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2009 Scholar's Day Program

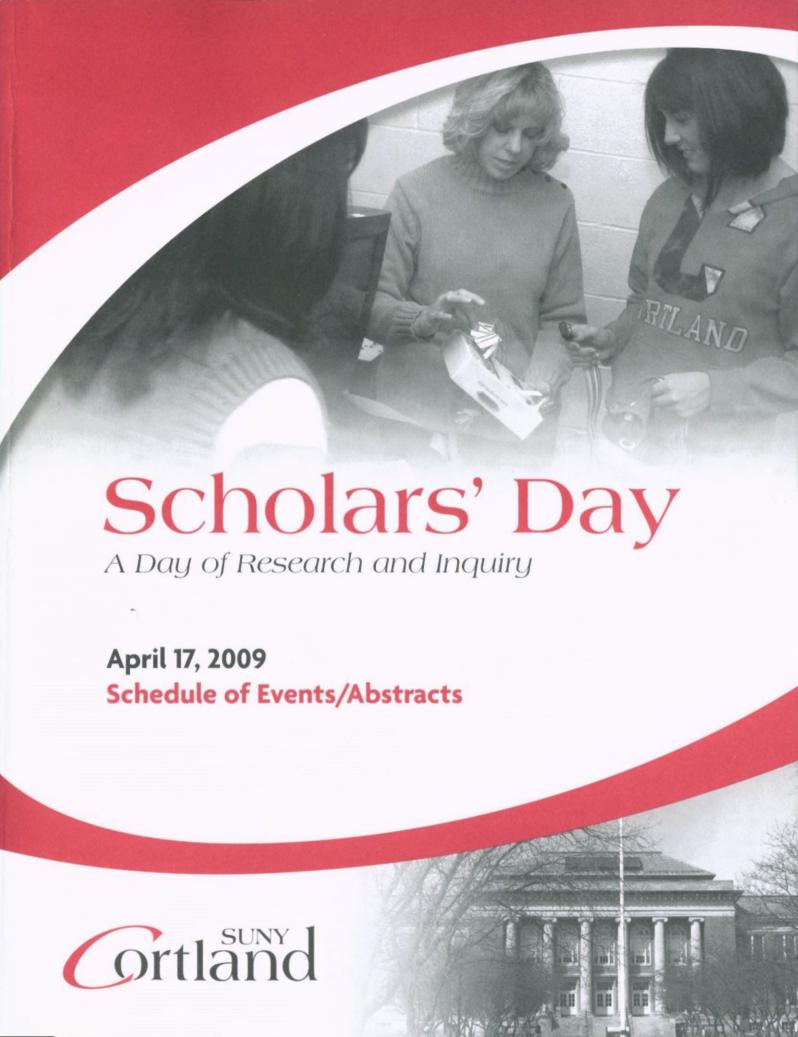
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Scholars' Day

April 17, 2009 Old Main SUNY Cortland

Schedule of Events

8:30-9:45 a.m.

Concurrent Sessions I

10:00-11:15 a.m.

Concurrent Sessions II

11:30 a.m.-12:30 p.m.

Keynote Address Brown Auditorium

"A Career in Research:
A Rocky Road or a Smooth Pathway?"

Edward J. Zambraski '71, Ph.D., FACSM Division Chief, Military Performance Division US Army Institute of Environmental Medicine Natick, Massachusetts

Emeritus Professor of Physiology Rutgers University New Brunswick, New Jersey

12:30-1:30 p.m.

Poster Sessions Lobby Area, 1st & 2nd Floors

1:30-2:45 p.m.

Concurrent Sessions III

3:00-4:15 p.m.

Concurrent Sessions IV

4:30-5:15 p.m.

Closing Session Brown Auditorium

The Blue Roots of American Popular Music
Students and Faculty from the SUNY Cortland
Rock and Blues Ensemble and Beginning
Blues Guitar classes
Africana Studies Hip Hop Emcee's with the
SUNY Cortland Hip Hop Dance Team - Drama

Scholars' Day is an event designed to demonstrate, highlight, promote, and encourage scholarship among SUNY Cortland faculty, staff, and students. Our scholarly work is crucial to who and what we are as individuals and as an institution. This day is an attempt to help our students and the general public understand and appreciate what we do, to draw students into the intellectual life and the excitement of scholarly work, and to publicize the accomplishments of our faculty, staff, and students.

Throughout the day, presentations will be made be faculty, staff, students, and alumni. In addition to attendance by members of the campus community, invitations have been extended to area high school students and their advisors, our elected representatives, and to the Cortland community at large.

Support for Scholars' Day has been received from the Office of the President, the Office of the Provost and Vice President for Academic Affairs, The Cortland Fund, The Cortland College Foundation, and Auxiliary Services Corporation.

Our appreciation to the Scholars' Day Committee:

R. Bruce Mattingly, Arts & Sciences (Chair)

Cynthia J. Benton, Childhood/Early Childhood Education

Philip Buckenmeyer, Kinesiology

Christopher P. Cirmo, Geology

Daniel M. Harms, Library

David Miller, Geography

Lisa Mostert, Classroom Media Services

Gigi Peterson, History

Kevin Pristash, Campus Activities

Special thanks to the Student Alumni Association for providing volunteers for Scholars' Day.

Complimentary refreshments will be served in the Colloquium Room on the second floor both in the morning and in the afternoon.

CONCURRENT SESSIONS I

8:30-9:45 a m

Kinesiology I Brown Auditorium

Moderator: Laura Hill, Visiting Assistant Professor, Kinesiology

The Effects of Static or Dynamic Warm-ups on Anaerobic Activity Using the Wingate Test

Lindsay Bakker, H. Austin Rhodes, Trish Witter, Undergraduate Students Presenters.

Laura Hill, Visiting Assistant Professor, Kinesiology

Exercise Performance Related to Time of Day

Zachary Bogardus, Jennifer Dennis, Danielle Ferris, Undergraduate Students Presenters:

Philip Buckenmeyer, Associate Professor and Chair, Kinesiology

The Effects of Listening to Different Music Genres during a Two-Mile Run

Amanda Hickey, Diana Williams, Undergraduate Students Presenters:

Katherine Polasek, Assistant Professor, Kinesiology

The Effects of High vs. Low Potassium Diet on Muscle Fatigue among College-Aged Males

Crystal Quashie, Haleigh Muka, Jesse Sanna, Undergraduate Students Presenters:

Philip Buckenmeyer, Associate Professor and Chair, Kinesiology

Static and Dynamic Warm-Up and Their Effects on Lower Body Force Production

Presenters: Mike Avery, Clark Holdsworth, Lauren Phillips, Undergraduate Students

Jeff Bauer, Associate Professor, Kinesiology

The Effects of Internal and External Motivation during a Bicep Curl on College-Aged Men and Women

Kyle Bigney, Danielle Ruminski, Undergraduate Students Presenters:

Jeff Bauer, Associate Professor, Kinesiology

Literacy Teacher and Student Scholar Exchange Room 209

Moderator: Keirin Lazauskas, Graduate Student, Literacy Student

Literacy Buddies, Literacy Scholars

Presenters: Sheila G. Cohen, Associate Professor and Chair, Literacy

Jessica Kabanuk, Lecturer, Literacy SUNY Cortland Teacher Candidates

> Preliminary Report of Miller Site 35 CO 32 Summer 2008 Room 121

Moderator: Ellis E. McDowell-Loudan, Professor, Sociology/Anthropology

The Miller Site 35 CO 32: Preliminary Report: Summer 2008

Presenters: Ellis E. McDowell-Loudan, Professor, Sociology/Anthropology

Heather Beardsley, Undergraduate Student

Policy, Preservation, and Power Room G-12

Moderators: Megan Wagner, Graduate Student, Sport Management James Reese, Associate Professor and Graduate Coordinator, Sport Management

Fans Apply Full-Court Press to Pitt over Reseating Policy

Presenters: James Reese, Associate Professor and Graduate Coordinator, Sport Management

Mark Dodds, Assistant Professor, Sport Management

David Snyder, Professor, Sport Management

Exploring Motives for Hiking on the Appalachian Trail: Using a Means-end Approach

Presenters: Eddie Hill, Assistant Professor, Recreation, Parks and Leisure Studies

Barbara Freidt, Lecturer, Old Dominion University

Marni Goldenberg, Associate Professor, California Polytechnic State University

Edwin Gómez, Associate Professor, Old Dominion University

Sport and International Relations: The Soft Power of Sports in the Korea International Cooperation Agency's (KOICA) Cultural Diplomacy

Presenter: ChangKi Bahng, Graduate Student

Power in the Modern World: International Perspectives
Room G-10

Moderator: Sharon Steadman, Associate Professor, Sociology/Anthropology; Coordinator, International Studies Program

Social Inequalities: Power and Health Care in Transitional Nations

Presenter: Sarah Voorhees, Undergraduate Student

The Madrasa and the State: Trepidation over Islamic Education in Secular Nations?

Presenter: Kaleigh Corgan, Undergraduate Student

An International Experience: The Key for Successful Leadership

Presenter: Brittany Wright, Undergraduate Student

The Future of Venezuela: Power, Chavez, and the Socialist State

Presenter: Jonathan Weinstock, Undergraduate Student

Mathematics Education Room 230

Moderator: Mary K. Gfeller, Assistant Professor, Mathematics

Clinical Interviews in Mathematics Education

Presenters: Benjamin Lester, Blythe McPletl, Meghan Peck, Chris Salerno, Kathryn Schultheis,

Annie Whitman, Undergraduate Students

Richard Sharp, Graduate Student

NYS IRRC Room G-09

Moderator: Janet Duncan, Associate Professor, Foundations and Social Advocacy

The New York State Inclusive Recreation Resource Center at SUNY Cortland

Presenters: Lynn Anderson, Professor and Chair, Recreation, Parks and Leisure Studies

Vicki Wilkins, Professor, Recreation, Parks and Leisure Studies

Vicki Wilkins, Frojessor, Recreation, Farks and Leisure Studi

Laurie Penney McGee, Project Coordinator, NYS IRRC

Whitney Mayer, Graduate Student

Urban Education

Room G-24

Moderator: Anne Burns Thomas, Assistant Professor, Foundations and Social Advocacy; Program Coordinator, Cortland's Urban Recruitment of Educators (C.U.R.E.) Program

Urban Education and No Child Left Behind Legislation

Presenters: First Year Students in Cortland's Urban Recruitment of Educators (C.U.R.E.) Program

New Media in the Classroom

Room 120

Moderator: Karen Stearns, Assistant Professor, English

New Media in the English Language Arts Classroom

Presenters: Karen Stearns, Assistant Professor, English

Tim Casey, Suzanne Farah, Joyce Hansen, Allison Porzio, Kari Redmond,

Sydney Welch, Graduate Students

<u>Feminism</u>

Room 229

Moderator: Michelle Kelly, Associate Professor and Chair, Foundations and Social Advocacy

Feminism: It's Not a Dirty Word

Presenters: Ashley Rogers, Caitlin DeGroat, Jennifer Ondrako, Undergraduate Students

CONCURRENT SESSIONS II

10:00-11:15 a.m.

Kinesiology II Brown Auditorium

Moderator: James Hokanson, Associate Professor, Kinesiology

Gender Differences in Rating of Perceived Exertion in Distance Runners

Presenters: Kathryn Poe, David Goldenberg, Undergraduate Students

James Hokanson, Associate Professor, Kinesiology

Assessing Anterior Cruciate Ligament Function Postoperatively During Jumping Tasks

Presenters: Michael Kuhn, Nicholas Pulling, Tiffany Grybas, Undergraduate Students

Jeff Bauer, Associate Professor, Kinesiology

Relationship between Upper Body and Core Muscular Strength and the Velocity of the Ice Hockey Slap Shot

Presenters: Kevin Cuddahee, Zach Dehm, Joe Radich, Undergraduate Students

James Hokanson, Associate Professor, Kinesiology

Information Processing Demands: Reaction Time While Driving and Performing Secondary Tasks

Presenters: Jennifer Cobb, Zachary Fluster, Greg Leder, Ashley Seaver, Undergraduate

Students

Joy Hendrick, Professor, Kinesiology

Reaching New Limits: A Comparison between Elliptical Cross-Trainer and Treadmill Maximal Oxygen Uptake

Presenters: Kristi Kellogg, Amanda Holley, Adah Campany, Undergraduate Students

Philip Buckenmeyer, Associate Professor and Chair, Kinesiology

Hopping and Leg Stiffness: Does Aging Affect the Bounce in Your Step?

Presenters: Nicole Dovi, Undergraduate Student

Peter McGinnis, Professor, Kinesiology

James Hokanson, Associate Professor, Kinesiology

Health Issues Room G-24

Moderator: Jena Curtis, Assistant Professor, Health; Coordinator, Human Services

Obesity Trends in Cortland County

Presenters: Bonni C. Hodges, Professor and Chair, Health

Regina Ferro, Graduate Student

Jill Murphy, Associate Professor, Upstate Medical Center

Where Are the Guys in Peer Education?: Two Investigations of Adolescent Male Participation in Sexual Health Peer Education Programs in New York State

Presenter: Sarah Beshers, Associate Professor, Health

Don't Die from Embarrassment: Barriers to Colo-Rectal Cancer Screening

Presenters: Bonni C. Hodges, Professor and Chair, Health

Mark Schaller, Graduate Student

SUNY Cortland Writing Contest Award Winners Present! Room 120

Moderator: Mary Lynch Kennedy, Distinguished Teaching Professor, English

Flower of the Field

Presenter: Krista Merry, Undergraduate Student

Snapshot: Quick Like a Bunny

Presenter: Jennifer Ondrako, Undergraduate Student

A Complicated Decision

Presenter: Erica A. Brazee, Graduate Student

Dating the Origin of the Split between Ascomycetes and Basidiomycetes

Presenter: Carmit Schatz, Undergraduate Student

Chasing Satan

Presenter: Joyce Hansen, Graduate Student

Dust Mite and On Anosmia

Presenter: Joseph Tutko, Undergraduate Student

Visual Arts: Effective Means to Enhance Creative Writing Quality

Presenter: Karen L. Randle, Graduate Student

The Cortland Early Childhood Professional Development Service
Room 121

Moderator: Cynthia J. Benton, Professor, Childhood/Early Childhood Education

The Cortland Early Childhood Professional Development Service (CECPDS): The Role of the SUNY Cortland Library in Supporting Effective Professional Development

Presenters: Lorraine Melita, Senior Assistant Librarian, Memorial Library

Patricia Roiger, Lecturer II, Childhood/Early Childhood Education

Angela Silverstein, Undergraduate Student

Anthropological Perspectives: Mind, Body, and the Ritual of Giving Room G-10

Moderator: Tiantian Zheng, Associate Professor, Sociology/Anthropology

The Messiah Theme: Major Figures in Ancient Judaism and their Revitalization of a Religion in Crisis

Presenter: Jennifer Burhans, Undergraduate Student

Tales from an International Fashion Model

Presenter: Angela Wilde, Undergraduate Student

Thieving Santa: U.S. Christmas Gift Exchange in Ritual Reversal

Presenter: Gretchen Herrmann, Librarian, Memorial Library

Conservation Biology Room G-12

Moderator: Steven B. Broyles, Professor, Biological Sciences

Conservation Biology and Adirondack State Park

Presenters: Jason Gorman, Justin Kindt, Mark Morrell, Amanda Neville, Jack Ruggirello,

Undergraduate Students

Steven B. Broyles, Professor, Biological Sciences

Transforming Cortland Students? Room 230

Moderators: Jerome O'Callaghan, Associate Dean, School of Arts and Sciences Lara Atkins, Assistant Director, James M. Clark Center for International Education

Transforming Cortland Students? What Do Students See as the Impact of Their Study Abroad Experience?

