a Difference in Academic Achievement?

Students with disabilities often benefit from unique strategies that support them in their school success. Evidence shows that pet therapy programs such as Reading Education Assistance Dogs can be very effective in increasing students' reading scores and helping to build confidence while reading. This presentation shares the highlights of research on pet therapy, the benefits for students with disabilities, and how to develop guidelines for establishing such a program.

Session B – Number 95 – Room 320.

Deborah Chung

Professor Derrick Fries, sponsor

High School Dropouts? The Impact of Michigan Merit Curriculum Reform on Special Education Students

The Michigan Merit Curriculum (MMC) reform, passed by the Michigan Department of Education in December 2006, mandates that all students who receive a high school diploma must complete at least four credits of math (including Algebra I & II and Geometry). Though well intentioned, the MMC reform will have detrimental effects on the graduation rates of special education and at-risk students. This presentation will examine the impact of the MMC reform on these students' futures and discuss the pending House Bill 4410 that seeks the reduction of Algebra II credit for all high school students.

Session B – Number 96 – Room 320.

Leandra Edwards

Professor Ann Orr, sponsor

Silence Isn't Always Golden: Augmentative/Alternative Communication for Steven

Steven is a 20-year-old young man with multiple disabilities who is unable to verbally communicate. This presentation is based on a senior honors project in which an augmentative/alternative communication device for Steven was sought and implemented. Device selection, funding and training details will be discussed, supplemented with a brief video of Steven's progress in communication.

Session A – Number 39 – Room 320.

Erin Marie Kanouse

Professor Derrick Fries, sponsor

Expanding Recreational Activities to the Blind and Visually Impaired

Visually impaired (VI) individuals engage in recreational activities at a significantly lower rate than their sighted counterparts. Several factors, including fear, lack of experience and lack of knowledge are believed to contribute to this discrepancy. The goal of this study is to help VI individuals, their parents and their educators overcome major barriers that inhibit their motivation for involvement and enhance their abilities to strive for greater confidence, independence and quality of life. This presentation will examine qualitative findings from secondary VI students in southeast Michigan and the barriers to full engagement in after-school activities.

Session A – Number 36 – Room 320.

Megan Pidgeon

Professor Alicia Li, sponsor

Math Learning Sets for Students with Severe Visual Impairments

Students who are Braille readers frequently have extremely low achievement in math. This is due to a variety of reasons that cannot be solved solely by providing students with Braille textbooks. Students need materials beyond text and graphics. They need concrete experiences of concepts and extensive drills to practice and master skills that their sighted peers get from printed worksheets. During this project, math learning kits were created to aid in the education and parental involvement in learning math of students with severe visual impairments. This presentation will address both the types of activities in the kits and the results of student use of the kits.

Session A – Number 37 – Room 320.

Jacqueline Elyse Pruder

Professor John Palladino, sponsor

Using Research-based Intervention Strategies in a Full-inclusion Setting

The purpose of this project was to study the effects of using special education research-based intervention strategies in a full inclusion general education setting. This presentation shares the benefits of using research-based intervention strategies with both general and special education students. The strategies from educational research by Robert J. Marzano, Debra J. Pickering and Jane E. Pollock will be demonstrated. Additionally, data collected from an area high school will be shared.

Session B – Number 89 – Room 302.

Department of Teacher Education

Daniel Cichoracki

Professor Brigid Beaubien, sponsor

Brain Development in Early Childhood, From Birth to Age Three

This project provides an introductory look at the technologies that are guiding and assisting our growing understanding of brain development. It also includes a brief, non-clinical look at the growing knowledge base on brain function and development, as well as a look at practical applications of this knowledge as it relates to the field of early childhood education.

Session A – Number 52 – Room 352.

Jill Cusumano

Professor Martha Baiyee, sponsor

Do You See What I See?

Many different techniques can be used to observe children in diverse settings. These observations allow a first-hand look at what children can do, especially during play. During this presentation you will learn about the use of a running record, anecdotal record, event sampling, time sampling (time check) and time sampling (frequency count). There are distinguishing differences among these five types of observations some that can be used with each other and others separately. The importance of observing children lies in using multiple techniques to find out information about the child's developmental status, thus, forming instruction and assessment that maximizes the child's development and learning.

Session A – Number 31 – Room 304.

Kate Dirks

Professor Linda Williams, sponsor

Bibliotherapy for the Inclusive Classroom

Bibliotherapy offers coping mechanisms and new insight for students who are struggling with life changing issues. This PowerPoint presentation will examine ways picture books can help teachers open the floor to issues that their students are working through at school or in their homes. Studies show that children are more apt to participate in discussions about a book, and its storyline, rather than discussing their own personal issues. Specific books will be highlighted for their multicultural characters and the type of therapy offered by the text.

Session A – Number 38 – Room 320.

Heather M. Dziurka

Professor Caroline Gould, sponsor

The Historic, Yet Tragic Impact of Media on Body Image for Women and Girls

This research project examined the elements of the psychological impact of media influences on body image for girls and women of all ages. A PowerPoint presentation will illustrate that the history of body image representation in the media has transformed over time from fairly accurate images to outrageously distorted images. The impact of this shifting media representation of an "ideal" female will be discussed and analyzed in terms of its influence on self-image, self-concept and self-approval. This presentation will cover the range of problems surfacing from the impact of distorted concepts of one's physical form.

Session A – Number 46 – Room 350.

Barbara Lynne Markell

Professor Mary Margaret Sweeten, sponsor

Small Business in America: Economics in Your World

In this 10-lesson unit, students are exposed to formal micro-economic principles through building small businesses of their choice. It was written with the goal of demystifying economics by requiring students to access their local community throughout the unit to collect data that applies to the economic principles they are learning. The desired impact is to break down barriers of exclusivity through community exposure and involvement while making economic ideas accessible and relevant.

Session A – Number 30 – Room 302.

Allen John Marry

Professor Mary Margaret Sweeten, sponsor

Sex Will Change Your Life:

A Unit on Sexuality Education for 9th Grade Health Students

This 10-lesson unit was designed to educate students about the many life-changing consequences of sexual activity. In a world where sexual pressures are everywhere, this unit educates students on how to deal with them appropriately and safely. Since students do not always heed the main message of abstinence, they are also prepared to deal with the many different experiences they will encounter in life involving peer and societal pressures.

Session B – Number 88 – Room 302.

Jennifer Nitz

Professor Mary Margaret Sweeten, sponsor

The Renaissance: A Unit Designed for a Multi-cultural Classroom

My unit covers the Renaissance and is designed for a multi-cultural 10th grade World History class. I created this unit so that students could gain an understanding and appreciation of this prominent cultural movement, and then appreciate and understand other cultural movements. This ability will help students be more accepting of other cultures and this is crucial as our schools are becoming increasingly diverse.

Session C – Number 152 – Room 320.

Deana Maureen Patterson

Professor Mary Margaret Sweeten, sponsor

Conditioning Anyone? Hair? Body? Oh Yes, That's Right ... The Mind

By learning how our brains work, we become empowered to make better choices. This unit is about the concept of learning. We will discuss cognitive learning and conditioning through examining the media, advertising, gambling and socialization plus discover how all these pieces fit into the puzzle of our brains. Upon completion of the unit, students will gain effective tools to reflect upon their lives and specifically address behaviors that they may want to change.

Session A – Number 29 – Room 302.

Shaun Welchko

Professor Christopher Robbins, sponsor

Bert and Ernie Visit the Golden Arches: PBS Kids, Corporate Sponsorship and Branding

This project evaluates the pedagogical aspects and potential socio-political consequences of corporate sponsorship messages aired during PBS kids programming. Sponsors are typically given 15-second spots between programs to broadcast their individual messages. While these messages follow rigid guidelines, are they essentially brand marketing toward children on trusted non-commercial media?

Session B – Number 76 – Room 300.

Shalyn D. Yandura and Ashley Krawczyk

Professor Martha Baiyee, sponsor

Meeting the Individual Needs of All Children: A Look at an Assessment in Early Childhood

As teachers, being conscious of the abilities of the children in our class is crucial when it comes to determining curriculum. In order to create a child-centered classroom that meets the needs of each individual child, it is necessary to know how to develop, implement and use assessment appropriately. This presentation will showcase our design and implementation of a primary screening tool for children between the ages of 2½ and 5 years old.

Session B – Number 87 – Room 302.

COLLEGE OF HEALTH and HUMAN SERVICES

School of Health Promotion and Human Performance

Anita R. Brauckmuller

Professor Frank Fedel, sponsor

WIMPi: Whiteboard+Information Management+Panopto+i>Clicker = Student Retention, Engagement and Learning

Five independent technologies have been integrated to create an engaging, convenient interface for traditional, hybrid and fully online students to access information. The EMU course management system (CMS-eCompanion) houses live (streamed) and archived Lecture Capture System (LCS-Panopto) events, with Interactive Whiteboard (IW) notes, and Information Management (IM) and Classroom Response System (CRS-i>Clicker) data for student use throughout their academic journey. WIMPi encourages interaction between virtual and in-class students and their instructor, provides a toolset to optimize knowledge acquisition, retention and comprehension, and enhances EMU's image as a technology integrator.

Session C – Number 132 – Room 300.

Jacqueline Marie Ellis

Professor Tony Moreno, sponsor

Comparison of Stride Technique and Injury Rate among Intercollegiate Runners

Because of the popularity of recreational running and the resultant injury rate within the United States, various running styles have been suggested to influence both performance and the risk of injury for this activity. The purpose of this investigation is to qualitatively evaluate running stride technique among competitive intercollegiate distance runners. Mid-foot versus rear-foot techniques will be compared to determine if there is an association with running injury as assessed by institutional athletic training staff.

Session C – Number 133 – Room 300.

Kendra N. Jaynes

Professor Shel Levine, sponsor

Depression among Diabetic Children

Depression among children accounts for a multitude of issues, such as feelings of inadequacy, eating disorders, low self-esteem and apathy toward life. Though the prevalence of depression in all children is 2-3%, the prevalence of depression among diabetic children increases four-fold to 12-18%. Depression among diabetic children has severe ramifications, such as a constant struggle for metabolic and glycemic control, thus, the co-morbidities should be monitored, managed and hopefully prevented.

Session B – Number 70 – Student Art Gallery.

Sandra Jones and Mackenzie Gilmore

Professor Frank Fedel, sponsor

Unlimited Opportunities in a World of Information: Successful Students = Successful Universities

Students today live and learn in an electronically connected world where access to information is almost unlimited. Identifying valid and useful information effectively is a daunting task, and local sources are often overlooked. This information management (IM) project promotes awareness of, and access to, not only virtual but also physical resources (i.e., models, DVDs, audio, notes) available to students in a given program of study. Resources are categorized and indexed, and results are searchable.

Session B – Number 113 – Room 352.

Zachary J. Maino

Professor Stephen McGregor, sponsor

The Comparison of Running Mechanics between Highly Trained Endurance Athletes and Collegiate Runners

The purpose of this study is to use triaxial high resolution accelerometers (HRA) to determine if there are differences in acceleration between highly trained intercollegiate runners and equally fit, lesser trained runners and how these putative differences relate to oxygen cost. $\dot{V}O_{max}$ tests will be conducted on a treadmill (True, MO) at a 1% grade and subjects will start at a pace of 2 km/h and increasing 2 km/h every 2 minutes until exhaustion. Breath-by-breath gas exchange will be measured using a portable metabolic system (Viasys, CA). Triaxial HRA will be collected at 625 Hz and streamed in real-time to a base station. Statistics will be performed using SPSS ($\alpha = 0.05$).

Session A – Number 54 – Room 352.

Kelly Robinson and Douglas Brown

Professor Frank Fedel, sponsor

Lecture Capture Systems (LCS): A Real Solution for Today's Student

The Lecture Capture System (LCS) meets the needs of today's busy students by letting them learn "anytime/anywhere." LCS allows students to participate in a lecture live from a remote location, to review points that were unclear in class, and to find additional related resources to help them understand the material most effectively. It provides instructors with a ubiquitous presence, enabling them to issue extended previews of upcoming class topics so students are well prepared for class discussions. When accessible serially, it promotes continuity of the educational experience. Additionally, lectures can be made portable, with options to download audio or video versions onto an iPod® or similar device.

Session B – Number 114 – Room 352.

Jasmyne Small

Professor Shel Levine, sponsor

Rezulin: The Miracle Pill?

In 1996, Warner-Lambert announced the development of Rezulin, a drug intended to treat the cause of type II diabetes. Rezulin belongs to the drug class thiazolidinediones (TZDs) that increase insulin sensitivity. It appeared that Rezulin played a key role in numerous deaths and was removed from the market. Steps have since been taken to potentially reinstate Rezulin into the market. The advancement of the drug into the market will be explored along with the relationship between Rezulin and its effects on the heart and kidneys.

