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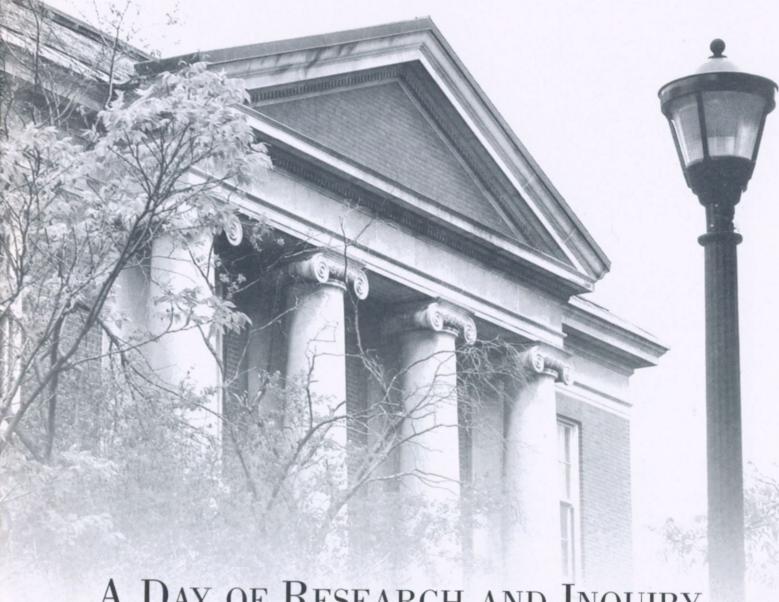
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# SCHOLARS' DAY



A DAY OF RESEARCH AND INQUIRY April 9, 2003

Abstracts

Cortland
State University of New York College at Cortland

### Scholars' Day

April 9, 2003 Old Main SUNY Cortland

## Abstracts

#### Schedule of Events

9:00 - 10:15 a.m.

Concurrent Sessions I

10:30 - 11:45 a.m.

Concurrent Sessions II

12:00 - 12:45 p.m.

Keynote Address Brown Auditorium

Developing an Interdisciplinary Research Career: Health Services Research

Dr. Morris Weinberger '74

Vergil N. Slee Distinguished Professor of Healthcare Quality

Management

Department of Health Policy and Administration

School of Public Health

University of North Carolina at Chapel Hill

12:45 - 1:45 p.m.

Poster Session

1:45 - 3:00 p.m.

Concurrent Sessions III

3:15 - 4:30 p.m.

Concurrent Sessions IV

4:45 p.m.

Closing Session Brown Auditorium

Red, White and Broadway
Kevin Halpin, Director, Performing Arts

#### Scholars' Day 2003

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 Vice-President of Academic Affairs, the Cortland College Foundation, the Student Alumni Association, Sigma Xi, and Auxiliary Services Corporation.

Our appreciation to the Scholars' Day Committee:

Mark J. Prus, Arts & Sciences (Chair)

Christopher P. Cirmo, Geology

Bonni Hodges, Health

David Miller, Geography

Gigi Peterson, History

Kevin Pristash, Campus Activities

John Sternfeld, Biological Sciences

George VerDow, Classroom Media Services

Gail Wood, Library

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

#### **Keynote Address**

#### Morris Weinberger

Morris Weinberger, a 1974 graduate of SUNY Cortland, is the Vergil N. Slee Distinguished Professor of Healthcare Quality Management in the Department of Health Policy and Administration at the University of North Carolina at Chapel Hill. His Scholars' Day keynote address on "Developing an Interdisciplinary Research Career: Health Services Research" will be delivered at noon in Brown Auditorium.

Following his graduation from SUNY Cortland with honors and dual majors in Sociology and Mathematics, Weinberger earned his M.A and Ph.D. degrees from Purdue University. From 1978 to 1989 he was a professor in the Indiana University School of Medicine, a scientist at the Regenstrief Institute for Health Care, and an Adjunct Professor of Sociology in Indiana University's Department of Sociology.

Weinberger was a post-doctoral Visiting Associate Medical Research Professor from 1988 to 1990 while he was affiliated with the Center for the Study of Aging and Human Development at the Duke University Medical Center in Durham, North Carolina.