Presenters: Brittany Wright, Jonathan Weinstock, Jude Anasta, Michelle Housworth,

Bailey Molitor, Greg Leder, Undergraduate Students

Trains and "Recreation Time" Room 209

Moderator: Lynn Anderson, Professor and Chair, Recreation, Parks and Leisure Studies

Cortland-Binghamton Excursion Train Study: A Replication and Extension

Presenters: Sharon Todd, Associate Professor, Recreation, Parks and Leisure Studies

Brandy Boden, Lecturer, Recreation, Parks and Leisure Studies

Eugene Borzendowski, Lindsey Brown, Frances Speight, Kokia Tarik,

Graduate Students

From Recess to Recreation Time: Engaging 5th and 6th Graders Through Resiliency-Based Programming

Presenters: Eddie Hill, Assistant Professor, Recreation, Parks and Leisure Studies

Amy Shellman, Assistant Professor, Recreation, Parks and Leisure Studies

Lindsey Brown, Graduate Student

"Mother Knows Best" with Successful Practices Room G-09

Moderator: Paul Luyben, Associate Professor, Psychology

So Long...Goodbye: Using Behavior Analysis to Teach a Preschooler to Say "Goodbye"

Presenter: Kerry Linden, Undergraduate Student

New Visions for Quality Inclusive Education

Presenters: Susan Stratton, Assistant Professor, Childhood/Early Childhood Education

Kimberly Rombach, Assistant Professor, Childhood/Early Childhood Education

KEYNOTE ADDRESS

11:30 a.m.-12:30 p.m. Brown Auditorium

"A Career in Research: A Rocky Road or a Smooth Pathway?"

Edward J. Zambraski '71, Ph.D., FACSM

Edward Zambraski joined the Military Performance Division of the U.S. Army Research Institute of Environmental Medicine, in Natick, MA, as Division Chief in 2003. Previously he was a Full Professor of Physiology at Rutgers University, NJ. He graduated from Cortland in 1971 with a major in Physical Education and a minor in Biology. He earned his Ph.D. from the University of Iowa in 1976 working under Dr. C. Tipton.

While at Iowa, Dr. Zambraski initiated the studies on the urinary profiles and dehydration in wrestlers. He was on the faculty at Rutgers from 1976-2003. His research interests pertain to the neural and endocrine control of renal and cardiovascular function. He has extensive research experience using both animal and human models. A large amount of his work has involved studying the changes in renal function in hypertension and cirrhosis, and also, evaluating the effects of exercise on kidney function.

Dr. Zambraski is currently on several editorial boards and he has served on NIH Study Sections and on various national research review panels. He also serves in several leadership roles both within the American Physiological Society and the American College of Sports Medicine. As the Division Chief of the Military Performance Division, he directs the activities of approximately 55 civilian and military research personnel. The research areas within his Division include: Performance Physiology, Injury Epidemiology, Biomechanics and Cognitive Performance.

POSTER SESSIONS

12:30-1:30 p.m. Lobby Area, 1st & 2nd Floors

Using Geographical Concepts to Educate Early Childhood Students

Presenters: Dawn Battista, Undergraduate Student

Wendy Miller, Assistant Professor, Geography

Using GIS to Make a Difference in Community Projects

Presenters: Ian Burk, David Delcourt, James (Jake) Kommer, Eric Strahley,

Undergraduate Students

Wendy Miller, Assistant Professor, Geography

Using Brief Video Tutorials to Enhance Student Learning

Presenters: Beginning and Advanced GIS Undergraduate Students

Wendy Miller, Assistant Professor, Geography

Using GIS Technology in Virtual Trail Mapping, Barranquitas, Puerto Rico

Presenter: James A. Christopher, Undergraduate Student

Ghana and Kenya: Study Abroad in Two of Africa's Most Prestigious Universities

Presenter: Abigail Mcphail, Undergraduate Student

Student Openness and College Adjustment

Presenters: Ryan J. Hiller, Kristin A. White, Undergraduate Students

Raymond D. Collings, Associate Professor, Psychology

Judy K. Bentley, Assistant Professor, Foundations and Social Advocacy

The Stereotype Threat

Presenters: Kyra Pinn, Jennifer Gioia, Undergraduate Students

Raymond Collings, Associate Professor, Psychology

The Influence of Amodal Cues on the Reaching Behavior of 4-Month-Old Infants

Presenters: Nicole Granger, Undergraduate Student

Kimberly Kraebel, Associate Professor, Psychology

Assessing the Role of Matching Sensory Cues on Habituation Processes in Human Infants

Presenters: Joanna Verdi, Undergraduate Student

Kimberly Kraebel, Associate Professor, Psychology

Will Matching Sensory Information Influence Infants' Ability to Imitate an Action?

Presenters: Jennifer Walker, Undergraduate Student

Kimberly Kraebel, Associate Professor, Psychology

The Effect of Perinatal Exposure to PCBs on Alcohol Consumption by Rats

Presenters: John P. Lombardo, Professor, Psychology

David F. Berger, Professor, Psychology

Peter M. Jeffers, Professor Emeritus, Chemistry

Jennifer Morrison, Graduate Student

Undergraduate Students in Behavioral Neuroscience (PSY 411)

The Role of Past Experience in Creating Interest and Support for a Local Tourist Train

Presenters: Ellie Barvinchak, Graduate Student

Sharon Todd, Associate Professor, Recreation, Parks and Leisure Studies

Comparison of MVPA While Playing DDR, EyeToy Kinetic and XaviX Tennis

Presenters: Jacob J. Weaver, Undergraduate Student

Stephen P. Yang, Assistant Professor, Physical Education John T. Foley, Assistant Professor, Physical Education

Doyle's Delight, the Highest Peak in the Maya Mts. Of Belize, Revisited

Presenters: Timothy J. Baroni, Distinguished Professor, Biological Sciences

D. Jean Lodge, Research Mycologist, USDA-Forest Service, Puerto Rico M. Catherine Aime, Assistant Professor, Plant Pathology & Crop Physiology,

Louisiana State University

High Resolution Images of Basidiospores of Some Un-Described Species of Mushrooms Collected from Doyle's Delight, the Highest Cloud Forest in Belize

Presenter: Jason Benza, Undergraduate Student

Comparisons between Male Wild Versus Male Sterile Flowers of the Arabidopsis thaliana Plants

Presenter: Valerie Pritchard, Undergraduate Student

Probing Phenotypes: Screening for Iron and Heavy Metal Responses in *Arabidopsis thaliana* Mutants

Presenter: Carmit Schatz, Undergraduate Student

Development of a Cell-Based Toxicity Sensor for Drinking Water Protection

Presenters: Trista Thorn, Undergraduate Student

Theresa Curtis, Assistant Professor, Biological Sciences

The Role of Syndecan-4 in Wound Healing

Presenters: Bailey Molitor, Jon Lee, Undergraduate Students

Sarah Wilcox-Adelman, Boston Biomedical Research Institute Theresa Curtis, Assistant Professor, Biological Sciences

Loss of Seed Viability in *Arabidopsis thaliana* Mutant Lacking Peroxisomal Enzyme MONOHYDROASCORBATE REDUCTASE 4

Presenters: Lisa DiMarco, Lecturer, Biological Sciences

Gena Gerstner, Undergraduate Student

Patricia Conklin, Associate Professor, Biological Sciences

The Synthesis of Azide Probes for the Study of Myristoylated Proteins

Presenters: Frank M. Rossi, Assistant Professor, Chemistry Cassandra Barnes, Undergraduate Student

Development of Molecular Fish Hooks

Presenters: Frank M. Rossi, Assistant Professor, Chemistry

Justin Kocent, Undergraduate Student

Bonding Modes of Amino Acid Anions, H2NCHRCO2, with an Rh2 Metal-Metal Bond

Presenters: Arden Zipp, Distinguished Teaching Professor Emeritus, Chemistry

Leonard S. Scheiber, Undergraduate Student

Synthesis and Characterization of a Series of New Rh₂ (O₂CC₆H₄X)₄ Compounds

Presenters: Arden Zipp, Distinguished Teaching Professor Emeritus, Chemistry

Patricia L. Latin, Undergraduate Student

LIDAR: Illuminating the Landscape

Presenters: David Barclay, Associate Professor, Geology

James Christopher, Elizabeth Hensel, Undergraduate Students

Inferred Melt Inclusions in Adirondack Garnet

Presenters: John-Luke Henriquez, Undergraduate Student

Robert S. Darling, Professor, Geology

Converting the SUNY Cortland Buses to Biodiesel

Presenters: Rich Rose, Kevin Stimson, Alana Zahn, Kaitlin Russo, Undergraduate Students

Brice Smith, Assistant Professor and Chair, Physics

Accuracy of American College of Sports Medicine (ACSM) Metabolic Running Equation

Presenters: Kathryn Poe, Undergraduate Student

Kim Harrison, Graduate Student

James Hokanson, Associate Professor, Kinesiology

Spin Fast or Slow, What is the Most Efficient Pedaling Cadence?

Presenters: Undergraduate Students in Exercise Science Research Methods (EXS 489)

James Hokanson, Associate Professor, Kinesiology

CONCURRENT SESSIONS III

1:30-2:45 p.m.

Kinesiology III

Room G-09

Moderator: James Hokanson, Associate Professor, Kinesiology

The Effects of Exercise on Physical Self-Perception among Cortland College Students

Presenters: Christopher Battaglia, James Garofalo, Joseph Santullo, Undergraduate Students

Katherine Polasek, Assistant Professor, Kinesiology

Gait Analysis among Two Groups of College Students; Using the GAITRite System

Presenters: Lisa Thomas, Jake Howell, Undergraduate Students

Jeff Bauer, Associate Professor, Kinesiology

Force Generation between the Two and Three-Point Stances in College Football Players

Presenters: Chelsea Backus, Steve Coleman, Sean James, Malorie Manheimer, Hans Wulf,

Undergraduate Students

Jeff Bauer, Associate Professor, Kinesiology

A Comparison of Steady State VO₂ When Comparing Leg and Combined Arm and Leg Work On the Elliptical Cross-Trainer

Presenters: Stefan DiBella, Undergraduate Student

James Hokanson, Associate Professor, Kinesiology

SUNY Cortland Community Bike Project

Room G-12

Moderator: Amy Shellman, Assistant Professor, Recreation, Parks and Leisure Studies

Sustainability of the SUNY Cortland Community Bike Project

Presenters: Lynn Anderson, Professor and Chair, Recreation, Parks and Leisure Studies

Eddie Hill, Assistant Professor, Recreation, Parks and Leisure Studies

Brandi Crowe, Lindsey Brown, Graduate Students

Jeff Radcliffe, Undergraduate Student

Mathematics through the Ages

Room 229

Moderator: Jalal Alemzadeh, Professor, Mathematics

Indian Mathematics and Mathematicians

Presenter: Erin Gravy, Undergraduate Student

Al-Kwarizmi and His Contributions to Mathematics

Presenter: Richard Rathbun, Undergraduate Student

The History of Taxi Cab Geometry

Presenter: Alyse Wolber, Undergraduate Student

Application of Taxi Cab Geometry in Real Life

Presenter: Kristi LaCount, Undergraduate Student

The Connection between Taxi Cab Geometry and Other Mathematical Subjects

Presenter: Britni Sauter, Undergraduate Student

Application of Geometry in Sports, Specifically Gymnastics

Presenter: Lauren Pytel, Undergraduate Student

Internship Experiences in the Natural Sciences Room G-10

Moderator: Christopher P. Cirmo, Professor and Chair, Geology; Coordinator of Environmental Sciences

Scallop Farming in the Peconic Bay: Water Quality and Environmental Concerns

Presenter: Nick Krupski, Undergraduate Student

Quarrying Methods at the LaFarge Quarry in Ravenna, New York

Presenter: Jonathan Zabron, Undergraduate Student

Beavers and Trail Establishment at the Lime Hollow Center for Environment and Culture

Presenter: Elizabeth Hensel, Undergraduate Student

Resource Management at the Morristown National Historic Park

Presenter: Ben Guidarelli, Undergraduate Student

GIS and Mathematical Modeling for a Distributed Watershed Application Model

Presenter: Matthew Vitale, Undergraduate Student

Writers Read Room 209

Moderators: Victoria Boynton, Associate Professor, English David Franke, Associate Professor, English and Professional Writing

Writers Read: Performances from the Professional Writing Program

Presenters: Victoria Boynton, Associate Professor, English

David Franke, Associate Professor, English and Professional Writing

Alex Reid, Associate Professor, English

Kevin Bahler, Adam Berenstain, Philip Bolton, Liz Wolff,

Professional Writing Students

World Issues Room 121

Moderator: Seth N. Asumah, Distinguished Teaching Professor, Political Science; Chair, Africana Studies

The Israeli-Hamas Conflict of 2009: Research Report from Israel

Presenter: Edward Gitlitz, Undergraduate Student

Moving Ahead or Hardly Moving? Women in Africa's Informalizing Economies

Presenter: Ibipo Johnston-Anumonwo, Professor, Geography

Islam, Rentier Nation States and Democracy in Africa

Presenter: Seth N. Asumah, Distinguished Teaching Professor, Political Science;

Chair, Africana Studies

The Harlotry Players Brown Auditorium

Moderator: Janet Wolf, Associate Professor, English

The Harlotry Players

Presenters: Janet Wolf, Associate Professor, English

Jaclyn Pittsley, Lecturer, English

Judith Van Buskirk, Associate Professor, History

Undergraduate Students

Marxist Philosophy

Room 230

Moderator: Kathryn Russell, Professor and Chair, Philosophy

What does Marx Mean for Students Today?

Presenters: Kathryn Russell, Professor and Chair, Philosophy

Undergraduate Students in PHI 382

Art and Imagination

Room 120

Moderator: Leslie Eaton, Associate Professor, Psychology

Art Images and VTS Strategies: Graduate Preservice Teacher Research on Classroom Applications for Grades 1 and 4

Presenters: Susan Stratton, Assistant Professor, Childhood/Early Childhood Education

Karen Randle, Jennifer Emerson, Graduate Students

Imagination and Emotion: Neurological Bases for Role-Playing's Effectiveness

Presenter: John Suarez, Coordinator, Office of Service-Learning, Institute for Civic

Engagement

Local Government and Pre-Law Internships Room G-24

Moderator: Thomas Pasquarello, Professor, Political Science

Issues and Research in Local Government and Pre-Law Internships

Presenters: Thomas Pasquarello, Professor, Political Science

Jeri Adams, Carlos Clarke, Brian LaPierre, Henckel Miranda, Undergraduate

Students

The Cortland Early Childhood Professional Development Service Room 130

Moderator: Karen Hempson, Coordinator, Professional Development School

The Cortland Early Childhood Professional Development Service (CECPDS): Implementation, Results and Implications

Presenters: Heather Bridge, Assistant Professor, Childhood/Early Childhood Education

Stephanie Fritz, Cortland County Community Action Program

Anne Withers, Executive Director, Cortland Area Child Care Council

Kristin Legacy, Amanda Barillo, Stephanie Walters, Undergraduate Students

CONCURRENT SESSIONS IV

3:00-4:15 p.m.