Session A – Number 55 – Room 352.

School of Nursing

Sherstin Celeste Harrison

Professor Sandra Nelson, sponsor

Mental Illness During Pregnancy: Considerations for Treatment

There are experiences or stages in life that are naturally more stressful that have the potential to aggravate current mental illness or provoke it, such as pregnancy. Treating and caring for mentally ill pregnant women takes special considerations by both nurses and physicians. Nurses are the professionals actually administering medications prescribed to the patients, and therefore they must understand the proper prescription and use of psychotropic medication during pregnancy. This paper aims to evaluate the prescription and use of psychotropic medication during pregnancy, specifically the most commonly prescribed types: anxiolytics, antidepressants, antimanics and antipsychotics, as well as nonpharmacologic treatment, and the effects of going untreated.

Session B – Number 71 – Student Art Gallery.



Heather McCurdy

Professor Heidi Deininger, sponsor

What Nursing Intervention Improves Self-care Capabilities in Patients with Liver Cirrhosis?

Liver cirrhosis is the 12th leading cause of death by disease, accounting for 27,000 deaths each year. Cirrhosis has various causes and affects men slightly more often than women. Patients with advanced disease have a high symptom burden and lower health-related quality of life. Patients often have decreased feelings of confidence in their own abilities to care for themselves. This becomes a major challenge as patients present with increasing acuity. A review of current research on nursing interventions that impact cirrhotic patients' self-care capabilities will be presented. Implications for practice and research will also be discussed.

Session A - Number 27 - Room 302.

Mitchell P. Radelt, Sr.

Professor Julie Slack, sponsor

A Self-efficacy Study of Level III Nursing Students in Teaching Health Promotion to Children

The purpose of this study is to evaluate teaching strategies of nursing students utilizing a self-efficacy tool. The study will compare Level III Nursing Students who teach children health promotion and those Level III Nursing Students who teach their peers simulating children. The students will be asked to evaluate their self-efficacy and capability of teaching children health promotion in the future. My hypothesis is the students who actually taught children will rate themselves higher than the students who only taught their peers.

Session B - Number 85 - Room 302.

Annie W. Robbins

Professor Michael Williams, sponsor

The Mechanism by which Cranberries Prevent Urinary Tract Infections (UTIs)

Cranberries have long been thought to be beneficial in the treatment and prevention of UTIs. In 1914, it was proposed cranberries acidify urine, making it inhospitable for pathogens. This belief persists today. This systematic literature review was conducted to determine the specific mechanism by which cranberries prevent UTIs. Results demonstrate that cranberry juice consumption does not significantly lower the urine pH. Rather, it is the disruption of cellular adherence by proanthocyanidins that prevents UTIs.

Session A - Number 53 - Room 352.

School of Social Work

Kristina Schaefer

Professor Marilyn Wedenoja, sponsor

Using Daily Behavior Report Cards as an Intervention in Primary School Students with ADHD

The aim of this study is to investigate whether the Daily Behavior Report Card that consists of a Behavior Modification Plan is effective in lowering inappropriate classroom behavior in unmedicated primary school aged children diagnosed with Attention Deficit Hyperactivity Disorder, ADHD. These children are characterized as having difficulty sustaining attention at school and play, as well as exhibiting inappropriately high levels of hyperactivity-impulsivity.

Session B - Number 86 - Room 302.

Mark Anthony Wheeler

Professor Betty Brown-Chappell, sponsor

Stereotypes: Ageism, Racism and Sexism's Effects on the 2008 Presidential Election and Our Citizens

This was an exploratory qualitative study, relying on descriptive data, participant observation during the general election campaign, and in-depth interviews (N=8) within six months after the election of Barack H. Obama, the first African-American elected president of the United States. My findings were that the preponderance of negative stereotypes in the campaigns counter-intuitively catalyzed the positive discussion of stereotypes.

Session C - Number 164 - Room 352.

COLLEGE OF TECHNOLOGY

School of Technology Studies

Sarah Peterhans

Professor Giri Jogaratnam, sponsor

Managing Guest Expectations in Luxury Hotels

Success in luxury hotels comes from their ability to provide exceptional service to their guests. In order to provide exceptional service, the management committees at these hotels need to be able to know and understand what their guests expect from their hotels. Management committees need to have a system of methods to understand guest expectations and why these expectations may change. Managers also need to be able to manage their guests' expectations so that guests are not disappointed.

Session A - Number 1 - Room 204.

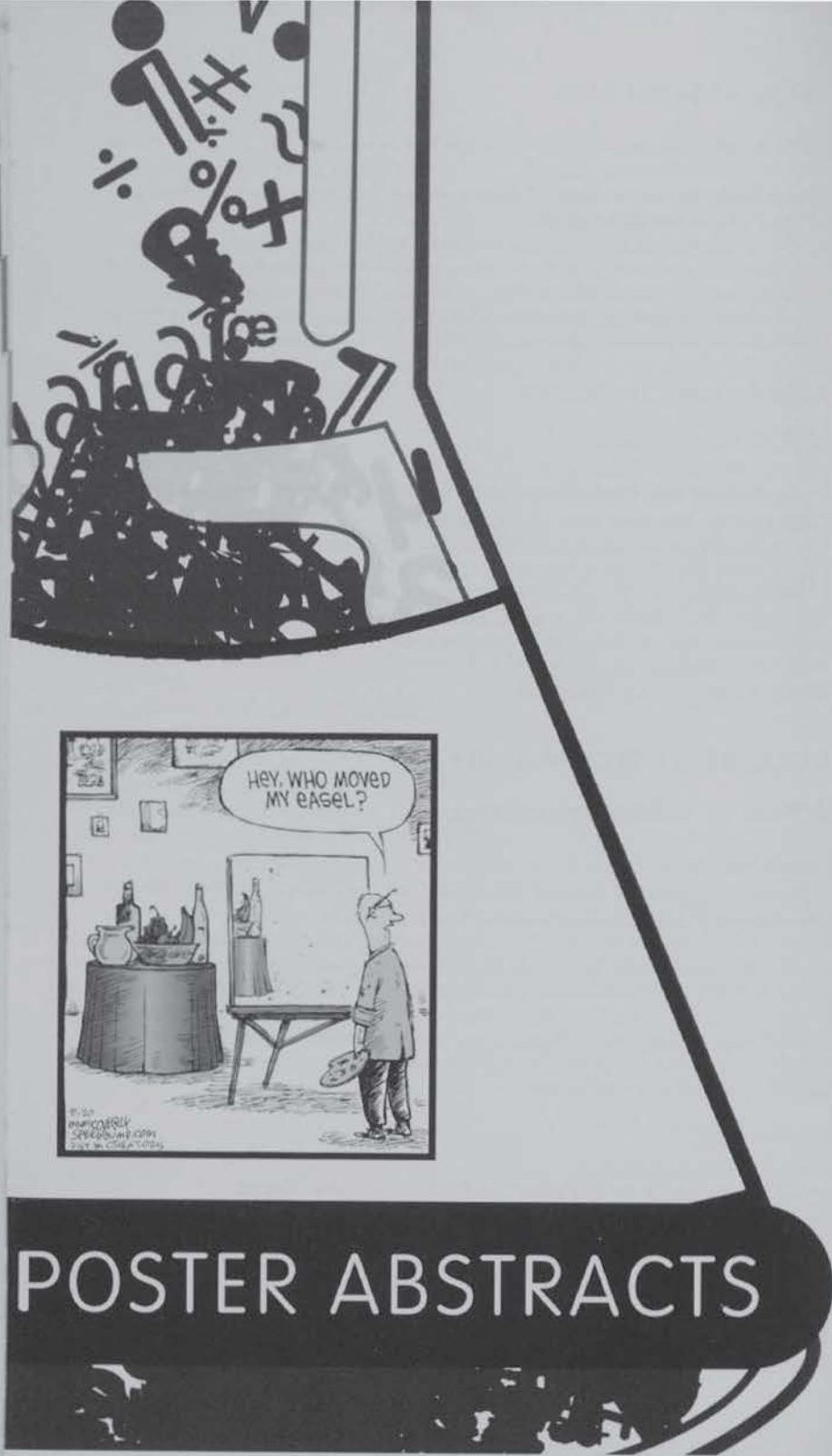
Karl Schuttler

Professor Skip Lawver, sponsor

Hacking Voice Over IP (VoIP): Is Your Corporate Phone System Secure?

As the standard for businesses moves from traditional telephone systems to Voice Over Internet Protocol (VoIP) the increased complexity in these systems provides for an increased number of vulnerabilities. This presentation will discuss the flaws in these systems and how hackers are taking advantage of them, giving them the ability to tap into your conversations and make calls on your dime.

Session B - Number 64 - Room 204.



POSTER ABSTRACTS

COLLEGE OF ARTS AND SCIENCES

CAS

Department of Art

Andrea Frownfelter

Professor Maria Ruggiero, sponsor

Hesitant, Hurt and Healing Flowers: Watercolors of Female Sexual Anatomy

Many women (myself included) have trouble expressing and embracing their sexuality because they are hurt, fearful, unsure or shy. I have found it easier to explore my personal observations and worries about female sexuality through a symbolic interpretation. By using the cliché of flowers as a representation of female genitalia, I hope to give visual voices to vaginas - and by extension, women - in the way that is most comfortable for me: through the creation of several watercolor paintings of flowers that have been wrapped, bandaged, taped, pinned or sewn.

Group 2 - 10:45 a.m. to 12:30 p.m.

Cressey Kovolessky

Professor Gretchen Otto, sponsor

Sexually Explicit Jewelry

Various metalsmithing and jewelry making techniques were used to create pieces around this particular theme. There are taboos concerning the idea of sex, especially outside of one's own home and among women. With jewelry it is (uncomfortably) brought into society. Balancing craftsmanship and aesthetics, the sexually explicit jewelry pieces on display were time consuming to make and were created at exhibition quality.

Group 1 - 8:30 a.m. to 10:15 a.m.

Jessica Tenbusch

Professor Gretchen Otto, sponsor

Geographical Representation through Metalsmithing and Drawing

I would like to explore the relationships of humans, animals and other living things to their geology and geography. These relationships may be how people perceive or relate to where they live geospatially, their migration patterns or how geography affects populations on a sociopolitical level.

Group 1 - 8:30 a.m. to 10:15 a.m.

Julie Weber

Professor Amy Sacksteder, sponsor

Altered Books: Revealing Hidden Lines

Through the exploration of book manipulation my artwork has evolved to incorporate both literary and visual elements. By cutting into existing texts, I reveal various layers and successive images, including silhouettes and embellishments. Whether taking the form of an installation piece or a typographical map, my work explores visual dichotomies and engages with the practice of book manipulation in contemporary art.

Group 2 - 10:45 a.m. to 12:30 p.m.

Department of Biology

Khadija A. Abbas and Elizabeth Dorman

Professor Daniel Clemans, sponsor

The Synergistic Effects of Probiotic Microorganisms on the Microbial Production of Butyrate *In Vitro*

Butyrate producing microbiota are important in supporting the normal function of the human gastrointestinal tract. PCR was used to detect the genes butyrate kinase and butyryl-CoA CoA transferase that contribute to butyrate production in a panel of representative gut microbiota. Co-culture experiments were conducted to determine the level of butyrate production. Real-time quantitative PCR was used to estimate the number of bacteria in co-culture by targeting the 16S rDNA gene. Preliminary data suggested that two *Clostridium* spp. (ASF 500 and ASF 502) and one *Eubacterium* sp. (ASF 492) possessed at least one of these genes for butyrate production; however, assessment of butyrate production showed the butyrate level does not correlate with the results from qPCR.

Group 1 – 8:30 a.m. to 10:15 a.m.

Joseph Michael Alvillar

Professor Anne Casper, sponsor

Analysis of DNA Repair at Chromosomal Fragile Sites in the Yeast *Saccharomyces cerevisiae*

Fragile sites within a chromosome are areas where breaks in the DNA frequently occur. These sites have been associated with genomic alterations in human tumor cells.

Fragile sites in *Saccharomyces cerevisiae*, a yeast, are also frequently associated with genomic changes. We seek to understand how DNA breaks at fragile sites are repaired. We are using differences between homologous chromosomes to investigate repair by a mechanism known as break-induced replication.

Group 2 – 10:45 a.m. to 12:30 p.m.

Lisa Denys

Professor Kristi Judd, sponsor

Incomplete Spring Mixing in Small Deep Lakes in Southeast Michigan

Temperate lakes are commonly thought to mix completely, or turnover, twice annually in the fall and spring. Turnover is mainly driven by temperate changes and wind, but factors such as salinity may also affect the extent of spring turnover. For this study, five southeast Michigan lakes were surveyed for chemical, physical and biological factors to assess oxygen in the bottom waters and identify trends in the abundance and diversity of zooplankton and phytoplankton. The results showed that complete mixing in spring occurred in only two of the five lakes surveyed. Incomplete mixing has important implications for nutrient dynamics and food webs in lakes.