During the late-1980s and early-1990s, he held numerous positions at both the University of North Carolina and the Duke University Medical Center where he was a Senior Fellow at the Center for the Study of Aging and Human Development and a Research Professor at the Center for Health Policy Research and Education. He also served for a year as the Acting Director at the Center for Health Service Research in Primary Care of the Health Services Research and Development Field Program of the Durham Veterans Affairs Medical Center in Durham.

In 1994, he became Director of the Center for Health Services Research at the Roudebush Veterans Affairs Medical Center; a Professor in the Indiana School of Medicine's Department of Medicine and a Senior Scientist at the Regenstrief Institute for Health Care in Indianapolis.

His honors include a 2002 Vision Award for Groundbreaking Work in Chronic Illness Care from the Robert Wood Johnson Foundation and appointment as a Research Career Scientist with the Department of Veterans Affairs HSR&D Service.

SUNY Cortland honored him as a Distinguished Young Alumnus in 1984.

Weinberger's research output has been truly prodigious. He has been the Principal Investigator, Co-Investigator, or Project Director on more than 40 research grants totaling literally many millions of dollars. He is an author or co-author of more than 140 scientific papers in peer-reviewed journals on a variety of subjects including gerontology, arthritis, diabetes, and patient and provider attitudes toward health care delivery. He has served as an Associate Editor of the journal *Diabetes Care*, and he is currently Editor-in-Chief of the journal *Medical Care*, a post he has held since 1997.

### Scholars' Day 2003 Abstracts

#### **CONCURRENT SESSIONS I**

9:00-10:15 a.m.

Is one's preferred jumping frequency, the most efficient?

Elizabeth Ackley, Clifford Coleman Jr., Carrie Costello, Shawn Jackett, Megan Rogers, Elizabeth Szotyori,

Undergraduate Students

James F. Hokanson, Assistant Professor, Exercise Science and Sport Studies

Peter M. McGinnis, Professor, Exercise Science and Sport Studies

Joy L. Hendrick, Professor, Exercise Science and Sport Studies

The purpose of this study was to examine muscular efficiency under three jumping frequency conditions to better understand the physiological and biomechanical relationships of human locomotion. Seven college-age volunteers each practiced jumping for six days to determine their preferred jumping frequency. On the seventh day, subjects performed the jumping task on a force platform while connected to a portable oxygen analysis system. VO<sub>2</sub> data were collected used to determine gross efficiency. In addition, force data were collected from which stepping frequency and average peak force were calculated. Repeated measures were performed on all subjects under three conditions (preferred frequency, 15% faster, 15% slower). A metronome was used to assist with the cadence. The results indicate that slower pace movements are the least economical. Due to variability in preferred cadences, no differences in gross efficiency were found between the fast and preferred frequencies.

The Fidelity of Ski Jump Training Drills with the Take Off Phase of Ski Jumping

Elizabeth Szotyori, Undergraduate Student

Peter McGinnis, Professor, Exercise Science and Sport Studies

The purpose of this study was to compare the hip, knee, and ankle joint angles during the ski jumping take off motion on the hill with these angles during two different dry land training drills. A video camera recorded sagittal views of four subjects performing ski jump takeoffs and two dry-land training drills, the bugle and the bungee, during a summer practice session. Video clips of each jump and training drill were digitized using the Peak Motus system. The hip and shoulder angles and the hip and ankle angles were plotted for the ski jump and the two dry land training drills. These plots were used to illustrate the differences between the takeoffs performed on and off the hill. The results indicate that the training drills were consistent with actual jumping.

EMG Comparisons for Trunk and Upper Body Muscles for the Horizontal Press Performed on a Stable bench and on a Stability Ball

Megan Rogers, Undergraduate Student

Philip J. Buckenmeyer, AssistantProfessor, Exercise Science and Sport Studies

The stability ball has been used in the past for rehabilitation as well as for core strengthening exercises. More recently there has been a trend towards increasing sport specificity with efforts to improve core strength. This study will examine the muscular activity and muscle recruitment from electromyographic (EMG) peak amplitude and average amplitude signals while performing the horizontal press on a stable bench surface and on a stability ball. Participants will be ten male, Division III collegiate athletes whom have had a minimum of two years experience in a strength and conditioning program. EMG activity will be recorded for selected upper arm and trunk muscles during the two seconds of both the upward and downward phases of the press. Statistical results from the repeated measures ANOVA will be discussed relevant to other literature findings and in reference to future training and rehabilitation practices.