Research on MacIntyre Room 230

Moderator: Andrew Fitz-Gibbon, Assistant Professor, Philosophy; Director, Center for Ethics, Peace and Social Justice

The Ethics of Alasdair MacIntyre

Presenters: Andrew Fitz-Gibbon, Assistant Professor, Philosophy; Director, Center for

Ethics, Peace and Social Justice

Stephanie VanHamlin, David VanHamlin, Steven Strollo, Jonathon Weinstock,

Undergraduate Students

Literature and Language

Room 209

Moderator: Paulo Quaglio, Assistant Professor, International Communications and Culture

The Frontiers and Labyrinths of Roberto Bolaño's 2666

Presenter: Wes Weaver, Professor, International Communications and Culture

Corneille, Music and Immigration in Modern Quebec

Presenter: Timothy Gerhard, Assistant Professor, International Communications and Culture

Development of Inflectional Grammatical Categories: Application to Spanish

Presenter: Donna E. West, Assistant Professor, International Communications and Culture

Are We Still Relevant?
Room G-12

Moderator: Raymond D. Collings, Associate Professor, Psychology

Are We Still Relevant? Two Empirical Examinations of Student and Faculty Perspectives on Liberal Arts Education

Presenters: Raymond D. Collings, Associate Professor, Psychology

Michelle Kelly, Associate Professor and Chair, Foundations and Social Advocacy

Donna M. Videto, Professor, Health

Undergraduate Students

U.S. History in International Context Room G-10

Moderator: Gigi Peterson, Assistant Professor, History

U.S. History in International Context: Student Research

Presenters: Jeromy Snyder, Daniel Pitcher, Undergraduate Students

Biological Sciences

Room G-09

Moderator: Peter K. Ducey, Professor and Chair, Biological Sciences

A Natural History of Facts: Personal Conclusions or Research Based Data

Presenter: Chelsea Cook, Undergraduate Student

The Arabidopsis thaliana VTC3 Gene – Its Identification and Role in Ascorbic Acid Biosynthesis

Presenters: Patricia L. Conklin, Associate Professor, Biological Sciences

Dennis DePaolo, Carmit Schatz, Undergraduate Students

Strategies and Methods in Math Room 229

Moderator: Jalal Alemzadeh, Professor Mathematics

Teaching Strategies

Presenter: Kimberly Degrazia, Graduate Student

Ranking College Football Teams Using Markov Chains

Presenters: Amber Murphy, Undergraduate Student

R. Bruce Mattingly, Interim Dean, School of Arts and Sciences

Chinese Art and Culture Room 120

Moderator: Jeremiah Donovan, Professor, Art and Art History

Permission to Speak: International Art Collaboration in China

Presenters: Jeremiah Donovan, Professor, Art and Art History

Patrick Foley, Ken Little, Gina Smith, Undergraduate Students

PDS - Professional Development School

Extending the Learning Community between SUNY Cortland and the Cortland Enlarged
City School District through Partnerships

Room 121

Moderator: Karen Hempson, Coordinator, Professional Development School

Unified and Teaching and Learning Initiative (UTLI)

Presenters: Kimberly Rombach, Assistant Professor, Childhood/Early Childhood Education

David Smukler, Assistant Professor, Foundations and Social Advocacy

Kelly Michales, Katie Swanson, Cortland City Teachers

Taryn Lippert, Sarah Fetcho, SUNY Cortland Student Teachers

PDS-Math Partnership Project

Presenters: Susana Davidenko, Associate Professor, Childhood/Early Childhood Education

Shana Snyder, Teacher, Cortland City Schools ~ Barry School

Cortland Reading and Writing Collaborative

Presenters: Phyllis Litzenberger, Literacy Specialist, Cortland Enlarged City School District

William Buxton, Associate Professor, Literacy Department

Juli Quinn, Kim Pace, Bonnie Meldrim, Teachers, Cortland Enlarged City

School District

The Benefits of GIS Room G-24

Moderator: Scott Anderson, Associate Professor and Chair, Geography and GIS

The Benefits of Geographic Information Systems in the Exploration and Exploitation of Oil and Natural Gas Resources

Presenter: Marco A. Terrazas, Undergraduate Student

> Deconstructing Barbie: A Critical Analysis of the Original Material Girl at Fifty Room 130

Moderator: Ibipo Johnston-Anumonwo, Professor, Geography

A Rhetorical Analysis of Barbie as Beauty Icon, Lusty Consumer, and Provocateur

Presenter: Kathleen Lawrence, Associate Professor, Communication Studies

Educating Barbie

Presenter: Cynthia Benton, Professor, Childhood/Early Childhood Education

Sexism, Heterosexism and Barbie's Gender Role

Judith Ouellette, Associate Professor, Psychology Presenter.

Pink My Ride: Barbie's Convertibles, Dune Buggies, and Dream Campers

Presenter: David Miller, Distinguished Teaching Professor, Geography

The Geography of Barbie

Presenters: Wendy Miller, Assistant Professor, Geography

Rebecca Blumbergs, Elizabeth Hensel, Danielle Kreamer, Joshua Smith,

Alyson Walzer, Undergraduate Students

Life-size Barbie

Presenters: Mary Gfeller, Assistant Professor, Mathematics

Jessica Finton, Siobhan Kelly, Erik Larson, Erica Thigpen, Deborah Walton,

Undergraduate Students

CLOSING SESSION

4:30-5:15 p.m.

Brown Auditorium

Moderator: Thomas Pasquarello, Professor, Political Science

The Blue Roots of American Popular Music

Presenters: Steven Barnes, Lecturer, Africana Studies

Richard Harris, Lecturer, Africana Studies

Timothy Gerhard, Assistant Professor, International Communications and Culture Colleen Kattau, Assistant Professor, International Communications and Culture

Noelle Paley, Lecturer, Africana Studies

Thomas Pasquarello, Professor, Political Science

Students from the SUNY Cortland Rock and Blues Ensemble and Beginning Blues

Guitar Classes

Africana Studies Hip Hop Emcee's with the SUNY Cortland Hip Hop Dance

Team - Drama

ABSTRACTS

CONCURRENT SESSIONS I

8:30-9:45 a.m.

The Effects of Static or Dynamic Warm-ups on Anaerobic Activity Using the Wingate Test Lindsay Bakker, H. Austin Rhodes, Trish Witter, Undergraduate Students Laura Hill, Visiting Assistant Professor, Kinesiology

To athletes, a warm-up before the start of practices or a competition is not an unfamiliar thing. These warm-ups usually consist of some sort of light exercise followed by a series of stretching. However, there is a dispute over which method of stretching, static or dynamic, would be the most effective in improving athletic performances. In this study, the different effects of static and dynamic stretching were observed. We hypothesized that the dynamic form of stretching would yield the best results in the Wingate test. The 30 participants were split up into three different groups. All performed a two minute bike warm-up; one performing only a two minute warm up, one group performing static stretching exercises, and lastly one group also performing a series of dynamic stretching exercises. After the warm up all groups will perform the Wingate test; this is a 30 second sprint on a cycle ergometer. With this information, a multiple variance ANOVA was analyzed on SPSS version 16.0.

Exercise Performance Related to Time of Day

Zachary Bogardus, Jennifer Dennis, Danielle Ferris, Undergraduate Students Philip Buckenmeyer, Associate Professor and Chair, Kinesiology

The present study seeks to determine the relationship between time and day and sport performance. It is hypothesized that the participants will perform best at the vertical jump, the agility run, and the reaction time test during the afternoon session. Participants in the study are both male and female, SUNY Cortland college students, between the ages of 18-22. Each group will be randomly selected to meet for three test periods in a span of one week and the times will vary between 8 a.m., 2 p.m., and 8 p.m. Participants performance will be tested using the sergeant vertical jump, the ten yard shuttle run and the Lafayette Instrument Visual Choice Reaction Time Apparatus. We will record their best time of the three trials in each test for further analysis. There will be three separate ANOVA tests ran on the results as well as the LSD Tukey Post Hoc test.

The Effects of Listening to Different Music Genres during a Two-Mile Run

Amanda Hickey, Diana Williams, Undergraduate Students Katherine Polasek, Assistant Professor, Kinesiology

In today's society, before a person runs out the door, they always have to check to make sure they have their car keys, wallet, cell phone, and now even their iPod. The purpose of the current study was to investigate college-aged students' effect from listening to hip-hop, classical, or no music at all during a two-mile run. Participants ran two miles every other week in Lusk Field House, listening to a different music genre on an iPod each week. A stopwatch was used to observe the participant's times each week and participants gave their rate of perceived exertion (RPE) after every quarter mile. After each run participants completed a quick 12-question survey on their focus, mood, arousal, and performance during the run. We hypothesized that hip hop music would enhance the participant's arousal, mood, focus and performance more than the classical or no music. We also hypothesized that participants listening to no music would have the slowest running times, and the lowest RPE mean score.

The Effects of High vs. Low Potassium Diet on Muscle Fatigue among College-Aged Males Crystal Quashie, Haleigh Muka, Jesse Sanna, Undergraduate Students Philip Buckenmeyer, Associate Professor and Chair, Kinesiology

Research has found that during exercise, lower levels of potassium have been linked to a quicker onset of fatigue. The purpose of this study was to find out if potassium has an effect on performance. We wanted to see if low potassium levels would increase the onset of muscle fatigue. Fourteen male SUNY Cortland students participated in this study. The participants were randomly split up into two groups, a high potassium group and a low potassium group. One group had to adopt a high potassium food diet for two weeks and the other group had to adopt a low potassium food diet for two weeks. At the beginning and end of the study the participants had to complete a thirty second Wingate test, which tests anaerobic fatigue. The knowledge gained from this study may help to increase the duration of specific exercises and increase a person's total exercise output.

Static and Dynamic Warm-Up and Their Effects on Lower Body Force Production Mike Avery, Clark Holdsworth, Lauren Phillips, Undergraduate Students Jeff Bauer, Associate Professor, Kinesiology

There has been much controversy on which warm-up style produces better lower body force production. Past studies have determined that a dynamic style warm-up will lead to a greater lower body force production. They have also shown that a static style warm-up will not only not increase force production but will actually decrease force production. In order to test why these findings are observed, twenty Division III College aged, male, baseball players performed two tests on two non-consecutive days. They performed static style warm-up and then performed three standing vertical jumps and the dynamic warm-up and three vertical jumps. The force produced from the jumps was averaged for each player. Those findings were then analyzed using an independent t-test from SPSS version 16.0 software. This helped determine which warm-up session (static or dynamic) lead to an increased force production.

The Effects of Internal and External Motivation during a Bicep Curl on College-Aged Men and Women

Kyle Bigney, Danielle Ruminski, Undergraduate Students Jeff Bauer, Associate Professor, Kinesiology

Motivation has been shown to be an effective tool in aiding and bettering the physical output of individuals during physical activity and exercise. The participants in this study were college aged males and females. A cybex bicep curl machine and an EMG were used in the study. Thirty participants were randomly assigned to three different groups: a control, internal or external group. Each student was asked to perform the exercise and motivation was given during the bicep curl exercise. The internal group was asked to concentrate on the feeling of contraction in their bicep muscles, the external on performing the movement and bringing the bar to their chest, and the control received no motivation. A baseline test was performed with no motivation given, followed with a 20-25 minute rest. Results were evaluated using SPSS version 16.

Literacy Buddies, Literacy Scholars

Sheila G. Cohen, Associate Professor and Chair, Literacy Jessica Kabanuk, Lecturer, Literacy SUNY Cortland Teacher Candidates

This session focuses on an ongoing assessment to determine the value of pen pal exchanges between teacher candidates and elementary school students. It highlights factors revealed in the assessment that impact pen pal exchanges in various settings, i.e. exchanges initiated within a college course and exchanges in a less formal, unstructured setting. Presenters will describe several ongoing "Literacy Buddy" pen pal projects and share some of the assessment findings regarding what teacher candidates learn in the various settings about children's literacy development and about the nature of teacher research.

The Miller Site 35 CO 32: Preliminary Report: Summer 2008

Ellis E. McDowell-Loudan, Professor, Sociology/Anthropology Heather Beardsley, Undergraduate Student

This session describes the survey and testing of a newly discovered prehistoric Native American site in Cortland County, NY. SUNY Cortland undergraduate students helped document a new archaeological site. The research project was enhanced by a SUNY grant funding Haudenosaunee leader, Darren Bonaparte, who provided native traditional environmental and cultural views to expand on the archaeological training students received. The project was enriched by a field trip to a Cayuga village excavation and visits to the Miller Site from a number of knowledgeable researchers who shared their expertise with them. Field and laboratory work continued into the fall semester and Heather Beardsley will discuss some of the developments made during that portion of the research. Plans for the 2009 field season will be described, and reasons why further research is warranted will be explained.

Fans Apply Full-Court Press to Pitt over Reseating Policy

James Reese, Associate Professor and Graduate Coordinator, Sport Management Mark Dodds, Assistant Professor, Sport Management David Snyder, Professor, Sport Management

In preparation for the 2002-2003 basketball season, the University of Pittsburgh (Pitt) began advertising season tickets for its general seating in a new basketball facility. In marketing materials, Pitt guaranteed season tickets holders would be allowed to keep existing seat locations in the new facility, as long as they continued to purchase season tickets each year. In 2005, Pitt announced a policy change for distribution of season tickets for men's basketball. Fans would be reseated annually based on priority points earned through donations to the Panther Club. This led to a class action suit on behalf of approximately 650 season ticket holders for breach of contract. The class action complaint was filed on March 29, 2005. After extensive negotiations between the parties, a settlement agreement was announced on May 31, 2005. Researchers will analyze this case from a legal and public relations perspective to determine its impact on Pitt.

Exploring Motives for Hiking on the Appalachian Trail: Using a Means-end Approach

Eddie Hill, Assistant Professor, Recreation, Parks and Leisure Studies Barbara Freidt, Lecturer, Old Dominion University Marni Goldenberg, Associate Professor, California Polytechnic State University Edwin Gómez, Associate Professor, Old Dominion University

The Appalachian Trail (AT) is a 2,175 mile National Scenic Trail extending from Maine to Georgia. Since its inception in the early 1920s, the AT has been used by individuals, families, schools, and other organizations. However, limited research has been conducted on understanding motives of AT hikers. Using a Means-end theoretical approach, a survey instrument was developed and launched on-line. A total of 454 usable surveys were collected. Various attributes (e.g., being outdoors), consequences (e.g., solitude), and values (e.g., self-reliance) emerged from the data. To determine the nature of the relationship between the means-end constructs, a Pearson correlation was used to investigate the relationships between the three factors. An understanding of the benefits associated with hiking on the AT may be useful in arguing in favor of funding for the conservation and preservation of the trail and its surrounding corridor lands for future use.

Sport and International Relations: The Soft Power of Sports in the Korea International Cooperation Agency's (KOICA) Cultural Diplomacy

ChangKi Bahng, Graduate Student

The purpose of this study is to examine case studies of KOICA's role and influence in international relations through its sports development. Soft power, first introduced by Harvard University professor Joseph Nye (1990), distinguishes the subtle effects of culture, values, and ideas on others' behaviors. The resource from which soft power behavior is derived is "culture" in which KOICA's sport cooperation has been seen as a tool for improving the relationship between partner countries. This leads us to ask: Has KOICA's effort to pass on "cultural diplomacy" to Asian partners played a role in increasing Korea's soft power? Is cultural soft power more human than hard power? Has KOICA's soft power been used for cultural and diplomatic objectives? The presenter will also discuss this emerging relationship, as it is widely understood that sports cooperation has potential impacts on shaping international relations.

Power in the Modern World: International Perspectives

Power structures are found around every corner within the context of human existence. The papers in this session, researched and presented by International Studies majors, will offer global views on the various types of power structures found and their impact on populations in global contexts. Topics such as the misuse of power, the consequences of inappropriate applications of power by governments, and rebellion against overbearing power structures will be explored.

Social Inequalities: Power and Health Care in Transitional Nations Sarah Voorhees, Undergraduate Student

The Madrasa and the State: Trepidation over Islamic Education in Secular Nations? Kaleigh Corgan, Undergraduate Student

An International Experience: The Key for Successful Leadership Brittany Wright, Undergraduate Student

The Future of Venezuela: Power, Chavez, and the Socialist State Jonathan Weinstock, Undergraduate Student

Clinical Interviews in Mathematics Education

Benjamin Lester, Blythe McPletl, Meghan Peck, Chris Salerno, Kathryn Schultheis, Annie Whitman, Undergraduate Students Richard Sharp, Graduate Student

In this session, students from AED 492 will share the results from clinical interviews conducted with students in area schools on K-12 topics in mathematics education.