Group 1 – 8:30 a.m. to 10:15 a.m.

Stephanie M. Gaul

Professor Cara Shillington, sponsor

Development of Prey Capture Behaviors in Newly Emerged Tarantula Spiderlings

Spiderlings emerge from their egg sacs with yolk reserves that nourish them until they establish prey capture behaviors. Development of these behaviors was observed by feeding newly emerged tarantulas (*Grammastola aureostriata*) pinhead crickets over several feeding trials. All predator-prey interactions were recorded for 30-minute periods. In successive trials, prey capture times decreased and there were reduced numbers of predator-prey interactions suggesting experience plays a role in development of predatory behaviors.

Group 2 – 10:45 a.m. to 12:30 p.m.

David Andrew-Essman Hufnagel and Mary Evelyn Patricia Skinner

Professor Aaron Liepman, sponsor

Heterologous Expression of CSLB Glycan Synthases from *Arabidopsis thaliana* in Yeast

Plant cell walls consist mainly of carbohydrates and are an important renewable resource, however, very few proteins involved in their synthesis have been identified. Numerous genes from the *CELLULOSE SYNTHASE-LIKE (CSL)* gene family encode glycan synthases involved in the biosynthesis of plant cell wall polysaccharides. Other CSL proteins are hypothesized to be involved in carbohydrate biosynthesis, but these remain largely uncharacterized. To determine the function(s) of *Arabidopsis* CSLB proteins, heterologous protein expression in the yeast *Pichia pastoris* is being used.

Group 1 – 8:30 a.m. to 10:15 a.m.

Rachel Hutchins, Alicia Ketcham, Stephanie Cholyk and Shirley Demko

Professors Daniel Clemans and Steven Francoeur, sponsors

The Effects of Light and Seasonality on Microbe Populations in Three Ecological Areas of the Huron River

The Huron River watershed comprises the three main land usages: agricultural, natural and urban. Theoretical speculation deduces that land usage affects the biochemical conditions within the watershed, therefore affecting water quality. Recent studies support that water quality can be assessed by examining the composition of the microbial communities found in biofilms. We analyzed and compared samples collected from the three site locations over the course of four seasons: fall (August), winter (December), spring (April) and summer (July). Microbial diversity was determined by isolating, amplifying and genotyping the 16S rRNA gene. The results show that microbial community structure varies as seasons, material compositions and site locations vary.

Group 2 – 10:45 a.m. to 12:30 p.m.

Alicia Ketcham

Professors Daniel Clemons and Steven Francoeur, sponsors

Formation of Clone Libraries as a High Resolution Finger Printing Technique to Determine Microbial Diversity

Microbial communities cultivated on unglazed ceramic tiles in artificial streams were analyzed to examine microbial diversity and dynamics in response to different levels of light and phosphorous. Results from culture-independent molecular techniques indicated that the microbial communities consisted largely of bacteria from the Proteobacteria phylum. Another interesting but unexplainable result was the presence of chloroplast hits, and their higher prevalence in streams containing low light and phosphorous conditions. Further molecular analysis will help identify the specific organisms and how they respond to these nutrient and light conditions.

Group 1 - 8:30 a.m. to 10:15 a.m.

Sarah Grace Killian

Professor David Kass, sponsor

The Evolutionary Origin of the Rodent *Mys* Element

Mys, a jumping gene, has a more complex evolutionary history than what was once believed. The *Mys* element was previously only identified within the genus *Peromyscus* that includes deer mice and their relatives. Genetic testing of related rodents indicated that *Mys* is also present in all analyzed genera of the tribe *Reithrodontomyini* and therefore dates back further in time. Additionally, *Mys* subfamilies derived from different source genes have been identified and their origins will be evaluated with further testing. The purpose of this study is to provide important insights regarding the origins and evolution of retrotransposons (jumping genes).

Group 2 - 10:45 a.m. to 12:30 p.m.

Jessica Kopala

Professor Robert Winning, sponsor

Involvement of Vav in the EphA4 Signaling Pathway of *Xenopus laevis* as a Possible p59fyn Activator

A potential role for the Vav2 gene in the EphA4 signaling pathway of the frog *Xenopus laevis* is investigated. To ensure that the Vav2 gene is expressed at the appropriate embryonic stages, a study of Vav2 expression was conducted. In the first phase of the project, the presence of Vav2 mRNA at various embryonic stages was detected using RT-PCR. In the second phase of the project, immunoblotting techniques were used to detect Vav2 protein. Results suggested the presence of Vav2 in all *Xenopus laevis* embryonic stages, but further research is necessary to determine the function and location of Vav2 in the EphA4 signaling pathway of the *Xenopus laevis* embryo.

Group 1 - 8:30 a.m. to 10:15 a.m.

Alma Longoria

Professor Kristi Judd, sponsor

Impacts of Land Use on Leaf Litter Decomposition in Streams

Land use and human activity, such as agriculture and development, can have strong impacts on water quality and biological processes in streams. We compared rates of leaf litter decomposition in streams draining urban, agricultural and natural land uses. Coarse and fine mesh bags were used to separate the effects of microbes and macroinvertebrates. We found no significant difference between decomposition rates in fine and coarse mesh bags, indicating decomposition was mainly by microbes. Decomposition rates were greatest in agricultural streams, but variability was high within this land use. Our results suggest that agriculture has the potential to impact biological processes in streams.

Group 2 - 10:45 a.m. to 12:30 p.m.

Karley Kristine Mahalak

Professor David Kass, sponsor

Identification and Application of Young SINE Variants in Assessing *Peromyscus* Phylogeny

Recent studies have differentially modified the established phylogenetic relationships of *Peromyscus* species (deer mice and their relatives). We have isolated "young" SINE (transposable element) sequences by data mining and PCR analysis. These highly advantageous homoplasy-free variants we identified are being utilized to help resolve the evolutionary history of *Peromyscus* species, as well as potentially demonstrate this application as a powerful tool in phylogenetic analyses.

Group 1 - 8:30 a.m. to 10:15 a.m.

Melissa Mejia Mora

Professor Glenn Walker, sponsor

Inner Ear Otoliths in Juvenile Fish: Correlation between Thiamine Deficiency and Gravity Perception

A comparative analysis is made of the inner ears of two thiamine (vitamin B1) deficient Lake Trout fry and two fry treated with the B vitamin complex, highlighting otolith and macular development in both fry. The research details preliminary work on the implications of thiamine deficiency on saccular, lagenal and utricular otolith formation as well as the correlation between thiamine depletion and disoriented swim-up behavior manifested in these fish.

Group 2 - 10:45 a.m. to 12:30 p.m.

Katherine Murcko and Bonnie Gibney

Professor Ulrich Reinhardt-Segawa, sponsor

Effects of Water Depth on Fast-start Responses in Three Fish Species

The sea lamprey is an invasive Great Lakes fish. Man-made physical barriers block lamprey migration in streams, but hurt native fish populations. We analyzed fast-start swim behavior of sea lampreys and two native fish species at varying water depths to determine how depth affects swim velocity and acceleration. We hypothesized that because of their body shape, lampreys would be poorer swimmers than the other species. Our results will aid in developing a selective sea lamprey barrier.

Group 1 - 8:30 a.m. to 10:15 a.m.

Michelle Rearick

Professor Robert Winning, sponsor

Cloning and Expression of ROCK1 in *Xenopus laevis* Embryos

P160 Rho-associated kinase (ROCK1) has been implicated as a downstream effector in the EphA4 signaling pathway. Its exact involvement, however, has yet to be established. Current experiments regarding its involvement in the *Xenopus* EphA4 pathway are being conducted using cDNA isolated from other species. While this method provides basic understanding of ROCK1's contribution to the pathway, a more ideal situation would be to use the gene from the same species. Cloning of *Xenopus* ROCK1 and characterization of its expression pattern in embryonic development are being done to provide new tools and understanding for future experimentation.

Group 2 – 10:45 a.m. to 12:30 p.m.

Melissa Rachel Redwood

Professor Marianne Laporte, sponsor

NADP Dependant-Malic Enzyme Expression in Arabidopsis Guard Cells

Arabidopsis thaliana plants were previously engineered for drought avoidance by reducing water loss through pores in their leaves. NADP-dependant Malic enzyme (ME) was over-expressed to cleave malate, producing CO₂ and closing the pores. In this project, the ME gene will be attached to a guard cell specific promoter to constrain expression to the pores, and a T7 tag will be added to allow detection. If successful, ME will only be detected in the guard cells of plants with drought avoidance capabilities.

Group 1 – 8:30 a.m. to 10:15 a.m.

Penelope Ann Richardson-Bristol

Professor Kristi Judd, sponsor

Effects of the Invasive Plant *Phragmites australis* on Great Lakes Wetlands along the Detroit River

Wetlands provide many important ecosystem services, such as flood control, habitat for plant and animal species, and water quality control. This study investigated the effects of the invasive plant *Phragmites australis* on wetland ecosystem structure and function. Plots were set up in wetlands of the Detroit River International Wildlife Refuge at sites with and without *Phragmites*. We assessed species diversity, plant biomass, duff accumulation, and water and soil nutrients. Our results show that sites containing *Phragmites* have higher plant biomass and lower species diversity, indicating that this invasive reed is altering the structure and function of these wetlands.

Group 2 – 10:45 a.m. to 12:30 p.m.

Stephanie Diane Seegert

Professor Robert Winning, sponsor

Characterization of LIM Kinase Expression and Activity in Early Amphibian Embryos

EphA4 is a cellular receptor that functions in mediating tissue interactions in embryonic development. The downstream effectors of EphA4 are mainly unknown, although previous research has indicated that the enzyme p160ROCK is one of the downstream mediators in the pathway. LIM kinase is an enzyme that is activated by p160ROCK. We have hypothesized that LIM kinase acts downstream of p160ROCK in the signaling pathway. Our results showed that LIM kinase is present and activated during development when EphA4 is active in the embryo that is consistent with a role for LIM kinase in EphA4 signaling. Further testing is necessary to determine if LIM kinase has an active role in EphA4 signaling.

Group 1 – 8:30 a.m. to 10:15 a.m.

Greg Stephan Sheremeta and Sarena Ellis

Professor Daniel Clemons, sponsor

The Diversity and Dynamics of Wetland Microbial Biofilm Communities in Response to Nitrogen and Phosphorous

Microbial identity plays a crucial role in the diverse biochemical cycles within our wetlands and ecosystems. In this research study we examined the microbial diversity of biofilm communities in response to different nitrogen and phosphorous levels at the man-made Paint Creek Wetland. Using culture-independent molecular techniques based on 16SrDNA, we will compare the microbial dynamics and diversity of the biofilms grown at the Paint Creek wetlands with those formed at the natural wetland within the Loesell Field laboratory.

Group 2 – 10:45 a.m. to 12:30 p.m.

Kimberly Smail

Professor David Kass, sponsor

Development of a LINE-based Phylogenetic Tool

Long interspersed DNA elements (LINEs) represent a family of "jumping genes" referred to as retrotransposons. These elements comprise up to 20% of the mammalian genome. Utilizing DNA from several species (rat, mouse, rabbit, degu, paca and pacarana), we amplified and analyzed LINE sequences in order to assess their use as a phylogenetic tool. This work serves as the basis of an ongoing class project investigation that provides students an understanding of the dynamics of the mammalian genome and molecular evolution. This study potentially will allow for contributions from genomic-based classes outside of EMU as a collaborative effort.

Group 1 – 8:30 a.m. to 10:15 a.m.

Adnan K. Syed and Danielle M. Rosen

Professor Aaron Liepman, sponsor

Exploring the Function of CSLA Family Members in Arabidopsis using GUS Reporter Gene Fusions

CELLULOSE SYNTHASE-LIKE A (CSLA) gene family members encode enzymes that synthesize mannan polysaccharides of plant cell walls. To improve our understanding of the functional significance of each CSLA family member, we are using CSLA promoter::GUS reporter gene fusions to study the spatiotemporal expression patterns of all nine CSLA genes in *Arabidopsis thaliana*. Distinct expression patterns have been observed among various members of this gene family, helping to explain why so many members of this family are present in Arabidopsis.

Group 2 – 10:45 a.m. to 12:30 p.m.

Jude Walser

Professor Cara Shillington, sponsor

Feeding Metabolics of Tarantulas in Response to Varying Availability of Prey

An increase in an organism's metabolic activity after feeding is called specific dynamic action (SDA). Many factors influence this process, including meal size and duration of period between meals. We measured SDAs in tarantulas after variable periods of non-feeding (10 days versus 30 days). Trends in our results indicate SDAs of increased magnitude and duration following longer periods of non-feeding. These data support our hypotheses and represent some of the first SDAs reported for spiders.