Gun Control: Law, Politics, Policy Undergraduate Students from POL 429 Robert Spitzer, Distinguished Service Professor, Political Science

Gun control is one of the most enduringly controversial and contentious issues in American Politics. Students from Professor Spitzer's class on Gun Control (POL 429) will present their research findings on key aspects of the gun control debate.

Weapons of Mass Destruction (WMD): Are Biological and Chemical Weapons (BCW) More Dangerous Than Nuclear Weapons?

Ram P. Chaturuedi, Distinguished Servoce Professor, Physics James E. Bugh, Professor Emeritus, Geology

The unparalleled, inhumane terrorist act of 9/11 has changed the global peace concern. Three-legged WMD seems to have the BCW component easily accessible to the miscreants. It has been estimated that, "for a large-scale operation against the civilian population, casualty might cost \$2,000/sq. Km with conventional weapons, \$800 with nuclear weapons, \$600 with chemical weapons, and \$1.00 with biological weapons." Extraordinarily small quantities of biological agents are all that are required to cause lethal results. In the case of anthrax, for example, one gram produces one trillion spores—an amount equivalent to 100 million lethal doses. This is why biological weapons are called a "poor man's" nuclear weapon.

Professional Writing Students Read from Their Work

David Franke, Assistant Professor English and Professional Writing

Victoria Boynton, Associate Professor, English

Alexander Reid, Assistant Professor, English

Karen Gordon, Sarah Steck, Daw Emke, Tony O'Malley, Erin Morris, Les Knonpel, Tasha Beers, Ruben Katinchi, Lauren Himiak, Emma Vassmer, Mike Buitrago, Undergraduate Students

Although the genres of academic writing are well established, appearing in such varied and discrete forms as the five-paragraph essay, the research article, the experimental report, and creative work, Clifford Geertz has suggested that some of the most important modern writing and research happens in what he calls "blurred genres," works that borrow and re-cast genre conventions to create new forms and voices. In this 75-minute session Professional Writing students will read from their recent analytic / reflective / creative / technical projects, presenting papers that are often hard to categorize but nevertheless often powerful and humorous. Student participants will be announced at the session.

The Other Codetalkers: Comanche and Choctaw in the World Wars

Linda Rosekrans, Instructor, English Tasiwoo Pa api, Historian Undergraduate Students in ENG 256

Navajo codetalkers' activities in the World War II Pacific theatre are now a matter of public knowledge. There are precedents for the use of Native language speakers as code speakers in World Wars I and II; the Choctaw have a documented history of the use of their language as a code in World War I, and the Comanche were approached to use their language as code in the European theatre of World War II. Original documents reveal methods and locations of use of Native dialects to communicate delicate information. Tasiwoo Pa api, World War II historian and author of books on First Nations indigenous codetalkers in both World Wars, will present with undergraduate students in ENG 256.

### Change and Continuity: A Two-Decade Overview of Gender and Development in Africa Ibipo Johnston-Anumonuo, Professor, Geography

A prime concern in the geography of gender is to examine changes in the status of women over time and across space. A regional and longitudinal comparative analysis of qualitative evidence and quantitative measures such as the gender-related development index (GDI) reveals patterns of change and continuity in the status of African women. Specifically, this paper provides a detailed account of the social, political and economic conditions of women in select African countries during the 1980s and 1990s. This two-decade overview enables an assessment of processes of gender differentiation in Africa with a primary focus on the differential effects that post colonial capitalist development policies have had on African men and women. The paper emphasizes the critical role of progressive policies and women's initiatives in promoting gender equality within Africa and in reducing human development disparities between Africans and citizens of the more industrialized countries.