The New York State Inclusive Recreation Resource Center at SUNY Cortland

Lynn Anderson, Professor and Chair, Recreation, Parks and Leisure Studies Vicki Wilkins, Professor, Recreation, Parks and Leisure Studies Laurie Penney McGee, Project Coordinator, NYS IRRC Whitney Mayer, Graduate Student

The New York State Inclusive Recreation Resource Center at SUNY Cortland is an exciting initiative, funded by the NY Developmental Disabilities Planning Council. The Center functions as a resource and referral hub for people with disabilities around the state, using the web and individualized assistance. Through training, on-site Inclusivity assessments, networking, regional advisory groups, and a constantly growing online inclusive recreation database, the Center provides information that people with disabilities need to pursue recreation in the most inclusive settings. The NYS Inclusive Recreation Resource Center takes a leadership role in forming regional networks, training recreation professionals, disability groups, and families in inclusivity assessment, and building a heavily linked online database that is continually evolving and growing with accurate information about recreation and parks in the state. This session will update the campus on the research and activities of the NYS IRRC over the past two years and share future initiatives.

Urban Education and No Child Left Behind Legislation

First Year Students in Cortland's Urban Recruitment of Educators (C.U.R.E.) Program

The landmark No Child Left Behind (NCLB) Legislation has resulted in dramatic changes in the nature of education across the United States, including an increased emphasis on high stakes testing and accountability. In urban areas, the impact of these changes has had serious consequences for students, teachers and schools. In this session, first year students in Cortland's Urban Recruitment of Educators (C.U.R.E.) Scholarship Program will discuss the No child Left Behind Legislation and describe the effects of this legislation in urban areas. Drawing on recent research and their own experiences working in Syracuse City schools, the C.U.R.E. students will engage the audience in order to better understand the current situation and the potential future of NCLB in urban schools.

New Media in the English Language Arts Classroom

Karen Stearns, Assistant Professor, English Tim Casey, Suzanne Farah, Joyce Hansen, Allison Porzio, Kari Redmond, Sydney Welch, Graduate Students

Today our students are living in a world that is increasingly non-printcentric. All teachers, and especially English Language Arts teachers, must adapt to what for many 21st century learners are more engaging forums for learning than print-only environments. Readily available digital technologies create opportunities for students to create images, sounds, designs, videos and other extra-alphanumeric texts in multimodal learning environments. Graduate students in our English Education program will demonstrate a range of multimedia composition forms to engage learners across grade levels adapting new tools for their own information and communication purposes. This session is suitable for all educators and prospective educators.

Feminism: It's Not a Dirty Word

Ashley Rogers, Caitlin DeGroat, Jennifer Ondrako, Undergraduate Students

Explores college students' understandings of feminism before and after studying issues related to the subject. Confronts stereotypical thinking about feminism, with a goal of examining several of the understandings that are more reflective of what a feminist position actually represents. In addition to issues of gender stereotyping portrayed by the media, presenters address domestic violence, blaming the victim, and a culture of rape where rape has become so normalized in our society that women unconsciously live by a "rape schedule." Personal experiences, as well as local and national statistics, are presented. We hope to motivate audience members to see how powerful each person can be in working to create a more just society through introducing activities that young women and men around the country are doing to battle gender stereotypes and inequities.

CONCURRENT SESSIONS II

10:00-11:15 a.m.

Gender Differences in Rating of Perceived Exertion in Distance Runners

Kathryn Poe, David Goldenberg, Undergraduate Students James Hokanson, Associate Professor, Kinesiology

The purpose of this study is to evaluate gender differences in distance runners and their perception of specific workloads (RPE). Volunteers exercised on a motor driven treadmill following the Bruce protocol used to estimate maximal oxygen uptake (VO_{2max}). Volunteers then ran at 30, 50, and 70 percent of their estimated VO_{2max} . Volunteers used the Borg RPE scale to evaluate their levels of exertion at each workload. During each testing session, both steady state heart rate (HR) and RPE data are collected. Data will be analyzed to determine differences in RPE between genders and examine the correlation between RPE and steady state HR.

Assessing Anterior Cruciate Ligament Function Postoperatively During Jumping Tasks Michael Kuhn, Nicholas Pulling, Tiffany Grybas, Undergraduate Students Jeff Bauer, Associate Professor, Kinesiology

Anterior cruciate ligament (ACL) injury has become an increasingly more common concern for athletes and has resulted in an increased preponderance of reconstructive surgery. While these patients have generally been able to return to athletic activities, further research into the return of strength and functionality postoperatively is warranted. As such, ten male and ten female subjects with a single reconstructed ACL will be biomechanically examined during a plyometric-jumping task for knee function abnormalities and/or deviations in force production. Force production in the healthy and reconstructed knees will be evaluated using an analysis of variance. It is postulated that the results will find that there is not a significant difference in force production between reconstructed and healthy knees. This provides a positive outlook for individuals who have suffered.

Relationship between Upper Body and Core Muscular Strength and the Velocity of the Ice Hockey Slap Shot

Kevin Cuddahee, Zach Dehm, Joe Radich, Undergraduate Students James Hokanson, Associate Professor, Kinesiology

Ice hockey is a game characterized by power and speed. Hockey players are required to use explosive power for short bursts of energy lasting from 30 seconds to one minute. Recently in the game of hockey, the slap shot has become a tremendous offensive weapon. The purpose of the study is to examine D III ice hockey upper body and core strength and correlate slap shot velocity. Off-ice strength testing session determined an overall strength score using BSDI customizable software. Slap shot velocity was measured on-ice using radar gun. Through the study we hope to show that the players with a stronger upper body and core will produce higher slap shot velocities.

Information Processing Demands: Reaction Time While Driving and Performing Secondary Tasks

Jennifer Cobb, Zachary Fluster, Greg Leder, Ashley Seaver, Undergraduate Students Joy Hendrick, Professor, Kinesiology

Driving is a complicated task that places great demands on the information processing system. Far too often, drivers attempt to engage in simultaneous secondary tasks that place too many demands on this processing system, resulting in a decreased capacity to successfully maneuver a vehicle. The purpose of this study is to observe the reaction time of individuals who are performing secondary tasks during a simulated driving test in an attempt to discover which task elicits the slowest reaction time. Secondary tasks examined include eating, personal hygiene related tasks and text messaging conversation. The effects of these tasks on the reaction times of coed college students will offer insight into the dangers associated with multi-tasking while operating a motor vehicle.

Reaching New Limits: A Comparison between Elliptical Cross-Trainer and Treadmill Maximal Oxygen Uptake

Kristi Kellogg, Amanda Holley, Adah Campany, Undergraduate Students Philip Buckenmeyer, Associate Professor and Chair, Kinesiology

Maximal oxygen uptake (VO_2 max) is the amount of oxygen a person consumes per minute per kilogram of body weight. VO_2 max tests are considered to be one of the best ways to measure a persons overall cardiovascular fitness level. Fifteen students from the SUNY Cortland campus will perform two VO_2 max tests. One of the tests will be accomplished on a treadmill and the other test will be completed on an elliptical cross-trainer. The treadmill VO_2 max test will follow the Bruce protocol and the elliptical cross-trainer test will follow a custom designed VO_2 max test. The predicted results will show that the VO_2 max achieved on an elliptical cross-trainer will be significantly higher than the VO_2 max achieved on a treadmill. This is due to more muscles recruited on the elliptical cross-trainer, increasing blood circulation and allowing muscles to extract more oxygen from the participants' blood.

Hopping and Leg Stiffness: Does Aging Affect the Bounce in Your Step?

Nicole Dovi, Undergraduate Student Peter McGinnis, Professor, Kinesiology James Hokanson, Associate Professor, Kinesiology

When movement involves stretch-shorten cycles the human body can mimic the motion of a spring and move with enhanced efficiency. Leg stiffness is the quantified stiffness of the human spring in motion and is adjusted based on physical demands. The mechanisms of efficient locomotion are important in older populations whose muscle size and force production deteriorate with age. Leg stiffness has mainly been studied in young, athletic populations, and research examining the affects of age on the body's ability to produce efficient, spring-like movement is limited. It is the purpose of the present study to determine the relationship between age and leg stiffness exhibited during a hopping task. The results of this study will provide further insight into the aging process and its influence on mobility.

Obesity Trends in Cortland County

Bonni C. Hodges, Professor and Chair, Health Regina Ferro, Graduate Student Jill Murphy, Associate Professor, Upstate Medical Center

As part of a larger project exploring the potential for school-based obesity prevention and reduction efforts in a CNY county a sample of students in grades 6-12 completed the physical activity and diet portions of the Youth Risk Behavior Survey to determine the self-reported prevalence of obesity, diet-related behaviors associated with obesity, and physical inactivity. In addition, direct body height and weight measures were performed on K-12 students for the computation of BMI. The presentation will review the major trends suggested by the data and discuss the implications for obesity prevention efforts in schools.

Where Are the Guys in Peer Education?: Two Investigations of Adolescent Male Participation in Sexual Health Peer Education Programs in New York State

Sarah Beshers, Associate Professor, Health

This presentation reports on two studies of adolescent male participation in sexual health peer education programs in New York State. The first study identifies the average percentages of female and male peer educators in a sample of 40 peer education programs and explores the relationship between financial compensation and male participation. Data were collected via a telephone survey of program staff. Data analysis shows that the average percentage of female peer educators in the sample is significantly higher than the average percentage of male peer educators. In addition, programs which provided a stipend do not have a significantly higher average percentage of male peer educators than programs which do not. The second study uses three focus group discussions with adolescent males to explore their perceptions of peer education. Qualitative data analysis identified several themes related to these perceptions.

Don't Die from Embarrassment: Barriers to Colo-Rectal Cancer Screening Bonni C. Hodges, Professor and Chair, Health Mark Schaller, Graduate Student

According to the National Cancer Institute colorectal cancer is the third most common type of cancer and the second leading cause of cancer deaths in men and women in the U.S. Data for Cortland County indicate that CRC mortality rates are significantly higher than both the state rates and the national *Healthy People 2010* goal. Early detection through screening is a key factor in combating CRC mortality, yet CRC screenings are underutilized. In order to gather information on CRC knowledge and perceptions of screening benefits and barriers a 26 item anonymous survey was administered to faculty and staff of SUNY Cortland 40 years of age and older. Survey administration was primarily through an on-line portal but was also made available in paper form for those choosing not, or were unable, to complete it on-line. Results of the survey will be presented and discussed with regard to health promotion program planning.

SUNY Cortland Writing Contest Award Winners Present!

Each year, the SUNY Cortland Writing Committee sponsors a campus-wide writing contest open to students in all majors and at all levels of study. Categories for which writing can be submitted include academic writing, fiction, poetry, scripts, literary nonfiction, and web page design. This year, seven College Writing Contest winners will present their work.

Flower of the Field

Krista Merry, Undergraduate Student

Snapshot: Quick Like a Bunny

Jennifer Ondrako, Undergraduate Student

A Complicated Decision

Erica A. Brazee, Graduate Student

Dating the Origin of the Split between Ascomycetes and Basidiomycetes

Carmit Schatz, Undergraduate Student

Chasing Satan

Jovce Hansen, Graduate Student

Dust Mite and On Anosmia

Joseph Tutko, Undergraduate Student

Visual Arts: Effective Means to Enhance Creative Writing Quality

Karen L. Randle, Graduate Student

The Cortland Early Childhood Professional Development Service (CECPDS): The Role of the SUNY Cortland Library in Supporting Effective Professional Development

Lorraine Melita, Senior Assistant Librarian, Memorial Library Patricia Roiger, Lecturer II, Childhood/Early Childhood Education Angela Silverstein, Undergraduate Student

A key component in the Cortland Area Early Childhood Professional Development Service (CECPDS) Grant is the working partnership between the Childhood/Early Childhood Department and the SUNY Cortland Library. CECPDS uses an Action Research approach to professional development in which journal articles are used to find strategies to improve teaching approaches in classrooms. The role of the library in CECPDS is explained and evaluated by Melita, Roiger and Silverstein.

Anthropological Perspectives on the Mind and Body

The two papers in this session approach the subject of the human mind and body from very different perspectives. These papers result from year-long research projects by each presenter. Jennifer Burhans will present her research on the intersection between the Judaism and Christianity of two thousand years ago. Both religions express deep concern over the issue of a coming messiah and the necessary ritual purity of the mind and body to achieve this religious goal. Burhans' research offers insight into both the differences and similarities of these two religions, including how and why Christianity emerged within the context of an anthropological investigation of the "mind and body." Angela Wilde uses her two decades of experience in the fashion industry, combined with her anthropological study of the field over the past year, to offer perspectives on who drives what is "fashionable" and why. Wilde's research gets at the inner workings of a field that causes women, and men, in worldwide contexts, to mindfully change their bodies because of the wishes of a few within the complex fashion industry.

The Messiah Theme: Major Figures in Ancient Judaism and their Revitalization of a Religion in Crisis

Jennifer Burhans, Undergraduate Student

Tales from an International Fashion Model

Angela Wilde, Undergraduate Student

Thieving Santa: U.S. Christmas Gift Exchange in Ritual Reversal

Gretchen Herrmann, Librarian, Memorial Library

It goes by many names — Evil Santa, Thieving Santa, Chinese Christmas, Yankee Trader, Zen Christmas—but the event is essentially a ritual reversal of Christmas gift giving customs in the United States. Counter to ideal notions of the perfect gift as a carefully selected item representing a unique bond between individuals, Thieving Santa is predicated on chance and even predatory behavior. This Christmas reversal is practiced among families, coworkers and voluntary associations, and it sets up a series of interactions that can increase group solidarity, while undermining notions of the "ideal gift". This paper analyzes this widespread American celebration, illustrated with examples from years of participant observation and internet postings.

Conservation Biology and Adirondack State Park

Jason Gorman, Justin Kindt, Mark Morrell, Amanda Neville, Jack Ruggirello, Undergraduate Students Steven B. Broyles, Professor, Biological Sciences

Adirondack State Park integrates public and private lands into a large biologically intact ecosystem that contains 85% of the wilderness found in eastern North America. Adirondack Park forests are protected by the "forever wild clause" of Amendment XIV of the New York State constitution. These features of Adirondack Park (i.e., size, constitutional protection, combining public and private lands) present unique opportunities and challenges for modern conservation biology. Our research will explore four contemporary conservation issues of Adirondack Park. The themes include (1) exurban development, (2) the Algonquin to Adirondack Biological Corridor proposal, (3) atmospheric pollution and forest conservation, and (4) citizen science initiatives. Our approach will be to describe each issue and offer salient perspectives on challenges and controversies of adopting conservation practices in Adirondack Park.

Transforming Cortland Students? What Do Students See as the Impact of Their Study Abroad Experience?

Brittany Wright, Jonathan Weinstock, Jude Anasta, Michelle Housworth, Bailey Molitor, Greg Leder, Undergraduate Students

The experience of studying abroad as an undergraduate is often described as "transformative." The expectation is that immersion in another culture opens students to new understandings of society, language, politics, thought and/or culture. This panel will examine the particular issue of how students, in the aftermath of the study abroad experience, behave differently as "students." Students will reflect on how their instructors abroad differed from the norm of faculty as experienced at Cortland, and how study abroad has affected how they relate to their courses, fellow students, and faculty.

Cortland-Binghamton Excursion Train Study: A Replication and Extension

Sharon Todd, Associate Professor, Recreation, Parks and Leisure Studies Brandy Boden, Lecturer, Recreation, Parks and Leisure Studies Eugene Borzendowski, Lindsey Brown, Frances Speight, Kokia Tarik, Graduate Students

The intention of this study was to replicate and expand the 2007-2008 Excursion Train Study, funded by the New York State Senate, with a primary purpose of determining the feasibility of extending tourist excursion rail service between Binghamton and Cortland. In terms of replication, potential excursion train users were surveyed at The Fall 2008 Great Cortland Pumpkinfest regarding excursion train use patterns, willingness to pay, potential benefits, potential barriers, marketing and communication, and demographics. In terms of adding new dimensions to the study, current excursion train users and potential users associated with a tourism event were tapped at the 2009 Central New York Maple Festival, with an emphasis on examining the economic impact of the Marathon Maple Fest Train Run. The results will be used by the New York State Senate to inform decisions made relative to passenger excursion trains in the Central New York area.