Group 1 – 8:30 a.m. to 10:15 a.m.

Samantha Marie Wolf
Professor Kristi Judd, sponsor

Effects of Land Use on Large Woody Debris in Streams

Large woody debris potentially influences a number of stream ecosystem processes. For example, wood in streams provide hot spots of microbial activity and nutrient cycling. We predicted that the amount of wood in streams would be related to the land use in its catchment. Our results showed that streams in natural land uses had more than two times the amount of large wood than streams draining agricultural or urban land uses, although there was high variability. Natural streams also had higher concentrations of dissolved organic carbon. These results suggest that agriculture and development may impact stream health by altering wood inputs.

Group 2 – 10:45 a.m. to 12:30 p.m.

Department of Chemistry

Michelle Altenburg
Professor Harriet Lindsay, sponsor

Use of Conformational Anchors to Investigate Stereoselectivity in the Aza-Cope Mannich Reaction

In an effort to probe the factors influencing selectivity in the aza-Cope rearrangement-Mannich cyclization, we have designed several reaction precursors that vary by the size of one or more of their carbon chains. Based on these studies, conclusions may be drawn regarding the size requirements to suppress unwanted movement in the molecule. Minimizing reaction byproducts serves as evidence for suppressing movement.

Group 1 – 8:30 a.m. to 10:15 a.m.

Deidre Hardemon
Professor Ruth Ann Armitage, sponsor

Determining the Efficacy of Nondestructive Pretreatment Methods on Known-age Textiles

The purpose of this study was to evaluate a new pretreatment method for removing humic acid contamination prior to nondestructive radiocarbon dating of textile samples. Modern-age wool and linen were contaminated with 11,000 year-old humic acid, then cleaned using three different protocols. Using GC-MS, we quantified humic acid marker compounds for comparison with the radiocarbon dates. The results of this work are an important step in applying this new dating technique to waterlogged and otherwise heavily contaminated archaeological textiles.

Group 2 – 10:45 a.m. to 12:30 p.m.

Patricia Hiemstra, Amy Poopat, Konrad Kasparschuster, Logan Darlow, Audrianna Sevilla and Cody Tull

Professors Ellene Tratras Cantis and Brooke Criswell, sponsors

Inconvenient Truths: Scientific Presentations

Chemistry and communication students in the Creative Scientific Inquiry Experience (CSIE) seminar worked with the Great Lakes Environmental Research Lab (GLERL), part of the National Oceanic and Atmospheric Administration (NOAA), to learn about various Great Lakes-based research projects. Some of these projects included work on Gar-fish populations, invasive species like Zebra mussels, ecosystem forecasting research and environmental observing systems. Learning about these research projects, how to produce a scientific podcast, and the podcasts themselves will be presented. Podcasts can be viewed on the GLERL website:

www.glerl.noaa.gov/pr/podcasts/CSIE_podcasts.html

Group 1 – 8:30 a.m. to 10:15 a.m.

William C. Joesten
Professor Timothy Friebe, sponsor

Investigation of an Acid-catalyzed Robinson Annulation under Microwave Irradiation

The base-catalyzed Robinson annulation reaction has historically been an important synthetic method for the preparation of substituted cyclohexanone ring systems. However, there are only a limited number of synthetically useful reports for the corresponding acid-catalyzed reaction. Our investigations into a simple acid-catalyzed Robinson annulation utilizing microwave irradiation will be presented.

Group 2 – 10:45 a.m. to 12:30 p.m.

Kevin Kawchak and John Heemstra
Professor Gregg Wilmes, sponsor

Synthesis of Amphiphilic Block Copolymers by Reversible Addition Fragmentation Chain Transfer Agents

Amphiphilic diblock copolymers, polymers containing regions of different chemical properties, self-assemble into nanostructures and show great potential as drug delivery devices. Reversible Addition Fragmentation chain Transfer polymerization (RAFT) allows for the synthesis of polymers with uniform chain lengths and a variety of functional groups. We report the synthesis of RAFT Chain Transfer Agents (CTAs) and their use in the synthesis of block copolymers. The effect of the heating method and the CTA:initiator:monomer ratio on the resulting polymers was investigated. The techniques developed here will allow us to synthesize a wide variety of useful block copolymers for future studies.

Group 1 – 8:30 a.m. to 10:15 a.m.

Bobby Marthambadi

Professor Gavin Edwards, sponsor

Observation and Modeling of Pollution over the Western Pacific Ocean

The concentration of pollutants over the Western Pacific Ocean has been investigated using aircraft measurements and computer models. This research is part of ongoing work to validate these models and diagnostic tools for the atmospheric chemistry community. The gas concentration data obtained in this study suggest that the Western Pacific is an area that is very sensitive to human activities. Using the tendency of the marine atmosphere to produce or lose ozone as an indicator, we show that pollution transported from Asia to this area can cause large-scale perturbations of the natural "background chemistry" over a large geographical area.

Group 2 - 10:45 a.m. to 12:30 p.m.

Geneve Maxwell

Professor Ruth Ann Armitage, sponsor

Methodological Study of Two Derivatization Methods for Proteinaceous Binders in Rock Paintings

In this study, two different derivatizing methods were used to characterize the proteinaceous materials in paint binders for both modern and archaeological samples. The two methods were compared to see which would yield more useful information, both qualitatively and quantitatively, about the composition of the binders when subjected to GC-MS. Ultimately this work will aid archaeologists who study rock paintings in understanding both the age and composition of these unique artifacts.

Group 1 - 8:30 a.m. to 10:15 a.m.

Tiffany Micys

Professor Harriet Lindsay, sponsor

Lewis-acid Mediated Aza-Cope Rearrangement Mannich Cyclization of Conformationally Mobile Iminium Cations

The aza-Cope rearrangement—Mannich cyclization has been used for both the synthesis of complex and simple nitrogen-containing ring systems. In most cases, the reaction commences with a Bronsted acid-mediated unimolecular or bimolecular process. While some examples of Lewis acid-mediated aza-Cope—Mannich reactions have been reported, this method has not been studied extensively. We have surveyed a variety of Lewis acids for their ability to initiate the aza-Cope—Mannich reaction in a unimolecular process and will describe optimized reaction conditions.

Group 2 - 10:45 a.m. to 12:30 p.m.

Ian Matthew Pendleton

Professor Harriet Lindsay, sponsor

Aza-Cope Rearrangement Mannich Cyclization of Conformationally Mobile Iminium Cations

The aza-Cope rearrangement—Mannich cyclization is a tandem process that allows a reactant to undergo several sequential reactions in a single synthetic step. During our investigations, we have found that reactions initiated by a Lewis acid form products faster and with fewer byproducts than those initiated by a Bronsted acid. Theoretical and experimental results illustrating these differences and the application of the aza-Cope—Mannich reaction to the synthesis of a synthetic amino acid will be presented.

Group 1 - 8:30 a.m. to 10:15 a.m.

Stephanie Simon, Hillary Walters and Manzar Zaidi

Professor Steven Pernecky, sponsor

Methodology and Analysis of Butyrate in Bacterial Microorganisms

Butyrate, a short chain fatty acid (SCFA), has been shown to have a positive impact on the immune system and on the gastrointestinal tract. The purpose of this experiment was to determine the presence of butyrate produced by various bacterial cells grown in culture using GC/MS derived chemically from extractions of bacterial cultures. Quantifiable amounts of butyrate were detected using GC/MS. By studying probiotics under variable cell growth conditions, the contribution of butyrate precursors and producers may be determined. The method can potentially be used to detect the presence of other SCFAs in bacterial cultures that have the potential of being beneficial to health.

Group 2 - 10:45 a.m. to 12:30 p.m.

Patrick Spoutz

Professor Maria Milletti, sponsor

An Analysis of the Conformational and Electronic Characteristics of PAI-1 Inhibitors

Polyphenolic compounds containing two gallate groups have been shown to be effective inhibitors to Plasminogen Activator Inhibitor-1 (PAI-1). In this work we use Density Functional methods to examine the relationship between pKa of gallate protons and activity for two inhibitors. The results show no distinct variation in the partial charges of the gallate protons. However, an analysis of conjugate base stability indicates that some differences are observed between the most and least effective inhibitors.

Group 1 - 8:30 a.m. to 10:15 a.m.

Brenan Nicole Wilson

Professor Deborah Heyl-Clegg, sponsor

Inhibition of Human Islet Amyloid Polypeptide Aggregation and Membrane Damage in β -islet Cell Mimics

Human islet amyloid polypeptide (hIAPP) is co-secreted with insulin and found in large aggregations within the β -islet cells of individuals with type II diabetes. The aggregation of hIAPP into fibrils is thought to disrupt the membranes of these cells resulting in their destruction. Fragments of insulin, a known fibrilization inhibitor, were synthesized and tested in synthetic vesicles using Thioflavin T fluorescence assays to determine their influence on hIAPP aggregation and membrane damage.

Group 2 - 10:45 a.m. to 12:30 p.m.

Department of Communication, Media & Theatre Arts

David Rash

Professor Henry Aldridge, sponsor

Michigan Theater Calendar Project

Professor Henry Aldridge is writing a history of Ann Arbor's Michigan Theater. The backbone of his research is a day-to-day calendar that lists every event and film run at the theater since 1928. To compile such a list requires a daily search of the Ann Arbor News since 1928. This project focuses on compiling the final years of this calendar.

Group 1 - 8:30 a.m. to 10:15 a.m.

Department of Computer Science

Andrew Benson, Andrew Byrd, Byron Heads, Lahiru Samarawickrama and Maxwell Langensiepen

Professor Susan Haynes, sponsor

An IDE for the Visual Programming Language GLIF

The basis of this project is to build an Integrated Development Environment (IDE) for the programming language GLIF. In GLIF, the programmer directly encodes the flow of data. The IDE is an environment for GLIF program development, auto-formatting to enforce the language syntax. Since this language is visual, it is very important to perfectly format the program. An explanation, overview, and demonstration of the current implementation of GLIF and its IDE will be given.

Group 2 – 10:45 a.m. to 12:30 p.m.

Department of English Language and Literature

Karla Maschalko

Professor Derek Mueller, sponsor

3.333 Ways to Digital Style: Remaking the Manifesto

In the *Communist Manifesto*, Karl Marx uses vivid and dramatic language to describe the bourgeoisie. "3.333 Ways to Digital Style: Remaking the Manifesto" takes a passage from Marx that is filled with such language and remakes it into three distinctive genres: a Twitter stream, an imagetext triptych and a syntax analysis. The first two remakes amplify Marx's message while illustrating how his prose style can generalize to other genres or medias. The third analyzes the structure of Marx's prose using Richard Lanham's *Paramedic Method* and Virginia Tufte's "Short Sentences." The goal is to demonstrate what happens when traditional prose style moves to a digital platform.

Group 1 – 8:30 a.m. to 10:15 a.m.

Department of Geography and Geology

John Natus

Professor Norm Tyler, sponsor

Unconventional British Colonialism in Adelaide, South Australia

Adelaide, South Australia is one the most beautiful cities in the world. Its astonishing emergence represented unconventional British Colonialism. Other settlements in Australia included penal colonies, but no criminals could be transported to Adelaide. Adelaide attracted settlers because of its religious freedom, and its residents were not subject to the laws or constitutions of any other part of Australia. Adelaide's residents relied on good physical planning principles, a perseverant culture, and a mining and agricultural economy for their eventual success.

Group 2 – 10:45 a.m. to 12:30 p.m.

Department of History and Philosophy

Eric Leo

Professor Philip Schmitz, sponsor

Athenian Education during the Classical Period: A Historical Description and Psychosocial Analysis

This paper explores the education of Athenians during the classical period (450-323 BCE) and gives special attention to the social and psychological aspects of their development. The education system that was used will be described richly and analyzed in detail to explain the features that gave rise to Sophists, Plato's Academy, Aristotle's Lyceum and Alexander the Great. Primary and contemporary expert sources along with modern theories in social psychology will be used to explain these occurrences. The research and evidence presented will argue that educational conditions of the period were the cause of a Golden Age.

Group 1 – 8:30 a.m. to 10:15 a.m.

Danielle Kareem Swidan

Professor Philip Schmitz, sponsor

The History of Rhinoplasty

"Nose jobs" might be a current trend in countries all around the world, but they have been around in history for thousands of years. Rhinoplasty techniques have evolved over time and the reasoning behind obtaining an altered look to the face has changed as well, yet modern-day operating rooms still use the basic techniques that have been found in operating rooms around the world for many years.

Group 2 – 10:45 a.m. to 12:30 p.m.