### The Frontier of Eastern Honduras, the Rio Platano Biosphere Reserve Elizabeth Fraser, Assistant Professor, Geography

The scarcity of arable land in Honduras, like other Latin American countries, drives many land-poor farmers to marginal hillsides or expanding primate cities. A small percentage of farmers deviate from these well-established routes and instead decide to move east. Over the years, the east-bound migrants merged into a frontier that is now penetrating the western boundaries of the Río Plátano Biosphere Reserve (RPBR). This presentation will explore the settlement patterns and land use practices of the migrants, how their presence affects the traditional land tenure system, and the impacts of these changes on the land cover of the biosphere reserve.

### DEBT (TV) Nation: The Media's Manufacturing of Consumption and Debt Culture Caroline K. Kaltefleiter, Associate Professor and Chair, Communication Studies

This paper examines the notion that traditional savings culture is being gradually eroded and replaced with a culture of debt that is taking hold of consumers at an ever earlier age. According to a recent study, carried out by MORI, entitled "Money in the Contemporary Family," attitudes are changing towards debt, which many now view as an inevitable facet of modern living. This paper/project is informed by the work of Noam Chompsky and Edward Herman (1988) and looks at advertising role's in not only creating consumption, but also manufacturing a debt culture through a series of campaigns for products including mortgage refinance, fast loans, and instant approval credit cards among others. Alternative media and critical finance pedagogy is examined to raise awareness regarding implications of a debt (youth) society.

#### A GIS Interpretation of World Opinion Scott Anderson, Assistant Professor, Geography Brendan McGovern, Undergraduate Student

On December 4, 2002 the Pew Research Center for the People and the Press published the results of an extraordinary survey of the opinions of 38,000 individuals from 44 countries. Participants responded to questions about politics and quality of life in their own countries. They also gave opinions about American politics, business practices, and popular culture, and about the war on terrorism, suicide bombing, and domestic security. There was considerable regional variation in the way respondents viewed these issues. Using GIS technologies, Anderson and McGovern highlight this geography in a set of provocative maps.

### Exchange Values: Ithaca HOURS Barter Currency and Related Social Values Gretchen Hermann, Librarian

Begun in 1991, Ithaca HOURS are a local barter currency which prints its own money bearing the motto "In Ithaca We Trust." An array of businesses, food venders and artisans in the Ithaca, NY area accept Ithaca HOURS for full or partial payment. Professionals and lay people alike offer and request a variety of goods and services for trade in the periodic listing of participants, Hour Town. Ithaca HOURS have become a national, even international, model for alternative currencies, emphasizing local economies, community power, ecological lifestyles, more equitable pay scales and personal empowerment. This paper will build on last year's investigation of the social values espoused in Ithaca HOURS publications and incorporate results from Hermann's research using participant observation and interviews with HOURS participants concerning these social values.

#### Reduction of Trichloromethyl Compounds by Iron and by Plant Leaves

Christina Liddy, Undergraduate Student Peter Jeffers, Professor and Chair, Chemistry

The chlorine atoms on CCl3X (X = H, CH3, CN, NO2) are sequentially replaced by hydrogen atoms when aqueous solutions of the halocarbons are reacted with metallic iron. These same reductions are observed when plant leaves are placed in the halocarbon solutions, and when the halocarbon vapors in air contact plant leaves. Rates of these processes and implications for clean-up of toxic chemicals will be discussed.

#### Measurement of PCB's in Fish Eggs

Jon Campbell, Undergraduate Student Peter Jeffers, Professor and Chair, Chemistry

Eggs from Walleye and ATS were collected from numerous New York State lakes and from Lake Huron. Analysis for PCB's (polychlorinated biphenyls) in these eggs may help to indicate whether PCB contamination is ubiquitous, or if specific sources lead to different levels of contamination of fish. Determination of PCB conatmination may be a key element in understanding reproductive dysfunction of fish in New York lakes and river systems.

#### Adventures in Chemical Ecology

Matthew Gronquist, Assistant Professor, Chemistry

The field of chemical ecology deals with ecological interaction at the molecular level. Examples include the production and deployment of sex pheromones, antibiotics, and venoms. An example of current interest involves the defensive chemistry of the firefly *lucidota atra*. Fireflies of this species, like many other species of fireflies, have been shown to posses a potent defense against predation in the form of distasteful or toxic chemicals that are present in the blood (hemolymph). A determination of the identities of these putative defensive compounds would be of considerable interest, both in terms of understanding the general ecology of this species, as well as in terms of the larger goal of identifying new bioactive compounds in nature. Such compounds have the potential for anthropic use in such varied applications as medicines and pest control agents.