From Recess to Recreation Time: Engaging $\mathbf{5}^{\text{th}}$ and $\mathbf{6}^{\text{th}}$ Graders Through Resiliency-Based Programming

Eddie Hill, Assistant Professor, Recreation, Parks and Leisure Studies Amy Shellman, Assistant Professor, Recreation, Parks and Leisure Studies Lindsey Brown, Graduate Student

This session highlights a recreation-based program aimed at promoting resiliency among 5th and 6th graders, during school hours. An elementary school in central New York renamed recess "Recreation Time" in an effort to highlight the value and importance of this "free-time" for student growth and development. Using the Benefits-Based Programming model, SUNY Cortland students facilitated seven weeks of theme-based programs (resiliency traits) during "Recreation Time" for these students. Each theme-based week included fun and cooperative activities using the Training Wheels Kits © and other student-generated initiatives geared toward this age group. These activities were intentionally and theoretically designed to parallel the seven resiliency traits (insight, independence, relationships, initiative, creativity, humor, values orientation) described by Wolin and Wolin (1993). Outcomes were measured using the Resiliency and Skills Profile (RASP).

So Long...Goodbye: Using Behavior Analysis to Teach a Preschooler to Say "Goodbye" Kerry Linden, Undergraduate Student

Four-year old Bergen did not say goodbye: never a farewell for his friends or teachers, not even goodnight to his mom and dad. His mother was dismayed and, wanting him to say "Goodbye," completed a field observation and intervention project using behavioral principles and methods. Balancing this scientific approach to parenting with "mother's knows best" inclinations was an intriguing and challenging process, as was incorporating Bergen's participation and preferences in the program. In this presentation, the investigator-as-mom will describe the project from inception to conclusion, including not only the results of the project but also personal reflections on the process. Along the way, this student investigator grew closer to her son as she learned more about what really motivated his behavior, as well as her own.

New Visions for Quality Inclusive Education

Susan Stratton, Assistant Professor, Childhood/Early Childhood Education Kimberly Rombach, Assistant Professor, Childhood/Early Childhood Education

Special education practices have undergone myriad changes in the past three decades. However, meaningful inclusive practices remain elusive for most classrooms. What models are currently examining practices and yielding significant results? The purpose of this presentation is to identify and describe successful and current research-based practices that are occurring in the Mid-State Region of New York. Topical practices to be discussed include Universal Design for Learning (UDL); Response to Intervention (RTI), and a model for Inclusive Education. Further, agencies currently participating in this initiative and their roles in New York State are described.

KEYNOTE ADDRESS

11:30 a.m.-12:30 p.m. Brown Auditorium

A Career in Research: A Rocky Road or a Smooth Pathway?

Edward J. Zambraski '71, Ph.D., FACSM Division Chief, Military Performance Division US Army Institute of Environmental Medicine Natick, Massachusetts

Emeritus Professor of Physiology Rutgers University New Brunswick, New Jersey

A large number of undergraduates consider or envision a career as a researcher; the area of interest could be in the humanities, basic sciences or in the medical field. To make this career choice a viable and positive reality, there are important factors or questions to consider.

How does one get exposed to or interested in a specific area of research? Are there jobs? What kind of training do I need? What does it take to have a successful and rewarding career doing research in a university or college setting? Is the "tenure-track university professor" route a viable option? What are the research opportunities within the private sector (industry) or the government? How might these positions be similar or different to doing research in the academic environment?

Dr. Zambraski, trained with a Ph.D. in physiology, was a professor at Rutgers University for 27 years. His position involved teaching, leading an active medical research program on cardiovascular and kidney disease, and training / mentoring undergraduate and graduate students. He also has been very active within various organizations, such as The American Physiological Society, The American College of Sports Medicine and the National Institute of Health, chairing national committees and panels on matters pertaining to career opportunities in the basic and applied sciences. His current position is with the U.S. Army as the "Chief" of a medical research division at the U.S. Army Research Institute of Environmental Medicine, in Natick, MA.

For this presentation he will bring these experiences to discuss the issues and questions that individuals need to address when there is consideration of a career as a research scientist.

POSTER SESSIONS

12:30-1:30 p.m. Lobby Area, 1st & 2nd Floors

Using Geographical Concepts to Educate Early Childhood Students

Dawn Battista, Undergraduate Student Wendy Miller, Assistant Professor, Geography

National geography standards were created in 1994 to address geographic education for grades K-12. A great deal of attention has been paid to the use of geography for older students, but it is equally important for younger students as well. This poster explores some key geographic concepts and discusses their relevance to the national geography standards and their application to early childhood education.

Using GIS to Make a Difference in Community Projects

Ian Burk, David Delcourt, James (Jake) Kommer, Eric Strahley, Undergraduate Students Wendy Miller, Assistant Professor, Geography

This project showcases the results of an Independent Study course with three student posters. This project looks at how Geographic Information Systems (GIS) technology can be used to address local community projects. These advanced students will use their own projects to show how GIS is used, what it can be used for, and how they applied it to a specific issue. Steps of their project and the map outcome will be shown and discussed.

Using Brief Video Tutorials to Enhance Student Learning

Beginning and Advanced GIS Undergraduate Students Wendy Miller, Assistant Professor, Geography

Students from many disciplines are enrolling in the Geographic Information System (GIS) courses offered by the geography department. Throughout the four core GIS courses students require 'refreshers' on how to complete certain tasks within the software. In the past, these students have either asked classmates or waited for the instructor for guidance. A new project is being undertaken in the spring 2009 semester using short, video—based tutorials to provide this information to students. These tutorials are created and placed on the desktop of computers in the GIS laboratory, so students in any of the GIS courses can access them. Students in the Advanced GIS course will be creating the tutorials to be used and tested by the students in the Introductory GIS course. The effectiveness of these tutorials will be discussed.

Using GIS Technology in Virtual Trail Mapping, Barranquitas, Puerto Rico James A. Christopher, Undergraduate Student

As technology improves, utilization of GIS for recreational purposes becomes both more common and more effective. In this presentation, Christopher blazes a trail through the canyon of Barranquitas, Puerto Rico. Christopher maps his progress throughout the traverse using handheld GPS technology, and back in the workstation with computer based GIS technology. Furthermore, by using a 3D mapping program, it is not only possible to digitally draw out the trail, but also to display comparative vistas. The technologies and techniques used to create these maps will be discussed in detail.

Ghana and Kenya: Study Abroad in Two of Africa's Most Prestigious Universities Abigail Mcphail, Undergraduate Student

Study abroad offers students a transformative experience that will refocus their entire outlook on life and the globe as a whole. It enhances career opportunities and promotes self-empowerment needed to be successful and competent in this ever-changing global market. In this new globalized economy, it is essential for students to acquire sufficient knowledge about communities and cultures outside of their own to compete with the demands of globalization. In this perspective, Ghana and Kenya both equally offers a rich and dynamic cultural experience that will increase students' knowledge concerning Africa and the world and uphold world diversity. In this poster presentation Abigail Mcphail will illustrate with pictures and the evidence why it is imperative that SUNY Cortland students consider studying at the University of Ghana and the United States International University in Kenya, two of Africa's most prestigious Universities. The phenomenal educational and cultural experience students will attain at these two prominent Universities will transform their perspective of the world and those who live in it.

Student Openness and College Adjustment

Ryan J. Hiller, Kristin A. White, Undergraduate Students Raymond D. Collings, Associate Professor, Psychology Judy K. Bentley, Assistant Professor, Foundations and Social Advocacy

Relations between willingness of college students with disabilities to divulge information and college adjustment are examined. Interviews with twelve students about their transition into college examine openness with professors, classmates, and close friends, asking for and receiving disability services, and adjustment to college. Results indicate positive correlations between asking for services, willingness to divulge to professors and classmates, and college adjustment, while no correlation exists between openness with close friends and college adjustment.

The Stereotype Threat

Kyra Pinn, Jennifer Gioia, Undergraduate Students Raymond Collings, Associate Professor, Psychology

Our research project will study the effect of stereotypes related to being a student at a public college as opposed to a more prestigious private school. Specifically, using SUNY Cortland undergraduate students, the purpose of this study is to examine if the scores of our participants' on a mock math achievement test will be impacted by negative self-attributions. To accomplish this, we will administer one of two sets of instructions before the testing, one set will state that the test is designed examine differences in performance between students at private and public colleges, and one set will include no such statement. Using a similar procedure, Claude Steele has found that highlighting race and gender stereotypes lower math and verbal scores on standardized tests. We hypothesize that our participants whose negative stereotypes about their type of school are evoked will score lower on tests than students in the neutral conditions.

The Influence of Amodal Cues on the Reaching Behavior of 4-Month-Old Infants

Nicole Granger, Undergraduate Student Kimberly Kraebel, Associate Professor, Psychology

The current study will assess the influence of sensory information on reaching behavior in four-month-old infants. The participants will be placed on their backs under an activity gym with hanging objects. One group of infants will receive matching sensory information about the hanging objects through sight and touch, while a second group will receive non-matching sensory information through sight and touch. A control group will receive sensory information through only one sensory modality, sight. A reach will be considered hand contact with one of the hanging objects for all groups. The expectation is that those infants that receive matching sensory information will show an increase in reaching behavior while the infants who receive non-matching sensory information will show a decrease in reaching behavior.

Assessing the Role of Matching Sensory Cues on Habituation Processes in Human Infants Joanna Verdi, Undergraduate Student Kimberly Kraebel, Associate Professor, Psychology

The current study aims to find out whether infants will habituate to held objects faster when given matching visual and tactile stimulation. Three-month-old infants will be placed into three groups. Infants in the first group will see a mobile with cylinders hanging from it, and hold a cylinder of the same size in their right hand (matching information). How long they hold the cylinder will be recorded. Infants in the second group have the same procedure, but hold a brick-shaped object (mismatching information). Infants in the third group will hold a cylinder but will not see a mobile. It is expected that the infants will habituate to the objects faster in the presence of matching information and that habituation will be inhibited in the presence of mismatching information. Positive results will support Bahrick and Lickliter's (2004) Intersensory Redundancy Hypothesis which predicts facilitated learning in a multimodal context for young infants.

Will Matching Sensory Information Influence Infants' Ability to Imitate an Action? Jennifer Walker, Undergraduate Student Kimberly Kraebel, Associate Professor, Psychology

The role of intersensory integration will be studied to determine its influence on imitative behavior in human infants. Infants, 6 months of age, will watch a two-action sequence on an object (a cylinder) repeated several times and then tested for their imitation of those actions (latency, number of acts). Redundant sensory information will be manipulated across three groups of infants. The experimental group will receive matching tactile information about the object they are observing. One control group of infants will receive mismatching sensory information and a second control group will not receive any tactile information while observing the actions. Based on Bahrick and Lickliter's (2004) Intersensory Redundancy Hypothesis predicts that infants given matching sensory information will show stronger imitative behavior than infants who do not receive redundant sensory information and that reaching behavior might be inhibited for those infants who receive mismatching sensory information.

The Effect of Perinatal Exposure to PCBs on Alcohol Consumption by Rats

John P. Lombardo, Professor, Psychology David F. Berger, Professor, Psychology Peter M. Jeffers, Professor Emeritus, Chemistry Jennifer Morrison, Graduate Student Undergraduate Students in Behavioral Neuroscience (PSY 411)

Over the past 30 years the age of first alcohol use among human females has declined. The present experiment used an animal model to examine the effects of exposure to polychlorinated biphenyls (PCBs) during gestation and lactation on alcohol consumption. The diets of 10 pregnant dams were augmented daily with a Nilla Wafer containing an industrial mixture of PCBs in corn oil from gestation days 5 to 19. Ten control dams received wafers with corn oil alone. Starting on postnatal day 50 one randomly-selected male and female offspring from each litter was habituated to increasing concentrations of ethanol solution. Their voluntary consumption of 6 % ethanol was measured during subsequent daily 1-hr periods. Adjusted for body weight, the PCB-exposed female offspring drank more than all the other groups. These findings improve our understanding of the consequences of exposure to environmental contaminants that may be specific to addictive behavior in females.

The Role of Past Experience in Creating Interest and Support for a Local Tourist Train

Ellie Barvinchak, Graduate Student

Sharon Todd, Associate Professor, Recreation, Parks and Leisure Studies

Tourism officials speculate the rail corridor between Cortland and Binghamton could sustain themed and destination-driven scenic train use. Since experience levels have been found to influence recreationists' expectations, motives, attitudes, and behaviors, this study sought to discover if past excursion train use would differentially affect local citizens' interest and support. A systematic random sample of 778 potential and actual train users responded to a survey (47% response rate) administered spring 2008. Respondents with past experience (57%) tended to demonstrate significantly higher levels of interest and support for excursion train experiences, rated benefits significantly higher, and perceived significantly lower levels of constraint. To broaden the base of support, officials should provide residents with opportunities to ride excursion trains, since they will likely seek additional opportunities in the future. Having a variety of themes and destination events could help stimulate and sustain interest in repeat use and expand clientele to regional tourists.

Comparison of MVPA While Playing DDR, EyeToy Kinetic and XaviX Tennis

Jacob J. Weaver, Undergraduate Student Stephen P. Yang, Assistant Professor, Physical Education John T. Foley, Assistant Professor, Physical Education

Current guidelines suggest that children and adolescents should acquire at least one hour of moderate to vigorous activity (MVPA) everyday; however, American teenagers spend a lot more time in front of TV's and playing video games. Interactive video fitness games (exergames) are gaining popularity and may have the potential to increase physical activity levels. Exergames require participants to be physically active contrary to the traditional hand-held controller, which requires minimal physical exertion. The purpose of this study was to determine the differences of time spent in MVPA while playing three separate video fitness games including EyeToy Kinetic by Sony, Inc., Dance Dance Revolution (DDR) by Konami, Inc., and XaviX tennis by XaviX (SSD). This study shows that EyeToy was more effective than DDR and XaviX for acquiring MVPA. The results of this study also demonstrated that all three exergames could be healthy alternatives to other physical activities. Furthermore, researchers must carefully select the most appropriate assessment devices for valid and reliable results.

Doyle's Delight, the Highest Peak in the Maya Mts. Of Belize, Revisited

Timothy J. Baroni, Distinguished Professor, Biological Sciences D. Jean Lodge, Research Mycologist, USDA-Forest Service, Puerto Rico M. Catherine Aime, Assistant Professor, Plant Pathology & Crop Physiology, Louisiana State University

In August 2004, mycologists Baroni, Lodge and Lindner joined an international team of biologists to undertake the first ever helicopter-assisted expedition to study the biodiversity of Doyle's Delight, an unexplored cloud forest in the Maya Mountains of Belize. Mycologists Baroni, Lodge and Aime participated in a second expedition in August 2007 with support from the National Geographic Society and the British Mycological Society. During this expedition nearly 500 collections of fungi were documented over 10 days. Approximately 20-30% of the species were collected during both expeditions, but because conditions for fruiting were more favorable in 2007, the diversity was greater. First reports of species in the rust genera Tuberculina and Dietelia, and numerous new records of rust for Belize were obtained. Our preliminary results from 2007 indicate we have found many more new species and two taxa that resist generic placement. A photo essay of some of these newest finds is presented.