Department of Physics and Astronomy

Ransom Brown

Professors Diane Jacobs and Beth Kubitskey, sponsors

Mock Mars Rover Mission: Increasing Interest in STEM Courses

The main thrust of our research was to determine whether a single, significant enrichment event in 8th grade could alter students' attitudes toward taking secondary science classes. We gave an 8th grade class a pre-experience survey to assess their attitudes toward science. We then worked with the students for eight weeks, on a Mars Rover project, during which the students built robots and programmed them to navigate a mock Martian terrain they designed. We gave the class a post-experience survey to determine if their attitudes had changed. We will discuss our findings, including the beginnings of a longitudinal study where we will track the students during their high school careers.

Group 2 – 10:45 a.m. to 12:30 p.m.

Nickolas Alan Miller

Professor Diane Jacobs, sponsor

Researching Ice Nucleation and Timing Circuits — A Summer Studying the Clouds

This past summer I studied ice nucleation and built a circuit capable of producing laser pulses for a holographic imaging system. I used an apparatus, created by Colin Gurganus at Michigan Tech University, to study how water freezes by super-cooling water droplets that have a 2 mm diameter. I then built a timing circuit that would pulse a laser so we could capture multiple images of cloud particles. I will discuss how ice nucleation and the timing circuit are used to study clouds.

Group 1 – 8:30 a.m. to 10:15 a.m.

Audelia Wittbrodt

Professor James Sheerin, sponsor

Studies of Ionospheric Interactions at HAARP

We report the results from a recent series of campaigns employing the HAARP HF transmitter (Gakona, Alaska) to generate and study strong Langmuir turbulence (SLT) in the interaction region of overdense ionospheric plasma. Diagnostics included the Modular UHF Ionospheric Radar (MUIR) sited at HAARP, the SuperDARN-Kodiak HF radar, and HF receivers to record stimulated electromagnetic emissions (SEE). Dependence of diagnostic signals on HAARP HF parameters, including pulse length, duty-cycle and aspect angle were recorded. Short pulse, low duty-cycle experiments demonstrate control of artificial field-aligned irregularities (FAFI).

Group 2 – 10:45 a.m. to 12:30 p.m.

Department of Psychology

Natalie Anderson, Kendra Clark and Alyssa C. Frederick

Professor Karen Saules, sponsor

Binge Drinking and Adverse Consequences among College Athletes, Exercisers and Non-exercisers

The literature suggests that college students engage in high levels of binge drinking and experience related adverse consequences. Therefore, understanding risk factors for college students' problematic alcohol use is important. Our preliminary findings suggest that regular exercisers have high rates of binge drinking, whereas lower rates were found among college athletes and non-exercisers. Also, both athletes and exercisers have relatively high rates of adverse consequences compared to non-exercisers. Data collection is ongoing.

Group 1 – 8:30 a.m. to 10:15 a.m.

Sean V. Astrakhan

Professors Karen Saules and Shauncie Skidmore, sponsors

Comparison of Self-reported Psychological Distress between Mexican and American University Students

Are Mexican college students happier than American college students? This study investigated self-reported psychological, interpersonal relationship and social role distress, academic self-efficacy, perceived level of social support, and family economics between these culturally diverse college populations. Data for the American students was collected at Eastern Michigan University and data for the Mexican students was collected at the Autonomous University of Benito Juarez. It was hypothesized that the Mexican population would report less distress, higher academic self-efficacy, and higher levels of friendship but lower family economic status. Results will be presented and discussed.

Group 2 – 10:45 a.m. to 12:30 p.m.

Julia Barta

Professor Heather Janisse, sponsor

School Readiness in Low-income Preschoolers: Findings from an Urban Head Start Program

Children enrolled in Head Start come from low-income families in which the parents often have less than a high school degree. Studies have shown that because of the disadvantages this population faces, these students are less prepared to enter kindergarten than other students. Children who begin school with skills like cooperation and communication are much more likely to earn good grades, graduate and be employable. The Head Start program targets children in low-income families to help prepare them for school. The purpose of this project was to examine changes in school readiness among students in a local Head Start agency across one school year as they prepare for kindergarten transition.

Group 1 – 8:30 a.m. to 10:15 a.m.

Alicia Renee Burditt

Professor Alissa Huth-Bocks, sponsor

The Influence of Economic Hardship and Perceived Social Support on Maternal Perceptions of Infant Temperament

Research shows that parental reports of infant temperament are influenced by a number of variables besides infant behavior. Utilizing the Infant Characteristics Questionnaire, Economic Hardships Interview and Perceived Social Support Scale with an at-risk sample, this study focuses on how economic hardships may contribute to maternal perceptions of infant temperament during the first year, and how social support may mediate that effect.

Group 2 – 10:45 a.m. to 12:30 p.m.

Alexandra Busuito

Professor Alissa Huth-Bocks, sponsor

Economic Hardship, Attachment Style and Women's Mental Health

Post Traumatic Stress Disorder (PTSD) and Perinatal Depression (PND) are disorders that are prevalent among adult females and present serious health problems. Given the severity of impairment seen in PTSD and PND, it is important to understand the risk factors for symptoms of each disorder. The current research study examined economic hardship and adult attachment styles as potential risk factors for the development of PTSD and PND symptoms in a group of high-risk pregnant women.

Group 1 – 8:30 a.m. to 10:15 a.m.

Angela Rochelle Joerin, Jess Harmon, Maegan Calvert
and Brianna Lopiccio

Professor Alissa Huth-Bocks, sponsor

The Association between Demographic Characteristics and Prenatal Maternal Expectations

The present study examined associations between demographic characteristics and prenatal expectations of motherhood. One hundred twenty primarily low-income female participants were interviewed during their third trimester of pregnancy. Results revealed no significant associations between prenatal expectations and income, ethnicity, relationship status, or first-time-motherhood vs. multiparous status. However, there was evidence that women may have defensively reported unrealistically positive expectations.

Group 2 - 10:45 a.m. to 12:30 p.m.

Briana Marie Murnahan

Professor Alida Westman, sponsor

Stress Relief and Anxiety Reduction Due to Paper-based and Computer-based Personal Writing

Stress and anxiety are common factors in the everyday lives of college students. Some students have found ways to reduce them and others have not. Four mediums were compared. These included two older styles of writing (diary and journal) and two newer styles (e-mail and Weblogs). E-mail was used most frequently, but following emotional hardship, students were more likely to turn to journaling. Diary writers started at a younger age than Weblog users, and diary writers tended to be younger than individuals who relied on none of these mediums for stress relief and anxiety reduction.

Group 1 - 8:30 a.m. to 10:15 a.m.

Eoin Rockne O'Bryan

Professor Alida Westman, sponsor

ATTENTION: The Effects of Splitting Attention between Two Modalities on Perception and Retention

Attention is a prerequisite for understanding and retaining information. Individuals frequently try to do two things at once, and they think they can. This study looked at the ability of individuals to listen and look at different stimuli and retain the information from both. This was done by having each participant listen to a list and read a different list at the same time and attempt to remember and record both lists accurately. The results showed that participants either scored low on both lists, or they scored higher on one list and very low on the other. These findings have implications for many settings, including the use of cell phones while driving.

Group 2 - 10:45 a.m. to 12:30 p.m.

Eric Charles Prichard

Professors Alida Westman and John Knapp, sponsors

Attitudes of Psychology Students and Biology Students toward Science and Paranormal Beliefs

The American Psychological Association guidelines for the psychology major emphasize the importance of teaching psychology students to appreciate the importance of the scientific method and critical thinking. Using the Science Motivation Questionnaire and the Revised Paranormal Beliefs Scale, the research evaluated the extent to which students majoring in psychology like learning about science and believe in what are termed "supernatural phenomena." For perspective, students majoring in psychology were compared to students majoring in biology.

Group 1 - 8:30 a.m. to 10:15 a.m.

COLLEGE OF EDUCATION

Department of Special Education

McLaine Catherine Dury

Professor Ann Orr, sponsor

Co-teaching Outcomes: What Does the Research Say?

To foster the inclusion of special education students within the general education setting, more and more schools are turning toward a co-teaching model of instructional delivery. Little is known about the efficacy of this pedagogy. This project explores the phenomenon of co-teaching by delving deep into the related literature. Specifically, this poster will present information on the various models of co-teaching and the outcomes associated with each model. Despite significant variants in study methodology, this synthesis of the literature indicates that co-teaching offers all students more positive outcomes than negative.

Group 2 - 10:45 a.m. to 12:30 p.m.

Noel McAuliffe

Professor Linda Polter, sponsor

Getting the Picture: Figurative Language Comprehension

Figurative language includes idioms, similes, metaphors and proverbs. Children with language impairments may understand the literal use of language but not the abstract use of language. Most children with language impairments are in the general education classroom where, according to one study, about 11% of teacher utterances contain figurative language. In addition, these children experience indirect requests, sentence ambiguity and words with multiple meanings. Figurative language comprehension is important for classroom performance as well as literacy skills. This presentation focuses on the acquisition of idioms and possible intervention for children with language impairments.

Group 1 - 8:30 a.m. to 10:15 a.m.

COLLEGE OF HEALTH and HUMAN SERVICES

School of Health Promotion and Human Performance

Jacquelyn L. Hall

Professors Tony Moreno and Jim Sweet, sponsors

The Incidence of Concussion and ACL Injuries among Female Division I Intercollegiate Athletes

Among female athletes, approximately 70% of all anterior cruciate ligament (ACL) injuries are the result of noncontact mechanisms, often associated with poor neuromuscular control. It is implied that neuro-cognitive changes resulting from concussion may diminish neuromuscular control, possibly predisposing them to noncontact ACL injuries. The purpose of this study is to determine if a relationship exists between the incidence of concussion and ACL injuries among female athletes at two intercollegiate Division I institutions.

Group 1 – 8:30 a.m. to 10:15 a.m.

Janelle Mitchell

Professor Shel Levine, sponsor

Moving to the Rhythm of your Heart: Exploring Current and Newer Treatments for Atrial Fibrillation

Over 2.2 million Americans suffer from an arrhythmia called atrial fibrillation (AFib). During atrial fibrillation, both the left and right atria fibrillate or shake instead of contract. Since the chambers are not contracting, the blood is not being entirely cleared from the atria, thus blood pools and increases the possibility of clot formation. A blood clot can leave the atria of the heart and travel to the brain resulting in a stroke. People with atrial fibrillation arrhythmia account for 15% of stroke cases. There are several treatments for atrial fibrillation. The purpose of this presentation is to explore current and new treatments for AFib.

Group 2 – 10:45 a.m. to 12:30 p.m.

School of Health Sciences

Seetha Nagaraja

Professor Anahita Mistry, sponsor

Type of Dietary Fat Influences the Action of Insulin

Dietary fat is well known for its role in cardiovascular disease. Does it increase the risk for diabetes? Types of dietary fat like medium-chain triglycerides or omega-3 alter insulin sensitivity. Reduced insulin sensitivity can cause insulin resistance and increases the risk for diabetes. This presentation will examine current research on the relationship between dietary fat composition and insulin action and its role in the development of insulin resistance. Recent studies indicate contradictory and surprising results.

Group 1 – 8:30 a.m. to 10:15 a.m.

John Reid

Professor Lynne Shetron-Rama, sponsor

Testing with an Anionic Surfactant

Minimum Inhibitory Concentration (MIC) and Minimum Bactericidal Concentration (MBC) were used to test the resistance of a wide list of pathogenic organisms to an anionic surfactant. Carrier testing was then implemented to establish an acceptable industry standard for testing the efficacy of this surfactant in killing pathogenic organisms. Stainless steel penicylinders were used for carrier testing for the organisms *Staphylococcus aureus*, *Escherichia coli*, *Candida albicans* and *Streptococcus* species.

Group 2 – 10:45 a.m. to 12:30 p.m.

Amanda Josephine Van Dort

Professors Lynne Shetron-Rama and Stephen McGregor, sponsors

Inflammatory Response to Multiple Bouts of Anaerobic Exercise

In order to understand the effects of anaerobic exercise on circulating cytokines, pro-inflammatory Interleukin-6 and anti-inflammatory Interleukin-10 were analyzed. Furthermore, creatine kinase was investigated to test for muscle fiber injury, and C-reactive protein was assayed for indication of a general systemic inflammatory response. Blood was drawn from 15 subjects at 30 minutes prior, one hour post and 24 hours post Wingate Bike test to measure the aforementioned biomarkers.

Group 1 – 8:30 a.m. to 10:15 a.m.

Habeba Zourob

Professor Anahita Mistry, sponsor

Advances in Distance Education in the Health Sciences

With technological advances, there has been remarkable progress in methods and techniques used to impart education. Online classes are becoming popular since they provide access to the classroom at all times and from anywhere. A virtual learning environment has its pros and cons. This study will examine the differences and similarities among online and on-campus learning environments in the Health Sciences, particularly in the nutrition field.