#### Successful Practices in Urban Schools

Lillivette Gonzalez, Katherine Ortiz, Alicia Avellaneda, Steven Rice, Undergraduate Students

The panel will discuss issues and problems effecting urban students, in particular African-American males and English language learners. Successful programs such as dual language curricula and culturally relevant teaching will be examined for components that promote learning, intellectual and social development and

positive feelings for education. Further, movements such as the "Fish Philosophy" will be discussed outlining how and why it is effective as well as how it is used in urban school settings. Blodgett Elementary School in Syracuse will be offered as a relevant case study.

#### CONCURRENT SESSIONS II

10:30 - 11:45 a.m.

Is There a Difference in Optimal Uphill Stride Frequency Between Trained and Untrained Distance Runners?

Elizabeth Ackley, Undergraduate Student Peter McGinnis, Professor, Exercise Science and Sport Studies

The purpose of this study was to determine if there is a difference in optimal stride frequency between trained and untrained runners running up a 10% grade. Subjects ran for three minutes on a treadmill with a 10% uphill grade at a velocity corresponding to 90% of the subject's VO<sub>2</sub> maximum. Oxygen consumption and stride frequency were measured. Subjects then repeated this test two, four, and six days later but their stride frequency was constrained to their preferred stride frequency, a frequency 10% faster than their preferred frequency, or a frequency 10% slower than their preferred frequency. A 2x2 repeated measures ANOVA was used to identify differences in the aerobic cost of each stride frequency and differences between the trained and untrained runners.

#### Muscular Efficiency in Off-Road Cycling

Shawn Jackett, Undergraduate Student

James F. Hokanson, Assistant Professor, Exercise Science and Sport Studies

Cycling in general has become more popular partly due to the success of professional cyclists such as Lance Armstrong. Lance Armstrong has won four Tour de France bike races in a row and a major reason for his success may be due to his high level of cycling efficiency. Many studies have been conducted to determine the optimal pedaling cadence for road cycling, yet few studies have examined optimal pedaling cadence for off-road cycling. Therefore, the purpose of this study will be to determine the optimal pedaling cadence for off-road cycling efficiency. Subjects will ride around a pre-designed course on a mountain bicycle which will have an electronic crank installed to measure power output. A portable gas analyzer attached to a harness worn by the subjects will measure oxygen consumption. Three different pedaling cadences will be tested (50, 80, and 110 rpms). Efficiency will be calculated as power output at a given oxygen consumption.

#### Is There a Best Time of the Day to Exercise?

Carrie Costello, Undergraduate Student

James F. Hokanson, Assistant Professor, Exercise Science and Sport Studies

The purpose of the present study will be to investigate whether exercising in the morning or evening has a significant affect on substrate utilization or caloric energy expenditure. Ten volunteers will perform three 30 min steady state bicycle exercises at 0700 and again at 1800 hours. Exercise intensity will be 60% of the subjects estimated VO2max. Four hours prior to testing the subjects will be provided with a small meal of a power bar and water. Expired gases will be collected and used to determine substrate utilization and oxygen consumption and caloric expenditure will be calculated. Rate of perceived exertion and heart rates will also be measure during the steady state exercise. Results will be analyzed using paired t-tests at 0.05 level of significance.

#### The Effect of Hamstring Flexibility on Vertical Jump Performance

Clifford Coleman, Jr., Undergraduate Student Wendy Hurley, Assistant Professor, Exercise Science and Sport Studies

A great deal of research exists identifying the most effective techniques to increase flexibility as well as the effects of increased flexibility on muscular performance. Little research exists, however in identifying what effect one's initial level of flexibility has on their muscular performance. The purpose of this study is to determine what effect hamstring flexibility has on vertical jump performance. The participants will be 20 volunteer males between the ages of 22-35 years old with similar physical activity levels. The subjects' hamstring flexibility will be measured using a sit and reach test. The vertical jump consists of countermovement jumps with no arm swing. Averages of three trials for both tests will be calculated. A Pearson product-moment correlation with an alpha level of .05 will be used for the statistical analysis. The results will be discussed in comparison to related literature factors and with implications to competitive athletic performance.