High Resolution Images of Basidiospores of Some Un-Described Species of Mushrooms Collected from Doyle's Delight, the Highest Cloud Forest in Belize

Jason Benza, Undergraduate Student

As part of a research project for Bio 428 (Scanning Electron Microscopy), eight recently collected and putatively new fungal species from Belize were prepared for imaging under the Scanning Electron Microscope. High resolution images of the surface structure of basidiospores can be diagnostic when determining if a species is new to science or not. The types of basidiospore ornamentations, when present, can be difficult to interpret using standard transmitted light microscopy, but well prepared samples are clearly revealed under the high resolving power of the SEM. Eight different species are presented, with photographs of the individuals and SEM images of their respective basidiospores. A discussion of each species is also presented.

Comparisons between Male Wild Versus Male Sterile Flowers of the Arabidopsis thaliana Plants

Valerie Pritchard, Undergraduate Student

In Arabidopsis thaliana mutant male sterile flowers are used in selection for specific genetic traits when crossbreeding with plants possessing known genetic markers, a technique commonly used in maize agriculture. Having male sterile mutants is a significant advantage in producing crosses since one is assured of pollen transfer uni-directionally. One such male sterile mutant in Arabidopsis seems to be tied to strictosidine synthase-like genes (At3g59530) that may have an analog found in maize male sterile plants, the Ms45 gene. Mutations in the Ms45 gene in maize are known to result in male-sterile phenotypes producing poorly formed cell walls in the male gametophytes (pollen grains) and fully mature flowers that shed very little pollen. Mutant Arabidopsis flowers with an apparent male-infertility phenotype having a mutation of the strictosidine synthase genes (At3g59530) were examined with high resolution scanning electron microscopy to determine anther development and pollen production in these supposed male sterile mutants.

Probing Phenotypes: Screening for Iron and Heavy Metal Responses in *Arabidopsis thaliana* Mutants

Carmit Schatz, Undergraduate Student

Iron deficiency in humans is a major health problem in areas where the dietary staple is plants. This is especially true in areas where soil conditions are aerobic and at neutral pH, as these conditions hamper plants' ability to uptake iron. We are using the model plant *Arabidopsis thaliana* to study iron uptake and regulation. We hypothesize that the iron uptake responses will be altered in *Arabidopsis* mutants KO 207, 93699-2, and 93699-11. Ferric chelate reductase assays and acidification assays were used to test the ability of these mutants to sense iron levels. Our results indicated that the 93699-2 and 93699-11 mutants behave as if iron-starved when grown under iron sufficient conditions. As more is learned about iron uptake pathways in *Arabidopsis*, we will learn more about how plants transport iron, with the goal of being able to genetically engineer staple food crops that store higher levels of iron.

Development of a Cell-Based Toxicity Sensor for Drinking Water Protection

Trista Thorn, Undergraduate Student Theresa Curtis, Assistant Professor, Biological Sciences

Protection of drinking water supplies from chemical contaminants can be enhanced by the use of toxicity sensors. Living cell sensors can indicate the presence of a broad range of chemicals (including unknown agents) that cause a toxic response, whereas analyte-specific sensors can only quantify and identify specific chemicals. Although toxicity sensors using enzymes or bacteria are presently in use at some water utilities, the use of mammalian cells as sensors is far less common, in spite of the potential relevance of these cells to human physiology. One major issue with using mammalian cells in toxicity sensors is the difficulty of maintaining cell viability under field conditions for extended periods of time until they are needed for water testing. In this study a variety of mammalian cell lines were evaluated for possible inclusion in a portable toxicity sensor system. To achieve cell layer stability over extended periods in the sensor system, multiple cell seeding densities, adhesion substrates, and cell feeding protocols were evaluated and optimized.

The Role of Syndecan-4 in Wound Healing

Bailey Molitor, Jon Lee, Undergraduate Students Sarah Wilcox-Adelman, Boston Biomedical Research Institute Theresa Curtis, Assistant Professor, Biological Sciences

Chronic wounds are on the rise, and are estimated to cost the U.S. billions of dollars this year to treat. Understanding how the body repairs damaged tissues, and what genes and biochemical factors influence the wound healing process will have tremendous impact on the treatment of chronic wounds. In collaboration with Dr. Sarah Wilcox-Adelman at the Boston Biomedical Research Institute, we are investigating the mechanism of delayed wound healing in mice lacking the syndecan-4 gene. The syndecans are a family of transmembrane heparan sulfate proteoglycans that can act as co-receptors with growth factor tyrosine kinase receptors. An essential step in normal wound healing is an increase in permeability of area vessels which allows inflammatory mediators and cells to gain access to the wound site to promote the repair process. We believe that syndecan-4 is required for the vascular endothelial growth factor (VEGF) induced increase in vascular permeability observed after injury. In this study, endothelial cells were isolated from wildtype and syndecan-4 null mice, grown in vitro, and exposed to VEGF. The data shows that after VEGF exposure, the wild-type cells exhibited the expected increase in vascular permeability; whereas the syndecan-4 null cells did not. This data shows that when syndecan-4 is absent, the VEGF induced increase in permeability is not observed which may contribute to the delayed wound healing observed in the null mice.

Loss of Seed Viability in *Arabidopsis thaliana* Mutant Lacking Peroxisomal Enzyme MONOHYDROASCORBATE REDUCTASE 4

Lisa DiMarco, Lecturer, Biological Sciences Gena Gerstner, Undergraduate Student Patricia Conklin, Associate Professor, Biological Sciences

Monohydroascorbate reductase 4 (MDAR4) is a peroxisomal enzyme involved in the recycling of ascorbate in *Arabidopsis thaliana*. Hydrogen peroxide (H₂0₂) is a toxic by-product of oxidative reactions in the peroxisome. Ascorbate peroxidase acts to remove H₂0₂ by catalyzing its conversion to water and oxygen with the use of electrons from ascorbate. One of the oxidized states of ascorbate is referred to as monohydroascorbate which is reduced to ascorbate by the action of MDAR. An *Arabidopsis* mutant with an insertion in the *MDAR4* gene has been isolated in our laboratory and has also been studied by Eastmond *et al.* (2007). Eastmond's lab reported a lack of post-germination growth in this mutant. Our lab has observed a decrease in viability in the seeds of these mutants that Eastmond's lab did not report. Germination rates of seeds and a control of various ages have been obtained and analyzed to determine what effect seed age has on viability in this mutant.

The Synthesis of Azide Probes for the Study of Myristoylated Proteins

Frank M. Rossi, Assistant Professor, Chemistry Cassandra Barnes, Undergraduate Student

A very popular area of research right now is the study of proteins and their role in innumerable biosynthetic reactions, signal transductions, and the many other functions in which they are involved. For this reason, it is very important to be able to isolate desired proteins from cells without alteration. A popular method of tagging and isolating proteins is the streptavidin - biotin interaction; however, the harsh conditions required to interrupt this reaction and purify the protein can often lead to contamination of the target protein. In order to modify this process in a way that would allow for the proteins to be extracted and then purified by mild photo-cleavage from their probe, molecules were synthesized to incorporate labeled myristoyl probes into proteins. The poster will show that process and the purpose of those molecules.

Development of Molecular Fish Hooks

Frank M. Rossi, Assistant Professor, Chemistry Justin Kocent, Undergraduate Student

Protein interactions within biological cells are essential to a seemingly infinite variety of processes. To study these complex interactions, researchers often analyze how proteins modify each other. As one may expect, a single protein must be isolated from its environment prior to any analysis. Conventional purification methods involve extracting proteins labeled with a high-affinity tag. After isolation, an enzyme is commonly used to "disconnect" the protein from the extracting tag. Unfortunately this process also digests the isolated protein into fragments. Dr. Rossi has proposed an extraction molecule that works similarly in pulling a protein from its environment, but contains a photo-cleavable component for "disconnecting" the target from the protein. By cleaving the bond with a light source as opposed to an enzyme, the target protein would be isolated, structurally in tact. The focus of our research project was to synthesize such a molecule and results will be discussed.

Bonding Modes of Amino Acid Anions, H2NCHRCO2, with an Rh2 Metal-Metal Bond

Arden Zipp, Distinguished Teaching Professor Emeritus, Chemistry Leonard S. Scheiber, Undergraduate Student

Several di-rhodium compounds with various formulas have been reported to function as anti-tumor agents through *in vitro* studies. One drawback for many of these substances is their limited solubility in water. It was thought that attaching ligands with hydrophilic tails such as the amine group in an amino acid would improve the solubility. Several attempts have been made to prepare such species, either directly from the acid and rhodium trichloride or by replacing the acetate groups in dirhodium tetraacetate, Rh2(O2CCH3)4. The results of these attempts will be discussed along with the characterization of the products formed.

Synthesis and Characterization of a Series of New Rh2 (O2CC6H4X)4 Compounds

Arden Zipp, Distinguished Teaching Professor Emeritus, Chemistry Patricia L. Latin, Undergraduate Student

A series of new compounds with the general formula, Rh₂(O₂CC₆H₄X)₄, have been prepared, employing substituted benzoate anions {O₂CC₆H₄X⁻} as ligands. These species were made by reacting an appropriate benzoic acid with dirhodium tetraacetate, Rh₂(O₂CCH₃)₄, synthesized in turn from the reaction of an acetic acid/sodium acetate mixture with RhCl₃. The X in the formula represents a range of electron-donating and –withdrawing groups, such as H, CH₃, Cl and NO₂. Infra-red spectra were obtained for all compounds to determine the influence of the various substituents on the strength of the carbon-oxygen bonds through which the ligands are attached to the Rh₂ framework. Visible spectra were also measured to investigate how the metal-metal bond joining the two Rh atoms is affected as electrons are either donated to or removed from that portion of the molecule by the attached ligands.

LIDAR: Illuminating the Landscape

David Barclay, Associate Professor, Geology James Christopher, Elizabeth Hensel, Undergraduate Students

Light Detection And Ranging (LIDAR) is distance-measuring system that can be mounted on an aircraft and used to survey the topography of the land surface in very high detail. A Cortland County data set, collected in May 2005 and obtained for this project from the Cortland County Soil and Water Conservation District, has a vertical accuracy of 0.91 feet and data points spaced ~10 feet apart, and thus is vastly superior in resolution and data density to previously available digital elevation data for the region. This poster will show how these data can be used to reveal subtle geomorphic and geologic features of the landscape that have hitherto been difficult to discern. Landforms and areas to be shown will include the eskers at Lime Hollow, the buried valley at Hoxie Gorge, push moraines at Labrador Hollow, and enigmatic high terraces in the headwater branches of the Tioughnioga River.

Inferred Melt Inclusions in Adirondack Garnet

John-Luke Henriquez, Undergraduate Student Robert S. Darling, Professor, Geology

Micron-scale, multiple-solid inclusions inside garnet were examined from middle Proterozoic gneiss found at Port Leyden, NY. The inclusions comprise largely zircon, and roughly equal amounts of biotite, quartz, and K-feldspar (determined by electron microprobe analysis and backscatter electron imaging). The garnet host grains are euhedral and were interpreted by Florence et al. (1995) as forming from migmatitic melt during the latest stages of Grenville Orogeny. Because of the inferred igneous origin of the host garnet and the consistent phases ratios of biotite, quartz and K-feldspar, the multiple solid inclusions are interpreted as crystallized melt inclusions. The origin of the zircon is unknown, but experimental work on Zr solubility in silicate melts (Watson and Harrison, 1983) suggests it is a non-igneous phase. We hope to test the melt hypothesis by heating the host garnet in a high temperature furnace to determine if the multiple solid inclusions "re-melt" to a silicate glass.

Converting the SUNY Cortland Buses to Biodiesel

Rich Rose, Kevin Stimson, Alana Zahn, Kaitlin Russo, Undergraduate Students Brice Smith, Assistant Professor and Chair, Physics

There are few issues more pressing than climate change. At Cortland, many things can be done to reduce our emissions of greenhouse gases. One such opportunity is to use a readily available, renewable fuel source found in kitchens all across the community as fuel for our buses. Our analysis shows that converting the campus buses to run on biodiesel derived from used cooking oil has many benefits, both environmental and financial. Although the optimum situation would be to use 100 percent biodiesel, a more immediate goal would be to run the buses on 50 percent biodiesel. This would not require any modification of the buses and adequate supplies of cooking oil have already been identified at local restaurants. As an educational institution, we are obligated to be progressive in our approach to global issues. By converting our buses to run on a blend of 50 percent biofuel, we will not only be doing a small part to combat global warming, but we will be serving as a model for other institutions to follow as well.

Accuracy of American College of Sports Medicine (ACSM) Metabolic Running Equation
Kathryn Poe, Undergraduate Student
Kim Harrison, Graduate Student
James Hokanson, Associate Professor, Kinesiology

The metabolic cost of exercise is independent of individual and equipment and can be estimated by the external work accomplished (ACSM metabolic equations). We tested six competitive distance runners on a treadmill at 80% of their VO_{2max} for four weeks. Expired gas was collected and steady state heart rates were measured. Actual oxygen cost for each week was compared to the estimated oxygen cost as determined by ACSM metabolic equations ($VO2 = Speed \times 0.2 + Speed \times Grade \times 0.9 + 3.5$). Fitness professionals use the ACSM metabolic equations to prescribe exercise intensity. The results may help fitness professionals and coaches better design exercise programs.

Spin Fast or Slow, What is the Most Efficient Pedaling Cadence?

Undergraduate Students in Exercise Science Research Methods (EXS 489) James Hokanson, Associate Professor, Kinesiology

Recently, professional cyclist Lance Armstrong has announced his return to competitive cycling following years of retirement. Previous research (see Coyle, 2005) has measured both maximal oxygen cost and cycling efficiency of Mr. Armstrong during eight years of his cycling career. Controversy exists if the reported improvement in cycling efficiency is physiological possible. In addition, Mr. Armstrong has been measured to cycle at a fast (~ 100 rpm) pedaling cadence. Muscular efficiency during steady-rate exercise can be expressed as the ratio between the work accomplished and the energy expended by the individual. On the cycle ergometer the determination of work accomplished can be easily quantified. However, depending upon the selection of the appropriate baseline correction to use in the efficiency calculation, the estimation of the energy expended by the subject will vary. This has led to the development of several methods of calculating efficiency. The current study calculated gross, net, and delta efficiency at several different pedaling cadences. The results may help explain elite cyclists' high efficiency.

CONCURRENT SESSIONS III

1:30-2:45 p.m.

The Effects of Exercise on Physical Self-Perception among Cortland College Students Christopher Battaglia, James Garofalo, Joseph Santullo, Undergraduate Students Katherine Polasek, Assistant Professor, Kinesiology

The effects of exercise on physical self-perception among Cortland college students will be discussed and presented using Microsoft PowerPoint. Fifty Cortland college students were divided into two groups of twenty-five. One group being non-exercisers and the other being exercisers with a minimum of three hours of physical activity per week. The presentation used the Physical Self-Perception Profile (PSPP) and the Physical Activity Assessment Questionnaire (PAAQ) to determine if there is any correlation between exercise and physical self-perception among Cortland college students. The results from the questionnaires were put through a chi-squared test using the SPSS 16.0 program for Windows. The independent variable in this study was the results from the PSPP and the dependent variable was the results derived from the PAAQ. Our hypothesis stated that the exercisers, or students who participate in physical activity, will have a greater physical self-perception than the non-exercisers.

Gait Analysis among Two Groups of College Students; Using the GAITRite System Lisa Thomas, Jake Howell, Undergraduate Students
Jeff Bauer, Associate Professor, Kinesiology

Gait analysis has become an important part of many medical fields; including orthopedics, geriatrics, pediatrics and even the veterinary world. The GAITRite system is a fourteen foot carpet that houses over 16,000 sensors capturing an electronic footprint assessing cadence, step-length, velocity and other gait parameters. Little Research had been conducted looking at the difference between healthy knees and surgically repaired knees. Our study has been conducted to show that there are differences in gait among those with surgically repaired knees and those who have not. A two session study was conducted where each participant walked across that GAITRite mat while being video taped. The GAITRite system then captured data which allowed us to analyze each participants gait and also allowed us to determine that there were differences among the gait of each person.