Group 2 – 10:45 a.m. to 12:30 p.m.

School of Social Work

Kayla Potter

Professor Marcia Bombyk, sponsor

Beyond Words: A Case Study in Social Work Praxis for Diversity Awareness

Developing educational programs that further the aims of social justice advocacy is a difficult yet valuable task within the field of social work. Beyond Words is an experiential program developed by student leaders in the Office of Diversity and Community Involvement that serves to raise campus awareness of social issues in our culture. This presentation will document and examine the initial outcomes and impact of Beyond Words within the campus community.

Group 1 – 8:30 a.m. to 10:15 a.m.

COT

COLLEGE OF TECHNOLOGY

School of Engineering Technology

Ryan Fox, Dalia Gutierrez and Matthew Kolehmainen

Professor Harvey Lyons, sponsor

Rehabilitation Assistance Walker Prototype

For this project we are taking a capstone project completed last year of a design for an assistance walker and creating the prototype. Included in the work will be a thorough materials, structural and ergonomic analysis.

Group 2 – 10:45 a.m. to 12:30 p.m.

School of Technology Studies

Maria Camille Langton and Dainn Dinardo

Professor Subhas Ghosh, sponsor

A Process to Produce Corn to Fabric

A new generation bio-fiber has been developed by Cargill, Incorporated. This fiber is produced from corn as a raw material. Sugar is extracted from the cornstarch that is fermented to lactic acid. Lactic acid is then polymerized into poly (lactic acid) fiber that is referred to as PLA fiber. Common applications of these fibers are woven textiles, knitted textiles, non-woven, centenary, medical products, agricultural and civil engineering goods.

Group 1 – 8:30 a.m. to 10:15 a.m.

Aunmar Mohammed and Anthony Bougard

Professors Pamela Speelman and Jeremy Catarino, sponsors

Simulation Visualization: What's the Purpose

Simulation is being used in almost all professions, from medical training to engineering analysis. In this poster presentation, the participants will discuss and demonstrate what can happen in a vehicular simulation when there are impairments to the driver, and when the surrounding environmental and lighting conditions are not optimal. This simulation falls under two specific categories: training and communication.

Group 2 – 10:45 a.m. to 12:30 p.m.

Lindsay Alexa Wallace

Professor Cathryn Amidei, sponsor

The Jacquard Loom at Greenfield Village

Greenfield Village houses one of the few functional, hand-powered Jacquard head looms in North America. While it has been fixed after sitting in disrepair for many years, there were several mysteries to unravel. By going through archives and graphing out the cards used for the Jacquard patterns much has been learned about the loom's use.

Group 1 – 8:30 a.m. to 10:15 a.m.



COT

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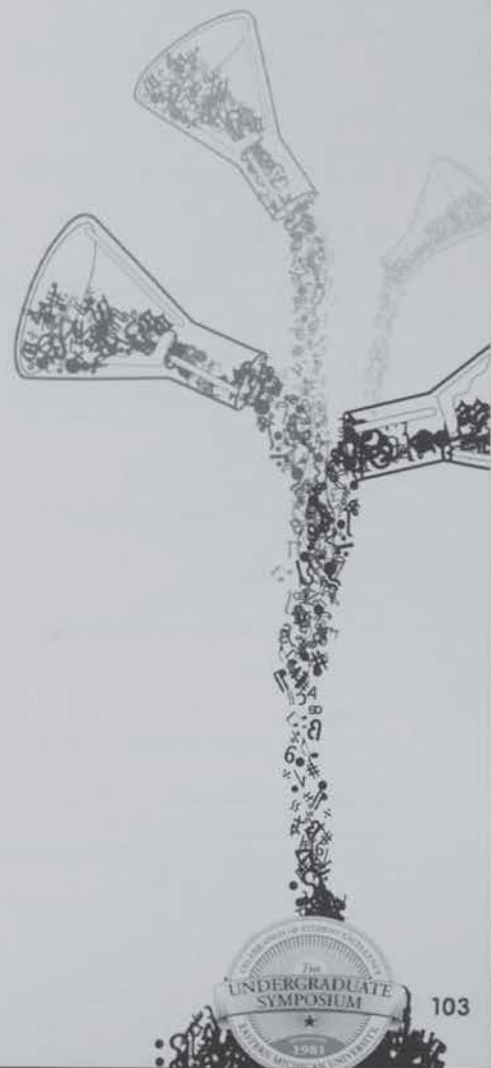
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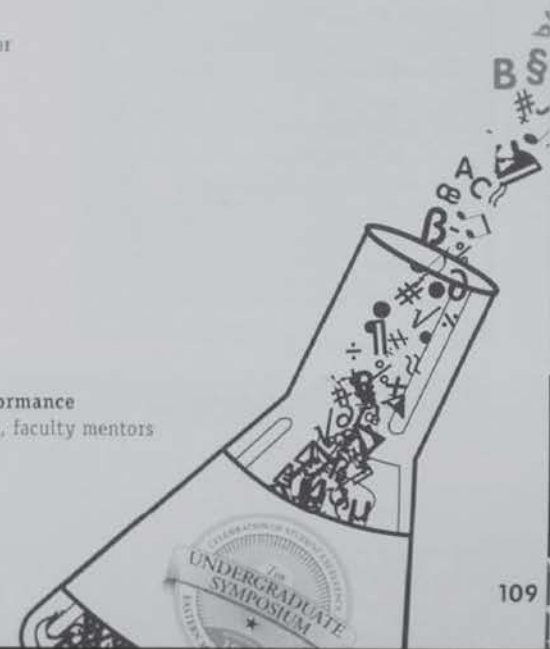
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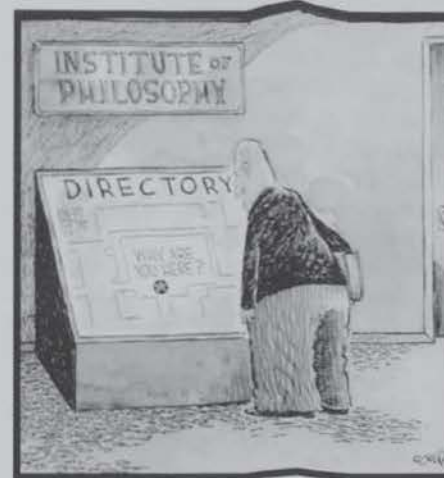
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INDEX

Name	Sessions	Pg.
Abbas, Khadija A.	Group 1 - 8:30 a.m. to 10:15 a.m.	80
Abdollahi, Fatemeh	Session C - Number 145 - Room 304.	40
Abernathy, Greg	Session C - Number 134 - Room 301.	34
Accomando, Erin	Session A - Number 4 - Room 204.	35
Adleman, Alisha	Session A - Number 51 - Room 352.	69
Ahles, Bailey	Session A - Number 9 - Auditorium.	53
Alexander, Alexis	Session B - Number 99 - Room 320.	35
Altenburg, Michelle	Group 1 - 8:30 a.m. to 10:15 a.m.	86
Altman, Mark	Session B - Number 101 - Room 330.	63
Alvarez, Michele Ruth	Session B - Number 95 - Room 320.	69
Alvillar, Joseph Michael	Group 2 - 10:45 a.m. to 12:30 p.m.	80
Anderson, Lindsay Joy	Session A - Number 57 - Kiva.	40
Anderson, Lindsay Joy	Session C - Number 168 - Kiva.	40
Anderson, Natalie	Group 1 - 8:30 a.m. to 10:15 a.m.	92
Astrakhan, Sean V.	Group 2 - 10:45 a.m. to 12:30 p.m.	92
Bancroft, Rachael Anne	Session A - Number 59 - Kiva.	41
Barta, Julia	Group 1 - 8:30 a.m. to 10:15 a.m.	93
Bartley, Ashley	Session A - Number 33 - Room 304.	45
Beck, Amanda Ann	Session B - Number 73 - Student Art Gallery.	35
Becker, Angi	Session B - Number 91 - Room 304.	44
Bedrosian, Cynthia	Session B - Number 105 - Room 350.	58
Benson, Andrew	Group 2 - 10:45 a.m. to 12:30 p.m.	90
Bolog, Robert Andrew	Session A - Number 59 - Kiva.	41
Bonk, Katelin	Session A - Number 32 - Room 304.	36
Bou-Fakreddine, Robieh A.	Session C - Number 136 - Room 301.	56
Bougard, Anthony	Group 2 - 10:45 a.m. to 12:30 p.m.	98
Bourke, Shannon Colleen	Session C - Number 125 - Student Art Gallery.	56
Brauckmuller, Anita R.	Session C - Number 132 - Room 300.	73
Brigham, Sarah Anne	Session A - Number 44 - Room 330.	48
Brown, Lindy	Session B - Number 67 - Auditorium.	53
Brown, Ransom	Group 2 - 10:45 a.m. to 12:30 p.m.	91
Buelow, Nathan Lewis	Session A - Number 17 - Room 300.	66
Burditt, Alicia Renee	Group 2 - 10:45 a.m. to 12:30 p.m.	93
Burnik, Gaber	Session B - Number 110 - Room 352.	52
Busuito, Alexandra	Group 1 - 8:30 a.m. to 10:15 a.m.	93
Byrd, Andrew	Group 2 - 10:45 a.m. to 12:30 p.m.	90
Calvert, Maegan	Group 2 - 10:45 a.m. to 12:30 p.m.	94
Carnaghi, Lucy Elizabeth	Session B - Number 119 - Kiva.	41
Carson, LaMario	Session A - Number 10 - Auditorium.	54
Carter, Chelsea	Session C - Number 140 - Room 302.	48
Casey, Erin	Session C - Number 144 - Room 304.	44
Casey, Mary Colleen	Session C - Number 129 - Room 300.	58
Cater, Kristen	Session B - Number 98 - Room 320.	34
Chapman, Richard	Session B - Number 82 - Room 301.	62
Cholyk, Stephanie	Group 2 - 10:45 a.m. to 12:30 p.m.	81
Chung, Deborah	Session B - Number 96 - Room 320.	70
Cichoracki, Daniel	Session A - Number 52 - Room 352.	71
Clark, Adrienne	Session A - Number 7 - Auditorium.	53

Name	Sessions	Pg.
Clark, Kendra	Group 1 - 8:30 a.m. to 10:15 a.m.	92
Cogswell, Kyle	Session B - Number 79 - Room 300.	66
Cohoon, Kellie Lois	Session A - Number 43 - Room 330.	48
Colston, Cheresse Elizabeth	Session B - Number 112 - Room 352.	41
Cordes, Melissa	Session B - Number 84 - Room 301.	34
Cosme, Antonio Rafael	Session B - Number 97 - Room 320.	59
Craig, Sarah	Session B - Number 111 - Room 352.	68
Crandall, Doug	Session B - Number 94 - Room 304.	42
Cusumano, Jill	Session A - Number 31 - Room 304.	71
Dardio, Karlton Lee	Session A - Number 59 - Kiva.	41
Darlow, Logan	Group 1 - 8:30 a.m. to 10:15 a.m.	87
Davenport, Kristin	Session A - Number 35 - Room 304.	60
Davis, Patrick Thomas	Session A - Number 12 - Student Art Gallery.	39
Demko, Shirley	Group 2 - 10:45 a.m. to 12:30 p.m.	81
Denys, Lisa	Group 1 - 8:30 a.m. to 10:15 a.m.	80
Dinardo, Dainn	Group 1 - 8:30 a.m. to 10:15 a.m.	98
Dirks, Kate	Session A - Number 38 - Room 320.	71
Dorman, Elizabeth	Group 1 - 8:30 a.m. to 10:15	80
Dury, McLaine Catherine	Group 2 - 10:45 a.m. to 12:30 p.m.	95
Duscio, Alexandre	Session B - Number 78 - Room 300.	67
Dyer, Daniel	Session C - Number 123 - Auditorium.	55
Dziurka, Heather M.	Session A - Number 46 - Room 350.	72
Edmonds, Cherie Perez	Session A - Number 47 - Room 350.	42
Edwards, Jonathan	Session A - Number 8 - Auditorium.	53
Edwards, Leandra	Session A - Number 39 - Room 320.	70
Ellis, Jacqueline Marie	Session C - Number 133 - Room 300.	74
Ellis, Riley	Session A - Number 23 - Room 301.	56
Ellis, Riley	Session C - Number 127 - Student Art Gallery.	52
Ellis, Sarena	Group 2 - 10:45 a.m. to 12:30 p.m.	85
Ellison, Donald Hamilton	Session C - Number 126 - Student Art Gallery.	57
Engmark, Sarah	Session C - Number 123 - Auditorium.	55
Estep, Nicholas	Session A - Number 40 - Room 320.	38
Everett, Timothy	Session A - Number 13 - Student Art Gallery.	39
Everly, Kasey Leigh	Session B - Number 90 - Room 304.	42
Fales, Paul Kimball	Session B - Number 102 - Room 330.	63
Fernandez, Tonia	Session A - Number 24 - Room 301.	46
Ferrall, Mark David	Session C - Number 165 - Room 352.	46
Fick, Andrew Maureen	Session A - Number 59 - Kiva.	41
Fox, Ryan	Group 2 - 10:45 a.m. to 12:30 p.m.	98
Frahm, Justin	Session C - Number 124 - Student Art Gallery.	57
Frederick, Alyssa C.	Group 1 - 8:30 a.m. to 10:15 a.m.	92
Frownfelter, Andrea	Group 2 - 10:45 a.m. to 12:30 p.m.	79
Garland, Kelly Renee	Session B - Number 66 - Auditorium.	54
Gaul, Stephanie M.	Group 2 - 10:45 a.m. to 12:30 p.m.	81
Gerlitz, Christian	Session B - Number 75 - Room 300.	69
Gibbons, Kathleen	Session B - Number 77 - Room 300.	68
Gibney, Bonnie	Group 1 - 8:30 a.m. to 10:15 a.m.	83
Gilbreath, Vanessa Nicole	Session C - Number 122 - Auditorium.	54