#### Politics and Multiculturalism on Campus

Undergraduate Students listed below

What is it like to be an Arab-American in post 9-11 America? Why do black athletes succeed in certain sports and why are the benefits of the existence of women's teams on college campuses still being debated in 2003? What is the "ideal" type of woman, as portrayed by the media? Is it the national average of size 14, or is it the stylized size 2, and what are the consequences to our teen population? Why is there such a growing proliferation of hate groups, such as the Aryan Nations and the KKK on the Internet? Do women still face the glass ceiling, and are Affirmative Action policies reverse discrimination? Can a person with a physical disability get around SUNY Cortland campus as easy as administration claims? Why were 100,000 Australian Aborigine children stolen from their parents, and why are the number of black prison inmates out of proportion to the general population? These and other questions will be asked, and examined by the students of Politics and Multiculturalism, POL 110-001,002.

Glass Ceiling: Myth or Reality? Erin Drobnicki and Jordan Dawson, Undergraduate Students

Title IX: Future for Female Sports Jacky Rochiguez and Holly Rieland, Undergraduate Students

Sweatshops and Students Kara Schindler, Undergraduate Student

Mascots: Honoring or Racism?

Laura Sheldon and Alicia Persinger, Undergraduate Students

Race in Sports: On and Off Campus John Wissner, Eddie Castine, Jason Tusch, Undergraduate Students

Racial Profiling: Not Just Black and White Yasmine Prasad and Nathan Bucar, Undergraduate Students

Images of the "Ideal" Women/Men Melissa Kudrowigh and Jamie Tutunjian, Undergraduate Students

Affirmative Action: Reverse Discrimination?

Matt Camiolo and Steven Alvarez, Undergraduate Students

Disparity of Prison Inmates by Race Brad Chalker, Undergraduate Students

KKK and Hate Groups: The Helping Hand of the Internet Chelsea Arlen and Leslie Palacios, Undergraduate Students

Stolen Generation: State Sanctioned Kidnapping Travis Zaugg and Lauren Frisch, Undergraduate Students

Racial Profiling in Sports

Erin McNelis and Miranda Chrispell, Undergraduate Students

Reality or Myth? Communism and Drug-Traffickers in Central America and Colombia Brett Troyan, Assistant Professor, History

This talk will discuss the events of the 1980s and 1990s in Central America and Colombia respectively. In the 1980s in Nicaragua and El Salvador, guerrillas fought to achieve change and reform in their societies. The conservative right and its followers sought to portray these guerrillas as subversives and communists. This discourse that linked the guerrillas with communism and with the Cuban government was a constant challenge to the Sandinistas' control of Nicaragua after 1979. In the 1990s, the Colombian government accused the Colombia guerrillas of drug trafficking and sought to link the guerrillas' insurgency with the drug trade. The legitimacy of the guerrillas was eroded by this government discourse both in Colombia and abroad.

Challenging Policy: Comparing Central America and Colombia Solidarity Movements in the U.S. Gigi Peterson, Assistant Professor, History

Peterson will compare U.S. activist responses to U.S. policy toward Central America in the 1980s, and Colombia from the 1990s to the present. Complementing Dr. Troyan's talk, she will examine the ways that internal events in these regions were portrayed in the United States. Competing discourses circulated among grassroots organizations, government officials, and media (both mainstream and alternative). Activists also employed a variety of strategies to try to reshape policy. These case studies highlight important debates about U.S foreign relations, and about the role that everyday people can play in shaping those relations.

Experiences with a Human Rights Delegation in Colombia Laura McDonald, Undergraduate Student

McDonald will discuss her recent trip to Colombia, shedding light not only on current human rights concerns there, but on a particular form of activism: "witnessing" a situation, and accompanying individuals and groups who risk repression.

The Simpsons and Southpark: Humor and the (De) Construction of Cultural Stereotypes Brian Fenner, Cali French, Daniel Houtz, Robert Schmidt, Undergraduate Students

This panel presentation is comprised of four undergraduate papers that examine *The Simpsons and Southpark* as media artifacts that use humor as a means of social critique. Intertextual references to mainstream society and popular culture icons are analyzed as agents that either maintain or change dominant ideologies of race, class, gender, ethnicity and sexual orientation.