Force Generation between the Two and Three-Point Stances in College Football Players
Chelsea Backus, Steve Coleman, Sean James, Malorie Manheimer, Hans Wulf,
Undergraduate Students
Jeff Bauer, Associate Professor, Kinesiology

The purpose of this study is to determine whether a football lineman can generate more force with a two-point or three-point stance. The participants will be fifteen Division III college linemen from the SUNY Cortland football team. These subjects will get into either a two or three-point stance and race through a designated finish line. Each lineman will go through three trials using each stance. Each trial begins with the lineman on a force plate, which will measure the forces generated as the participant explodes out of their stance. The projected result from this experiment is that the linemen will be able to generate significantly more force using a three-point stance in comparison to a two-point stance. These results could influence changes in football strategy to incorporate the three-point stance in more situations during the game.

A Comparison of Steady State VO₂ When Comparing Leg and Combined Arm and Leg Work On the Elliptical Cross-Trainer

Stefan DiBella, Undergraduate Student James Hokanson, Associate Professor, Kinesiology

Individuals new to exercise programs are told that the elliptical cross-cross trainer can be used as a full body workout. The current proposed aims to show that on a low resistance level there will be no difference in oxygen uptake (VO_2) when performing leg versus combined arm and leg work on the elliptical cross-trainer exercise machine. The intended research will attempt to show that not until the machine is on a high resistance level will the user have to recruit the upper body muscles to help keep the stride rate consistent. When the participants feel that the resistance is high and difficult to keep the stride rate consistent, a rise in VO_2 is expected.

Sustainability of the SUNY Cortland Community Bike Project

Lynn Anderson, Professor and Chair, Recreation, Parks and Leisure Studies Eddie Hill, Assistant Professor, Recreation, Parks and Leisure Studies Brandi Crowe, Lindsey Brown, Graduate Students Jeff Radcliffe, Undergraduate Student

The SUNY Cortland Community Bike Project (CBP) is an integral part of the campus. Students, faculty, and staff members look forward to the first day the yellow bikes arrive each semester. Since the yellow bikes belong to the community, they are not locked during the day. Volunteers lock the bikes at dusk, act as bike rangers, repair and maintain the fleet of yellow bikes. Cortland community members donate the bikes, which volunteers then rebuild, paint, and design. The CBP has seen greater success than many other university bike programs, which can be credited to our campus' commitment to the CBP's goals to promote a culture of shared community property, reduced environmental impact, decreased campus traffic and parking problems, and a daily symbol of sustainable transportation that improves health. This session will explore future directions of the CBP to ensure its sustainability and effectiveness, based on input from a campus-wide survey.

Mathematics through the Ages

Undergraduate students from the History of Mathematics Class will give talks on:

- Origins of Numbers and Counting
- Historical foundation/development of the arithmetic operations, +, -,

$$(\cdot, *, ab, \times), (:, -, \div,)$$
, and $(=, ==, --)$

- · Islamic Mathematics
- European Mathematics

Indian Mathematics and Mathematicians

Erin Gravy, Undergraduate Student

Al-Kwarizmi and His Contributions to Mathematics

Richard Rathbun, Undergraduate Student

The History of Taxi Cab Geometry

Alyse Wolber, Undergraduate Student

Application of Taxi Cab Geometry in Real Life

Kristi LaCount, Undergraduate Student

The Connection between Taxi Cab Geometry and Other Mathematical Subjects

Britni Sauter, Undergraduate Student

Application of Geometry in Sports, Specifically Gymnastics

Lauren Pytel, Undergraduate Student

Internship Experiences in the Natural Sciences

Many students in the sciences arrange professional experience internships as part of their curricular expectations and/or for personal growth and potential employment in the future. These internships provide students with a first experience regarding day to day employment expectations and responsibilities, and assist many students in honing their own desires and goals regarding their future capacity and interest as scientists. This session presents a small sampling of experiences from some science students from the 2007-2008 academic year.

Scallop Farming in the Peconic Bay: Water Quality and Environmental Concerns Nick Krupski, Undergraduate Student

Quarrying Methods at the LaFarge Quarry in Ravenna, New York Jonathan Zabron, Undergraduate Student

Beavers and Trail Establishment at the Lime Hollow Center for Environment and Culture

Elizabeth Hensel, Undergraduate Student

Resource Management at the Morristown National Historic Park

Ben Guidarelli, Undergraduate Student

GIS and Mathematical Modeling for a Distributed Watershed Application Model Matthew Vitale, Undergraduate Student

Writers Read: Performances from the Professional Writing Program

Victoria Boynton, Associate Professor, English David Franke, Associate Professor, English and Professional Writing Alex Reid, Associate Professor, English Kevin Bahler, Adam Berenstain, Philip Bolton, Liz Wolff, Professional Writing Students

The written word is a powerful force, but when the written word comes to life in oral performance, another kind of power exerts itself. The beauty, clarity, and hilarity of performed language inspire audiences across the nation and the globe. For instance, in slam and spoken word contests and in such hybrids as performance poetry as well as in popular radio shows such as This American Life and Prairie Home Companion, oral renditions of writing have an important place. Students in this session will perform their original written work. Also this session will serve as the launch for the Cortland literary magazine, Transition.

The Israeli-Hamas Conflict of 2009: Research Report from Israel

Edward Gitlitz, Undergraduate Student

The world's attention has been focused on the conflict between Israel and Hamas that erupted in December 2008 and continues as this abstract is written. World opinion has been widely reported as well as government opinion. Less is known about the reaction of ordinary Israeli citizens - men, women, students, old, young, etc. What has been the reaction of the Israeli Peace Movement? How do average Israelis view world reaction? Based on a short term stay in Israel during the height of the current Israeli-Hamas conflict, this presentation will seek to describe the background and nature of the conflict. Of special interest will be the reaction and dynamics of Israel public opinion with attention also to world public opinion.

Moving Ahead or Hardly Moving? Women in Africa's Informalizing Economies Ibipo Johnston-Anumonwo, Professor, Geography

Interdisciplinary analyses of gender and development issues show that a gender perspective can enrich the understanding of many aspects of the global economy including economic restructuring, and the informalization as well as feminization of the labor force. The conclusions from a variety of studies in Africa are that although women have made much progress toward gender equality, the results have been uneven, and often contradictory. Globalized markets brought new prosperity and growth to a variety of regions and sectors, but within the context of growing inequalities both within and between countries. In this presentation, I adopt a gender analysis framework to appraise contending perspectives about the differential impacts of globalization on African women. I draw on available empirical research to develop a two-decade synopsis on the responses of women in Africa's informal economy to the prospects and challenges associated with neoliberal economic reforms.

Islam, Rentier Nation States and Democracy in Africa

Seth N. Asumah, Distinguished Teaching Professor, Political Science; Chair, Africana Studies

Islam and Islamization of the nation states in Africa present a challenge to the democratization process on the continent. Concomitant with religion, Islamist movements, terrorism, petroleum products, petrodollars, praetorianism, the state of the African economy, and the anthropomorphic nature of the nation states tend to ignite debates over rentierism and the democratization process in predominantly Islamic nation states. In this presentation, Asumah would argue that contrary to the position of some Western observers that rentierism distorts the democratization process in nation building because it enhances hegemony maintenance by depoliticizing and pacifying the general populace through the provision of socio-economic programs, Islam combined with rentierism could produce reasonable stability for limited democracy to ensue in predominantly Islamic African nation states. Case studies from Algeria, Egypt, Nigeria and Libya will be used to support the conceptual framework for analysis.

The Harlotry Players

Janet Wolf, Associate Professor, English Jaclyn Pittsley, Lecturer, English Judith Van Buskirk, Associate Professor, History Undergraduate Students

Students will perform scenes from the plays of Shakespeare and Oscar Wilde's The Importance of Being Earnest. This event grew out of our conviction that the best way to study drama is to perform it. Shakespeare, for example, meant his plays to be performed, and would have been astonished to find out that we are reading them four hundred years after his lifetime. It's recognized that the best way of teaching Shakespeare is to turn the students loose and have them perform scenes from the plays. We ask students to perform scenes because we hope that when our students become teachers, they will do the same. Performing scenes from classic plays like those of Shakespeare and Oscar Wilde is a great way to bring the literature to life. It has another function: the oral interpretation and oral presentation skills students develop in these exercises will be of use in any career they may want to pursue after college.

What does Marx Mean for Students Today?

Kathryn Russell, Professor and Chair, Philosophy Undergraduate Students in PHI 382

Dr. Kathryn Russell and students in PHI 382 Marxist Philosophy will talk about the relevance of Marx's philosophy for understanding today's society. Emphasis will be placed on current events and examples of progressive struggles. Videos and power points will be shown to bring examples to life. Students' points of view will be emphasized, and audience participation will be encouraged.

Art Images and VTS Strategies: Graduate Preservice Teacher Research on Classroom Applications for Grades 1 and 4

Susan Stratton, Assistant Professor, Childhood/Early Childhood Education Karen Randle, Jennifer Emerson, Graduate Students

Art images are increasingly used as specific curricular supports in elementary schools. The Visual Thinking Strategies (VTS) process using age-appropriate images developed by Abigail Hoesen and Philip Yenawine (2001) has successfully improved student social skills, communication skills, and evidentiary reasoning skills. Susan Stratton will provide an overview of VTS and background information to introduce the session, and then two graduate students discuss their MST Capstone Research Projects describing their use of specific and adapted applications of the VTS curriculum in Central New York schools. Karen Randle presents her study that proposed to improve writing abilities of fourth graders. Jennifer Emerson presents her research with first graders that focused on classroom management, literacy and social skills development. Both studies provide exemplary action research models for preservice and inservice teachers.

Imagination and Emotion: Neurological Bases for Role-Playing's Effectiveness John Suarez, Coordinator, Office of Service-Learning, Institute for Civic Engagement

Research and experience attest to role-playing's instructional and motivational effectiveness in academic courses ranging from economics to writing. However, the literature does not explore the source of that efficacy. In this presentation, Suarez draws on recent neurological research to argue that role-playing's effectiveness comes from the human brain's ability to accept imagined activity as real, and from its ability to integrate emotion into the thinking process. Suarez will explore the implications of this claim for education in general and for service-learning in particular.

Issues and Research in Local Government and Pre-Law Internships

Thomas Pasquarello, Professor, Political Science Jeri Adams, Carlos Clarke, Brian LaPierre, Henckel Miranda, Undergraduate Students

This session examine that relationship between empirical and theoretical social science literature and the observations and experiences of students participating in local government and pre-law internships. Four student interns will discuss the extent to which their experiences or research projects in different settings are consistent with precepts generated from an examination of the relevant literature.

The Cortland Early Childhood Professional Development Service (CECPDS): Implementation, Results and Implications

Heather Bridge, Assistant Professor, Childhood/Early Childhood Education Stephanie Fritz, Cortland County Community Action Program Anne Withers, Executive Director, Cortland Area Child Care Council Kristin Legacy, Amanda Barillo, Stephanie Walters, Undergraduate Students

CECPDS is a New York State Office of Children and Family Services funded college/community partnership. Between 2007-2009, CECPDS implemented professional development sessions in 24 Cortland early-childhood classrooms in which both teachers and undergraduate students participated. The Action Research approach used incorporated the use of video and voice recordings that were in turn used to create Imovie presentations documenting the impact of the professional development in each classroom. The CECPDS professional development model is described and evaluated. The results of CECPDS are presented along with their impact on teachers and undergraduate students. There is discussion of the implications of CECPDS on future professional development access and policy, and on future college/community early childhood partnerships.

CONCURRENT SESSIONS IV

3:00-4:15 p.m.

The Ethics of Alasdair MacIntyre

Andrew Fitz-Gibbon, Assistant Professor, Philosophy; Director, Center for Ethics, Peace and Social Justice

Stephanie VanHamlin, David VanHamlin, Steven Strollo, Jonathon Weinstock, Undergraduate Students

Alasdair MacIntyre is one of the foremost contemporary moral philosophers. His landmark book *After Virtue* (1985) prompted many philosophers and social theorists to take a fresh look at Aristotelian ethics and virtue theory. In this presentation students report on their research on MacIntyre in four areas: MacIntyre and Feminist Ethics; MacIntyre and Nietzsche; MacIntyre and Science; and MacIntyre and the Latin Poor.

The Frontiers and Labyrinths of Roberto Bolaño's 2666

Wes Weaver, Professor, International Communications and Culture

One of the most significant literary events of 2008 was the publication of the English translation of 2666, a mammoth 912-page novel by the late Chilean writer Roberto Bolaño. The critics have lauded the work for its complexity, brilliance, ambitiousness, and originality. 2666 represents what is called in European letters a roman-fleuve, a "river novel," a macro novel that is comprised of many different subnovels apparently unrelated, yet which uncanningly share a common thread once the reading is concluded and properly "digested." The nature of this common thread is perhaps the principal mystery behind 2666 (besides its enigmatic title: Number of pages in the original manuscript? Minutes required to read the work? Characters in the novel?). In my analysis of the work, I will demonstrate how the process involved in the discovery of this thread, rather than the thread itself, is crucial to appreciating the novel's aesthetic. Bolaño's cervantine game of hide-and-seek with the reader is precisely the source of 2666's originality, which is nothing more, perhaps, than another successful rewriting of the originality of Don Quixote.

Corneille, Music and Immigration in Modern Quebec

Timothy Gerhard, Assistant Professor, International Communications and Culture

Although proud of their French cultural roots, Quebeckers of the twenty-first century also realize that their future lies in a blending of French Canadian tradition with the traditions of the many immigrants arriving in the province. These immigrants hail from various corners of the French-speaking world as well as regions where other languages are spoken, and as they adapt to life in Quebec, they are both transformed by and also help transform their host society. Corneille Nyungura, who lost his parents and many relatives in the Rwandan genocide in 1994, currently resides in Quebec and has become a popular French-language recording artist. This presentation explores the life and music of the popular Quebec artist Corneille in an effort to examine key themes regarding immigration and identity in modern Quebec.

Development of Inflectional Grammatical Categories: Application to Spanish

Donna E. West, Assistant Professor, International Communications and Culture

The hypothesis is two fold: 1) that the nature of Spanish as an inflectional language (person mapped as verb affixes) contributes to later acquisition of person in Spanish, as opposed to English, and 2) that the nontarget protomorphemic and morphemic forms function in Spanish as proto-verbs. Rationale for the initial hypothesis is founded in cognitive performance constraints on the number of slots in working memory at early ages (Bloom, 1990, 1993), together with Peters and Menn's (1993) and Ellis' (2004, 2006) claim that closed class functors (such as verb inflections) present particular challenges in acquisition. The latter hypothesis is grounded in three independent factors: 1) children's initial absence of verbs in obligatory contexts, 2) the nonobligatory nature of subject slot in Spanish and 3) the nature of Spanish as an inflectional language. This investigation traces the development of protomorphemic person forms in Spanish and English into morphemic person forms, namely, bound inflectional full-fledged morphemes in Spanish or free full-fledged morphemes in English. Speaker protomorphemes are realized in both languages lexically (as separate "words"); and phonetically they typically take the form of a nasalized vowel, and serve as fillers or amalgams (Peters and Menn, 1993, Peters, 1995, 2001A & B). More graduated speaker amalgams materialize as third person singular verb forms in Spanish (whose inflection may be absent of person meaning); and later, full-fledged speaker morphemes become target first person singular inflections on the verb ("-o"), together with the nonobligatory target nominative case pronoun "yo." In English, protomorphemic speaker forms (proper name and subjectless utterances) occur concurrently with morphemic speaker forms ("I"). Seven Spanish-speaking and two Englishspeaking children (from CHILDS) between 1;6 and 3;0 constitute the participants of the study. A natural speech sample was tape recorded bimonthly from each child, with a familiar adult present at each visit. Sessions lasted thirty minutes. A coding scheme accounts for all target and nontarget speaker forms; and relative frequencies of each form are calculated to compare the form's degree of use with age and across populations. Findings indicate a lag of more than one year in onset of speaker referents in Spanish (inflections, subject pronouns) as compared to speaker pronoun onset in English. Furthermore, whereas the target "I" and all of the nontarget forms constitute early speaker reference in English (from 1;6), onset of target "-o" is not noted until 2;8 in Spanish; and the third person singular verb form for speaker is the primary nontarget form -- shed prior to (nonconcurrent with) onset of speaker inflections.