Name	Sessions	Pg.
Gillum, Anthony Duane	Session A – Number 49 – Room 350.	42
Gilmore, Mackenzie	Session B – Number 114 – Room 352.	74
Girard, Christie Ann	Session A – Number 21 – Room 301.	57
Gomez, David Austin	Session A – Number 20 – Room 300.	43
Gordon, Kwablah Kuma	Session C – Number 138 – Room 302.	48
Grabarczyk, Emma	Session A – Number 10 – Auditorium.	54
Grant, Jeffrey R.	Session C – Number 120 – Auditorium.	54
Grau, Meghan	Session C – Number 123 – Auditorium.	55
Grunn, Holly	Session B – Number 78 – Room 300.	67
Gutierrez, Dalia	Group 2 – 10:45 a.m. to 12:30 p.m.	98
Gutman, Daniel	Session B – Number 100 – Room 330.	36
Hall, Jacquelyn L.	Group 1 – 8:30 a.m. to 10:15 a.m.	96
Hamilton, Sarah Christine	Session B – Number 69 – Auditorium.	55
Hamson, Mariel	Session C – Number 170 – Kiva.	43
Handran, Nicholas	Session B – Number 63 – Room 204.	38
Hardemon, Deidre	Group 2 – 10:45 a.m. to 12:30 p.m.	86
Harmon, Jess	Group 2 – 10:45 a.m. to 12:30 p.m.	94
Harris, Chelsea	Session A – Number 48 – Room 350.	43
Harris, Michael James	Session C – Number 167 – Room 352.	59
Harrison, Sherstin Celeste	Session B – Number 71 – Student Art Gallery.	75
Havenstein, Stephanie	Session A – Number 9 – Auditorium.	53
Heads, Byron	Group 2 – 10:45 a.m. to 12:30 p.m.	90
Heemstra, John	Group 1 – 8:30 a.m. to 10:15 a.m.	87
Hegarty, Michael K.	Session B – Number 117 – Kiva.	49
Herman, Monica	Session A – Number 16 – Room 300.	68
Hiemstra, Patricia	Group 1 – 8:30 a.m. to 10:15 a.m.	87
Hietko, Michelle L.	Session A – Number 18 – Room 300.	67
Hietko, Michelle L.	Session B – Number 111 – Room 352.	68
Hufnagel, David Andrew-Essman	Group 1 – 8:30 a.m. to 10:15 a.m.	81
Hutchins, Rachel	Group 2 – 10:45 a.m. to 12:30 p.m.	81
Jabour, Charles	Session B – Number 72 – Student Art Gallery.	36
Jacobs, Justin	Session B – Number 104 – Room 330.	63
James, Grant	Session A – Number 19 – Room 300.	67
Jaynes, Kendra N.	Session B – Number 70 – Student Art Gallery.	74
Joerin, Angela Rochelle	Group 2 – 10:45 a.m. to 12:30 p.m.	94
Joesten, William C.	Group 2 – 10:45 a.m. to 12:30 p.m.	89
Johnson, Brian	Session B – Number 63 – Room 204.	38
Johnson, Garret Paul	Session B – Number 61 – Room 204.	38
Jones, Sandra	Session B – Number 114 – Room 352.	74
Joshua, Samuel	Session C – Number 121 – Auditorium.	55
Kanouse, Erin Marie	Session A – Number 36 – Room 320.	70
Kasparschuster, Konrad	Group 1 – 8:30 a.m. to 10:15 a.m.	87
Kawchak, Kevin	Group 1 – 8:30 a.m. to 10:15 a.m.	87
Keough, Brian	Session B – Number 93 – Room 304.	43
Ketcham, Alicia	Group 2 – 10:45 a.m. to 12:30 p.m.	81
Ketcham, Alicia	Group 1 – 8:30 a.m. to 10:15 a.m.	82
Killian, Sarah Grace	Group 2 – 10:45 a.m. to 12:30 p.m.	82
Kinnell, Marybeth	Session A – Number 50 – Room 350.	43

Name	Sessions	Pg.
Klement, Cynthia S.	Session C – Number 157 – Room 330.	36
Knauf, Tyler	Session C – Number 123 – Auditorium.	55
Koester, Matthew Ryan	Session A – Number 59 – Kiva.	41
Kolehmainen, Matthew	Group 2 – 10:45 a.m. to 12:30 p.m.	98
Konopacki, Matthew	Session C – Number 123 – Auditorium.	55
Kooy, Abigayil Hannah	Session A – Number 35 – Room 304.	60
Kopala, Jessica	Group 1 – 8:30 a.m. to 10:15 a.m.	82
Kotula, Chelsea Sarah	Session B – Number 74 – Student Art Gallery.	37
Kovolesky, Cressey	Group 1 – 8:30 a.m. to 10:15 a.m.	79
Krawczyk, Ashley	Session B – Number 87 – Room 302.	73
Kretschmer, Kevin Thomas	Session A – Number 42 – Room 330.	49
Langensiepen, Maxwell	Group 2 – 10:45 a.m. to 12:30 p.m.	90
Langton, Maria Camille	Group 1 – 8:30 a.m. to 10:15 a.m.	98
Lanigan, Erin	Session C – Number 123 – Auditorium.	55
Larry, Paul	Session A – Number 41 – Room 330.	49
Lello, Louis	Session B – Number 83 – Room 301.	35
Lello, Louis	Session C – Number 137 – Room 301.	57
Leo, Eric	Group 1 – 8:30 a.m. to 10:15 a.m.	91
Leo, Eric	Session C – Number 151 – Room 320.	61
Li, Li	Session C – Number 155 – Room 330.	67
Lindstedt, John Kenneth	Session C – Number 150 – Room 320.	60
Longoria, Alma	Group 2 – 10:45 a.m. to 12:30 p.m.	83
Lonsdale, Chantelle	Session C – Number 128 – Student Art Gallery.	46
Loper, Scott Michael	Session B – Number 60 – Room 204.	39
Lopiccio, Brianna	Group 2 – 10:45 a.m. to 12:30 p.m.	94
Luedtke, Aaron	Session A – Number 45 – Room 330.	49
Lund, Stephen	Session B – Number 118 – Kiva.	50
Luthanen, Amanda	Session C – Number 154 – Room 330.	68
Luthanen, Amanda	Session B – Number 111 – Room 352.	68
MacLeod, Colin Lewis	Session B – Number 80 – Room 301.	61
Mahalak, Karley Kristine	Group 1 – 8:30 a.m. to 10:15 a.m.	83
Mahmoud, Muayad Fayez	Session C – Number 131 – Room 300.	59
Maino, Zachary J.	Session A – Number 54 – Room 352.	74
Maravelias, Jon	Session A – Number 2 – Room 204.	61
Maravelias, Jon	Session C – Number 153 – Room 330.	62
Marchese, Anthony David-Joseph	Session B – Number 68 – Auditorium.	55
Markell, Barbara Lynne	Session A – Number 30 – Room 302.	72
Marks, Mariano Ezequiel	Session A – Number 21 – Room 301.	57
Marquis, Colleen Anne	Session C – Number 158 – Room 350.	50
Marry, Allen John	Session B – Number 88 – Room 302.	72
Marthambadi, Bobby	Group 2 – 10:45 a.m. to 12:30 p.m.	88
Maschalko, Karla	Group 1 – 8:30 a.m. to 10:15 a.m.	90
Maxwell, Geneve	Group 1 – 8:30 a.m. to 10:15 a.m.	88
Mayville, Marian L.	Session C – Number 137 – Room 301.	57
McAuliffe, Noel	Group 1 – 8:30 a.m. to 10:15 a.m.	95
McCurdy, Heather	Session A – Number 27 – Room 302.	76
McKenna, Katherine	Session B – Number 74 – Student Art Gallery.	37
McKinnon, John Motley	Session C – Number 137 – Room 301.	57

Name	Sessions	Pg.
McPherson, Eden	Session B – Number 108 – Room 350.	33
Mentley, Nathan Thomas	Session B – Number 63 – Room 204.	38
Micyus, Tiffany	Group 2 – 10:45 a.m. to 12:30 p.m.	88
Milkovich, Benjamin Michael	Session A – Number 21 – Room 301.	57
Miller, Dustin Douglas	Session B – Number 65 – Auditorium.	37
Miller, Marie L.	Session A – Number 34 – Room 304.	62
Miller, Nickolas Alan	Session C – Number 136 – Room 301.	36
Miller, Nickolas Alan	Group 1 – 8:30 a.m. to 10:15 a.m.	91
Mitchell, Brandon	Session C – Number 139 – Room 302.	50
Mitchell, Janelle	Group 2 – 10:45 a.m. to 12:30 p.m.	96
Mohammed, Aunmar	Group 2 – 10:45 a.m. to 12:30 p.m.	98
Mora, Melissa Mejia	Group 2 – 10:45 a.m. to 12:30 p.m.	83
Morin, Matthew	Session C – Number 162 – Room 350.	64
Moser, Leeza	Session B – Number 78 – Room 300.	67
Mosquera, Andrew Philip	Session A – Number 59 – Kiva.	41
Mrozek, Brittany Lynne	Session C – Number 161 – Room 350.	64
Murcko, Katherine	Group 1 – 8:30 a.m. to 10:15 a.m.	83
Murnahan, Briana Marie	Group 1 – 8:30 a.m. to 10:15 a.m.	94
Nagaraja, Seetha	Group 1 – 8:30 a.m. to 10:15 a.m.	96
Natus, John	Group 2 – 10:45 a.m. to 12:30 p.m.	90
Nelson, Alexander Gordon	Session B – Number 103 – Room 330.	64
Neville, Kristin R.	Session A – Number 28 – Room 302.	59
Newland, Rachel Renee	Session B – Number 106 – Room 350.	64
Nitz, Jennifer	Session C – Number 152 – Room 320.	72
Nunes, Sr. Maria Fatima	Session C – Number 171 – Kiva.	44
O'Bryan, Eoin Rockne	Group 2 – 10:45 a.m. to 12:30 p.m.	94
O'Donohue, Sean Elliott	Session A – Number 59 – Kiva.	41
O'Donohue, Sean Elliott	Session A – Number 56 – Kiva.	44
Opfermann, Scott C.	Session C – Number 148 – Room 320.	51
Owen, Greg	Session A – Number 33 – Room 304.	45
Patterson, Danielle Renee	Session B – Number 107 – Room 350.	65
Patterson, Deana Maureen	Session A – Number 29 – Room 302.	73
Paulovich, Gerald Kevin	Session C – Number 130 – Room 300.	60
Pelt, Madison Elizabeth	Session B – Number 109 – Room 350.	33
Pendleton, Ian Matthew	Group 1 – 8:30 a.m. to 10:15 a.m.	88
Penney, Allison	Session A – Number 16 – Room 300.	68
Penney, Allison	Session B – Number 111 – Room 352.	68
Peterhans, Sarah	Session A – Number 1 – Room 204.	77
Petro, Justin	Session C – Number 144 – Room 304.	44
Pidgeon, Megan	Session A – Number 37 – Room 320.	70
Podsiadlo, Anna	Session A – Number 19 – Room 300.	67
Poopat, Amy	Group 1 – 8:30 a.m. to 10:15 a.m.	87
Potter, Kayla	Group 1 – 8:30 a.m. to 10:15 a.m.	98
Prichard, Eric Charles	Group 1 – 8:30 a.m. to 10:15 a.m.	95
Pruder, Jacqueline Elyse	Session B – Number 89 – Room 302.	71
Quenon, Alexander Christian	Session B – Number 62 – Room 204.	39
Rabideau, Joy S.	Session B – Number 77 – Room 300.	68
Radelt, Sr., Mitchell P.	Session B – Number 85 – Room 302.	76

Name	Sessions	Pg.
Rash, David	Group 1 – 8:30 a.m. to 10:15 a.m.	89
Rayyan, Naseem	Session A – Number 22 – Room 301.	58
Rearick, Michelle	Group 2 – 10:45 a.m. to 12:30 p.m.	84
Redwood, Melissa Rachelle	Group 1 – 8:30 a.m. to 10:15 a.m.	84
Reid, John	Group 2 – 10:45 a.m. to 12:30 p.m.	97
Richardson, Jacob	Session A – Number 25 – Room 301.	47
Richardson, Jacob	Session C – Number 135 – Room 301.	47
Richardson-Bristol, Penelope Ann	Group 2 – 10:45 a.m. to 12:30 p.m.	84
Robbins, Annie W.	Session A – Number 53 – Room 352.	76
Robinson, Kelly	Session B – Number 113 – Room 352.	75
Roe, Richard	Session A – Number 22 – Room 301.	58
Rogers, David Benjamin	Session C – Number 154 – Room 330.	68
Rogers, Katherine	Session C – Number 166 – Room 352.	47
Rosen, Danielle M.	Group 2 – 10:45 a.m. to 12:30 p.m.	85
Ruthven, Kristina Renee	Session C – Number 149 – Room 320.	34
Saab, Tricia Anne	Session C – Number 146 – Room 304.	45
Samarawickrama, Lahiru	Group 2 – 10:45 a.m. to 12:30 p.m.	90
Sasinowski, Amy Rose	Session A – Number 58 – Kiva.	63
Schaefer, Kristina	Session B – Number 86 – Room 302.	77
Schuttler, Karl	Session B – Number 64 – Room 204.	77
Sebastian, Alexis Michelle	Session A – Number 35 – Room 304.	60
Sebrank, Danielle Marie	Session C – Number 156 – Room 330.	65
Seegert, Stephanie Diane	Group 1 – 8:30 a.m. to 10:15 a.m.	84
Sessoms, Katherine L.	Session B – Number 77 – Room 300.	68
Sevilla, Audrianna	Group 1 – 8:30 a.m. to 10:15 a.m.	87
Sheremeta, Greg Stephan	Group 2 – 10:45 a.m. to 12:30 p.m.	85
Silvis, Matthew Thomas	Session C – Number 160 – Room 350.	51
Simon, Stephanie	Group 2 – 10:45 a.m. to 12:30 p.m.	89
Skinner, Mary Evelyn Patricia	Group 1 – 8:30 a.m. to 10:15 a.m.	81
Smail, Kimberly	Group 1 – 8:30 a.m. to 10:15 a.m.	85
Small, Jasmyne	Session A – Number 55 – Room 352.	75
Smith, Emily A.	Session B – Number 79 – Room 300.	66
Smith, Megan	Session C – Number 144 – Room 304.	44
Smith, Rebecca	Session A – Number 17 – Room 300.	66
Spoutz, Patrick	Group 1 – 8:30 a.m. to 10:15 a.m.	89
Sprague, Rebecca	Session A – Number 15 – Student Art Gallery.	65
Sprinkle, Luke	Session A – Number 14 – Student Art Gallery.	66
Stein, Christina	Session A – Number 17 – Room 300.	66
Stimmel, Meghan Kristine	Session A – Number 26 – Room 302.	66
Stoddart, Alexandra	Session A – Number 33 – Room 304.	45
Storey, Jason G.	Session B – Number 116 – Kiva.	51
Stothers, Jordan	Session C – Number 154 – Room 330.	68
Stratos, Erin Christine	Session C – Number 143 – Room 304.	45
Street, Valerie	Session A – Number 10 – Auditorium.	54
Swidan, Danielle Kareem	Group 2 – 10:45 a.m. to 12:30 p.m.	91
Syed, Adnan K.	Group 2 – 10:45 a.m. to 12:30 p.m.	85
Szewczyk, Renee	Session C – Number 154 – Room 330.	68
Tehrani-pour, Sarah	Session B – Number 81 – Room 301.	62

Name	Sessions	Pg.
Tenbusch, Jessica	Group 1 – 8:30 a.m. to 10:15 a.m.	79
Thom, Stephanie	Session A – Number 16 – Room 300.	68
Thom, Stephanie	Session B – Number 111 – Room 352.	68
Tipton, Caroline Aubrey	Session A – Number 59 – Kiva.	41
Tompkins, Sarah	Session A – Number 59 – Kiva.	41
Torok, Laura	Session B – Number 82 – Room 301.	62
Tracy, Austin M.	Session B – Number 92 – Room 304.	37
Tranchida, Kristen	Session A – Number 6 – Auditorium.	56
Tropf, Jon	Session C – Number 159 – Room 350.	51
Tucker, Kent	Session C – Number 144 – Room 304.	44
Tull, Cody	Group 1 – 8:30 a.m. to 10:15 a.m.	87
Umlauf, Paul Felix	Session C – Number 142 – Room 302.	65
Upham, Alex Reed	Session C – Number 147 – Room 304.	52
Van Dort, Amanda Josephine	Group 1 – 8:30 a.m. to 10:15 a.m.	97
Vasquez, Lois	Session A – Number 11 – Student Art Gallery.	47
Wallace, Lindsay Alexa	Group 1 – 8:30 a.m. to 10:15 a.m.	99
Walser, Jude	Group 1 – 8:30 a.m. to 10:15 a.m.	85
Walters, Hillary	Group 2 – 10:45 a.m. to 12:30 p.m.	89
Wandarama, Aissa Laouan	Session C – Number 141 – Room 302.	33
Weber, Julie	Group 2 – 10:45 a.m. to 12:30 p.m.	79
Welchko, Shaun	Session B – Number 76 – Room 300.	73
Wheeler, Mark Anthony	Session C – Number 164 – Room 352.	77
Whitaker, Teresa	Session B – Number 75 – Room 300.	69
Wilson, Brenan Micole	Group 2 – 10:45 a.m. to 12:30 p.m.	89
Wittbrodt, Audelia	Group 2 – 10:45 a.m. to 12:30 p.m.	92
Wittbrodt, Audelia	Session A – Number 22 – Room 301.	58
Wolf, Samantha Marie	Group 2 – 10:45 a.m. to 12:30 p.m.	86
Yandura, Shalyn D.	Session B – Number 87 – Room 302.	73
Zachrich, Kyle Steven	Session C – Number 136 – Room 301.	56
Zaidi, Manzar	Group 2 – 10:45 a.m. to 12:30 p.m.	89
Zavicar, Kimberly Ann	Session C – Number 163 – Room 352.	37
Zinn, Hannah Marie	Session A – Number 5 – Room 204.	38
Zourob, Habeba	Group 2 – 10:45 a.m. to 12:30 p.m.	97
Zurenko, William	Session A – Number 3 – Room 204.	52
Zweifler, Jasmine Appolonia	Session B – Number 115 – Kiva.	45
Zweifler, Jasmine Appolonia	Session C – Number 169 – Kiva.	46

DAVE COVERLY

Returns to EMU as the 2010 — 30th Undergraduate Symposium Keynote Speaker

Two-time presenter at the Undergraduate Symposium.

1984 — *English Language and Literature* with sponsor Marshall Tymn

1985 — *English Language and Literature* with sponsor James Angle



Dave Coverly is a nationally syndicated cartoonist. His "Speed Bump" cartoons appear in more than 200 newspapers, including *The Washington Post*, the *Chicago Tribune*, and *Parade Magazine*. In addition to his syndicated work, Coverly's cartoons have been published in *The New Yorker*, and he is also a regular contributing cartoonist to both of PETA's magazines, *Animal Times* and *Grrr!* for kids.

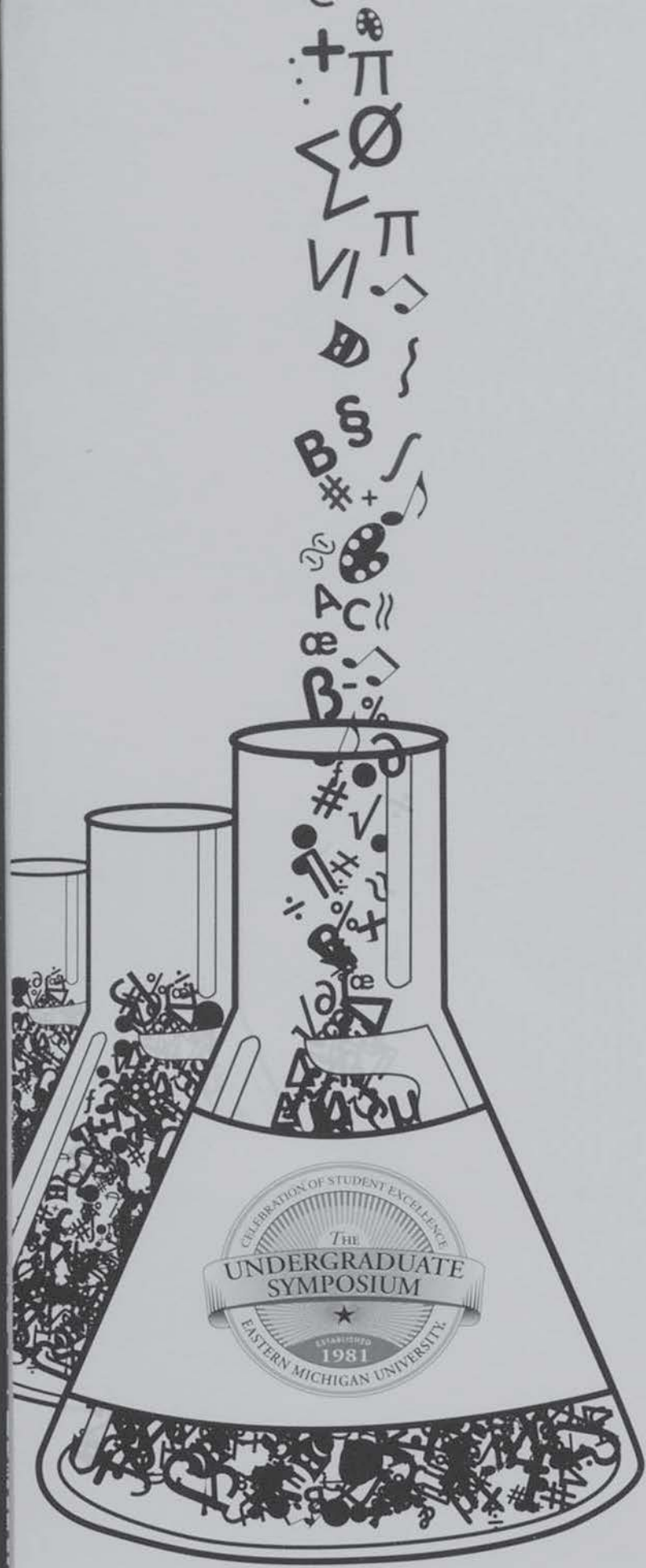
Coverly won the National Cartoonist Society's prestigious Reuben Award honoring him as Cartoonist of the Year, 2009. In both 2003 and 1995, "Speed Bump" was given the prestigious Best Newspaper Panel award by the National Cartoonists Society.

There is no overriding theme, no tidy little philosophy that precisely describes what "Speed Bump" is about. "Basically," Coverly says, "If life were a movie, these would be the outtakes."

Hot off the press, is his newest publication. It is a venture into children's literature as the illustrator for *Sue MacDonald Had a Book*, by fellow Ann Arbor resident, Jim Tobin. He has also published three books filled with his work. In 2000 his first book was published, *Speed Bump: A Collection of Cartoon Skidmarks* (Andrews McMeel). More recent books include *Speed Bump: Cartoons for Idea People* (2004, ECW Press), that was named Humor Book of the Year in independent publishing by *Foreword Magazine*, and *Just One %\$#@ Speed Bump After Another* (2005, ECW Press).

Coverly grew up in Plainwell, Michigan, where he was the cartoonist for his high school paper. He began taking cartooning seriously in 1986 as an undergraduate student at Eastern Michigan University, where he penned a comic panel called "Freen" for the *Eastern Echo*. He also studied in England during this time, and returned to EMU to receive his bachelor's degree in both philosophy and imaginative writing in 1987. He continued his cartooning in graduate school at Indiana University, where his panel won numerous national awards; he was graduated from IU with a masters in creative writing in 1992.

Coverly now works out his home in Ann Arbor, Michigan. He is married to Chris, and they have two daughters, Alayna and Simone.



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