Are We Still Relevant? Two Empirical Examinations of Student and Faculty Perspectives on Liberal Arts Education

Raymond D. Collings, Associate Professor, Psychology Michelle Kelly, Associate Professor and Chair, Foundations and Social Advocacy Donna M. Videto, Professor, Health Undergraduate Students

During a year-long series examining the state of higher education here at SUNY Cortland, a reoccurring question has emerged: Is the traditional model of a Liberal Arts Education still relevant and viable? This presentation will report the results of two empirical studies examining this question. First, a qualitative study involving a sample of upper division psychology students examined their perspectives on the liberal arts education they have received here at SUNY Cortland. Although generally positive, their responses raised several questions about the degree to which their expectations and needs have been met. A follow-up survey study posed these questions to a broader sample of undergraduates and faculty members from across the campus. This study explored differences in expectations and attitudes between students and faculty members, and it examined the effects of various demographic variables, (e.g. academic discipline, age, gender, etc.) on how the respondents perceived education at SUNY Cortland. This session will conclude with a round table discussion of the issues raised in the two studies, and how higher education might adapt to better serve our students in the 21st century.

U.S. History in International Context: Student Research

Gigi Peterson, Assistant Professor, History ~ Panel Chair and Commentator Jeromy Snyder, Daniel Pitcher, Undergraduate Students

In this session, senior History majors will present their research for the seminar "Global Ties at the Grassroots" – on international dimensions of U.S. history that involved everyday people. Each author investigated primary sources to arrive at fresh understandings of historical topics, and each will present highlights of his senior research paper. Offering insights into German-American impacts on the early United States are Jeromy Snyder with "Dedication to Faith and Culture: The Reverend Paul Henkel and the Henkel Press," and Daniel Pitcher with "Hessian Soldiers: Unsuspecting Patriots of the American Revolution." Also examining European influences on early North American history, Matthew Owens challenges myths with his "The Covenant Chain of Friendship and Allegiance: How the Links Binding the Iroquois Confederacy from Within, and to the English, Were Shattered." John Graham explores how a local community mobilized during a time of international crisis with "Wartime Farming in the Cortland Area."

A Natural History of Facts: Personal Conclusions or Research Based Data Chelsea Cook, Undergraduate Student

Scientific information is used every day, particularly in scholarly settings and policy decision-making. Sometimes, information is based off of solid evidence; educated individuals hypothesizing, doing research, and drawing conclusions based on observation, thus turning it into fact. However, these same educated individuals sometimes make statements without research, and if the distinction is not clearly made, these statements may be taken at the same value as research-based evidence. Here, I discuss a current issue in conservation biology: Are the earthworms currently inhabiting the Northeast United States exotic and could they be potentially harmful? With such accusation, I search for evidence by examining past & current hypotheses & citations, to identify whether the established point of view is truly based on researched data, and whether current policy is effective based on these data.

The Arabidopsis thaliana VTC3 Gene – Its Identification and Role in Ascorbic Acid Biosynthesis

Patricia L. Conklin, Associate Professor, Biological Sciences Dennis DePaolo, Carmit Schatz, Undergraduate Students

Ascorbic acid (Vitamin C) is a cellular reductant and an antioxidant that is extremely familiar to all of us. This small molecule has many critical functions in both plant and animal cells. Therefore it is somewhat surprising that some understanding of how plants synthesize ascorbic acid (Vitamin C) has only been realized within the past 10 years. We have recently discovered the identity of a new gene involved in plant ascorbic acid biosynthesis. How this gene was discovered as well as mutations in this gene (and the phenotype of the plants homozygous for these mutations) will be discussed. In addition, we will present information on plants that have been genetically engineered to over-express this gene as well as transgenic plants that express a fluorescent version of this gene. We will end with some ideas on how this gene may be involved in ascorbic acid biosynthesis.

Teaching Strategies

Kimberly Degrazia, Graduate Student

Teaching geometry is a very challenging task in high school. There are different schools of thoughts on the most effective way of teaching geometrical proofs in high school. In this presentation, Degrazia will share the result of her research/study on effectiveness of teaching geometrical proofs to three distinct high school classes using methods of flowcharting, two columns, and a combination of flowcharting and two columns proofs.

Ranking College Football Teams Using Markov Chains

Amber Murphy, Undergraduate Student R. Bruce Mattingly, Interim Dean, School of Arts and Sciences

Methods for ranking teams are used in many sports. Team rankings are particularly important in the college football Division I Bowl Subdivision, because, unlike nearly any other sport, the champion is not determined through a playoff. Instead, the Bowl Championship Series (BCS) Standings are used to select the two teams that will compete for the championship. The BCS Standings involve a combination of two human polls and six computer ranking methods. This presentation will discuss a new ranking method based on the mathematical theory of Markov chains. The rankings generated by this new method will be compared to the BCS rankings from the last three seasons.

Permission to Speak: International Art Collaboration in China

Jeremiah Donovan, Professor, Art and Art History Patrick Foley, Ken Little, Gina Smith, Undergraduate Students

During the summer of 2008 students and faculty from SUNY Cortland traveled within central and eastern China, studying culture and traditional and contemporary art processes. During this session students from Donovan's study abroad program will present their research on observations of the evolving practices of art in contemporary China, making a comparative analysis with traditional methods of production, and describe a collaborative ceramic art project with Chinese students.

PDS – Professional Development School: Extending the Learning Community between SUNY Cortland and the Cortland Enlarged City School District through Partnerships

The Professional Development School (PDS) model is an approach whose fundamental goal is increasing student learning through the establishment of a learning community involving school teachers, college-based faculty, teacher candidates, and students as well as administrators from both area schools and college. The main goals of the implementation of PDS projects are to: a) provide pre-service teachers with a more authentic classroom experience; b) give school faculty an opportunity to engage in applied research with college colleagues; c) provide an opportunity for college faculty to have access to a real world environment to bridge the gap between theory and practice; and d) ultimately boost student achievement. This collaboration opens opportunities to prepare new teachers and provide them with faculty development using inquiry-directed practices in a foundation of shared interest, mutual commitment, and trust. This PDS model is also designed to dovetail with NCATE standards of: learning community, accountability and quality assurance, collaboration, equity, and diversity, and structures, resources, and roles. The SUNY Cortland/Cortland City School District PDS is in its very early stages. There are three collaborative projects that began in September 2008. In this session the project directors will share their goals, their successes and the challenges of their projects. Below are brief descriptions of each PDS project. We invite you to join us in this panel discussion exchanging information and experiences.

Unified and Teaching and Learning Initiative (UTLI)

Kimberly Rombach, Assistant Professor, Childhood/Early Childhood Education David Smukler, Assistant Professor, Foundations and Social Advocacy Kelly Michales, Katie Swanson, Cortland City Teachers Taryn Lippert, Sarah Fetcho, SUNY Cortland Student Teachers

The Unified Teaching and Learning Initiative introduces a comprehensive professional development school (PDS) model developed to align the training of pre-service teachers within the shifting paradigm within Cortland City School's unified education (that is, education of students with special needs occurring within a general education environment). This initiative is designed to prepare general and special education pre-service teachers to teach in inclusive classrooms by creating multiple collaborative teaching and learning contexts for student teachers, in-service teachers, and college faculty. The collaboration revolves around small core teams that include two general education teachers (one primary level and one intermediate level), one or two special education teachers who work regularly with those general education teachers, a SUNY Childhood Education faculty member (Dr. Kimberly Rombach), and a SUNY Inclusive Special Education faculty member (Dr. David Smukler). The student teachers who are involved began in January, 2009.

PDS-Math Partnership Project

Susana Davidenko, Associate Professor, Childhood/Early Childhood Education Shana Snyder, Teacher, Cortland City Schools ~ Barry School

The Mathematics Partnership Project is collaboration between the Childhood Education Department (Dr. Susana Davidenko) and a team of four teachers from Randall and Barry Elementary Schools in Cortland. These teachers are becoming Mathematics Instructional Support Teachers (MIST): they design, implement and share with colleagues inquiry-based, student-centered mathematics units to teach the core content for each grade level. The units aim at enriching the textbook series adopted by the district. Cohorts of students in Dr. Davidenko's mathematics methods classes are involved in the project as they complete their first 50 hours of observation in the MIST's classrooms. Debriefing in the college classroom about the field experiences focus on the connections between theory and practice of teaching mathematics, and between teachers' content and pedagogical knowledge. Through their observations, teacher candidates have already realized the need for teachers' flexibility and ability to differentiate lessons to engage students in the inclusive classrooms.

Cortland Reading and Writing Collaborative

Phyllis Litzenberger, Literacy Specialist, Cortland City Schools William Buxton, Associate Professor, Literacy Department Juli Ouinn, Kim Pace, Bonnie Meldrim, Teachers, Cortland Enlarged City School District

The purpose of the Cortland Reading and Writing Collaborative is to make a sustained and positive difference in the literacy success of primary and intermediate children and teachers by providing high quality, reflective professional development through SUNY Cortland's Literacy Department graduate program. Headed by Phyllis Litzenberger, Literacy Specialist, the program integrates research-based strategies and practices developed and implemented by faculties of SUNY Cortland and the Cortland Enlarged City School District. This collaboration provides direct, continuous, and sustained faculty exchanges, resource-sharing, and funded research projects through a literacy coaching model. Presently, fourteen Cortland City teachers are involved in this extended learning community to improve upon and even develop new practices for literacy education.

The Benefits of Geographic Information Systems in the Exploration and Exploitation of Oil and Natural Gas Resources

Marco A. Terrazas, Undergraduate Student

Geographic Information Systems (GIS) are powerful and dynamic systems that allow us to work efficiently with geographic data in numerous ways. Geographic Information Systems have revolutionized cartography as well as the way quantitative and qualitative data is analyzed. Many oil and natural gas companies have implemented Geographic Information Systems due to their effectiveness dealing with simple as well as complex spatial queries or problems. These companies use Geographic Information Systems vastly to provide location information and analysis results to all company divisions. Exploration and exploitation activities use Geographic Information Systems to create scout and surface analysis maps. These maps are useful in telling about the surface features/shape of a certain area. The knowledge gained from these maps is very valuable because it allows for precise planning of well locations, pipelines, facilities, etc. Presently, Geographic Information Systems provide the most comprehensive solution to the spatial information needs of the hydrocarbon industry.

Deconstructing Barbie: A Critical Analysis of the Original Material Girl at Fifty

Lawrence will provide an overview of Barbie's impact as a cultural icon of womanhood in her presentation titled, "A Rhetorical Analysis of Barbie's Influence as Beauty Icon, Lusty Consumer, and Provocateur". Her analysis will include an examination of the paradoxical impact that Barbie has on young girls and her prevalence as an impossibly shapely, wrinkle-free, well-dressed fiftyyear old woman with a seemingly limitless budget for make-up, fashion, and frivolous accruements. Lawrence will consider Barbie's place in the world of post 9/11 children and her life philosophy of consumption for happiness. Given Barbie's popularity with school age children, Benton will continue the discussion with a focus on Barbie's influence in the classroom. Barbie is not typically seen in academic situations and environs. Although she has many accomplished careers given a quick change of outfits, she is very seldom shown teaching and learning. Her accessories as student include a pink backpack and tiny, flower notebook. For Barbie, even learning is about the accessories. Benton will search for answers to questions about the challenge of "Educating Barbie". Ouellette will follow Barbie's impact through her stereotypic gender role. Although Barbie only appears to have had one male companion over her lifetime she is decidedly straight-- and her appearance and action continues to facilitate stringent stereotypic roles. Fueling her role is the continued social pressure from heterosexist behaviors in American society. "Sexism, Heterosexism and Barbie's Gender Role" examines another major component of Barbie's impact on society and in particular children's ideas of what it means to be a woman and a man. Miller will trace Barbie's long history of automobile ownership. Despite changes in the economy over six decades, Barbie has always managed a fancy, pink, big, ride. From the passenger seat of her convertible, to being the driver in her signature VW bug, to her stint as a Nascar driver, and sports utility enthusiast, one thing remains constant. Barbie has never been deterred by the restrictions of safety devices, realities of rising gas prices, fear of a DUI ticket after a pool party or the lack of facilities in her camper. Miller will review these imperatives in his presentation, "Tracking Barbie: Pink Convertibles, Dune Buggies and Dream Campers."

A Rhetorical Analysis of Barbie as Beauty Icon, Lusty Consumer, and Provocateur Kathleen Lawrence, Associate Professor, Communication Studies

Educating Barbie

Cynthia Benton, Professor, Childhood/Early Childhood Education

Sexism, Heterosexism and Barbie's Gender Role Judith Ouellette, Associate Professor, Psychology

Pink My Ride: Barbie's Convertibles, Dune Buggies, and Dream Campers David Miller, Distinguished Teaching Professor, Geography

The Geography of Barbie

Wendy Miller, Assistant Professor, Geography Rebecca Blumbergs, Elizabeth Hensel, Danielle Kreamer, Joshua Smith, Alyson Walzer, Undergraduate Students

W. Miller's students in CAP/GRY 327 Computer Mapping and CAP/GRY 330 Advanced GIS Techniques will take a geographic look at Barbie's life and marketing. Alyson Walzer and Rebecca Blumbergs will demonstrate what countries have an International Barbie and will illustrate this information with a map and images of Barbie's clothing and accessories. It takes participation from many countries to make a Barbie and all of her accessories. Marissa Gannon will explore what it takes to make a Barbie - where does that hair come from? Joshua Smith, Elizabeth Hensel, and Danielle Kreamer will discuss other geographic elements of Barbie's life and marketing, including a glimpse of her home state of Wisconsin and her role in the modern global economy.

Life-size Barbie

Mary Gfeller, Assistant Professor, Mathematics Jessica Finton, Siobhan Kelly, Erik Larson, Erica Thigpen, Deborah Walton, Undergraduate Students

Gfeller's Math 101 students, Jessica Finton, Siobhan Kelly, Erik Larson, Erica Thigpen, and Deborah Walton will share their computations to create a life-size Barbie.

CLOSING SESSION

4:30-5:15 p.m.

The Blue Roots of American Popular Music

Steven Barnes, Lecturer, Africana Studies
Richard Harris, Lecturer, Africana Studies
Timothy Gerhard, Assistant Professor, International Communications and Culture
Colleen Kattau, Assistant Professor, International Communications and Culture
Noelle Paley, Lecturer, Africana Studies
Thomas Pasquarello, Professor, Political Science
Students from the SUNY Cortland Rock and Blues Ensemble and Beginning Blues Guitar Classes
Africana Studies Hip Hop Emcee's with the SUNY Cortland Hip Hop Dance Team – Drama

Blues music is an important part of Africana and American culture. This presentation traces, through a series of performances, the development of the blues from its origins in work songs and hymns to its emergence as a distinct musical style known today as the Delta Blues. From there, other performances illustrate how the blues branched off into jazz, gospel, soul, reggae, and rock music. We will discuss the cultural aspects of blues and related forms of music between performances.

Scholars' Day is made possible with support from the President's Office, Provost and Vice President for Academic Affairs Office, Cortland College Foundation, The Cortland Fund and Auxiliary Services Corporation.

www.cortland.edu/scholarsday