Uncovering the European Past

Courtney Seastedt, Jennifer Schiller, Mike Simon, Wendy Bielec, John Mcgoff, Cassidy Perreault, Undergraduate Students

This panel will present the results of six ongoing research projects on European history from the early modern era to the twentieth century. The presenters have made use of a wide variety of source materials—late medieval texts, autobiographical writing, philosophical and political treatises, memoirs and diaries, archival documents, private correspondence, and scholarly monographs and articles. Their topics include: the role of religion and gender in the witchhunts of early modern Europe, the impact of Garibaldi and Cavour in the push for nineteenth-century Italian unification, the nuances of Marx's original theories on socialism and communism, the social and cultural significance of women's experiences under Stalinist oppression, the struggles within the leadership of Ireland's independence movement, and the average soldier's shifting attitude towards World

Positive Teaching Strategies Promote Learning in the Schools and the Community Paul D. Luyben, Associate Professor, Psychology Students from HotShot Readers, Field Study in Applied Behavioral Analysis Teaching Assistants

Children with disabilities oftentimes have serious difficulties in reading and other school tasks while adult learners frequently perform at less than optimal levels. In this symposium, students will describe a variety of field projects in a series of short presentations. *HotShotReader* tutors will describe the programs they used to establish and improve the reading skills of beginning and older readers. Students who have completed field projects in applied behavior analysis will describe programs they have completed to improve the academic skills of a child with severe disabilities who could not write her name, and to help a boy work independently on assignments, while asking for help only when needed. Teaching Assistants will describe published research projects on the application of similar principles with adults in applied settings. Finally, although inconceivable several years ago, an effective and squeaky-new web-based beginning reader program will be demonstrated.

Listening Skills, Learning Styles, and Pedagogy John Suarez, Lecturer, English Teri Vigars, Academic Tutor, A.S.A.P. Library

This presentation reviews the rationale, design, and pedagogical implications of the Engaging First-Year Students Faculty Workshop. The workshop, which has been conducted three times since April 2002, addresses faculty behavior and teaching methods that hinder student learning. Workshop participants discuss data and practice principles related to active listening, learning styles, and student demographics. The content of, and responses to, the workshop can influence teaching philosophy and teacher training.

Using Dice to Illustrate Inductive Learning and Who Knows What Karla Helstrom and Adam Weisblatt, Undergraduate Student Daniel Driscoll, Professor, Mathematics

This presentation is designed to demonstrate how a game of chance using dice can be used to arrive at a general result from observed cases. For teachers and students, the beauty of mathematics so often lies in the rich variety of situations that can grow from the process of reasoning from the particular to the general. The presentation will analyze the popular gambling game that goes by various names; chuck-a-luck, coney island, etc. Bring some pennies.

A Community Assessment of Sense of Place and Perceived Need for Nature-Based Experiences in the Town of Trenton, NY

Stacey Merrigan Smith, Graduate Student Lynn Anderson, Professor and Chair, Recreation and Leisure Studies Charles Yaple, Professor Emeritus, Recreation and Leisure Studies

The purpose of this study was to examine level of support for a nature center for the Trenton Greenbelt Trail System, explore relationships between place attachment and perceived need for a community nature center, and develop a model for rural community assessment regarding nature center initiatives. 215 questionnaires and four focus groups provided data from randomly selected residents, teachers, students, trail-users, and businesspeople. Results indicated respondents were aware of and had used the Greenbelt. Greenbelt users appeared to be emotionally attached to the area and a majority thought the addition of a nature center was important. Support for a nature center and willingness to financially support it was positively correlated with place attachment. Results also indicated the importance of rural character, open space, and place-based education. However, a sense of place attachment to the Greenbelt must be more widely developed in order to build sustained support for a nature center.

Preferences of Cortland County Residents in the Development of the Tioughnioga River Trail Lynn Anderson, Professor and Chair, Recreation and Leisure Studies
Sharon Todd, Assistant Professor, Recreation and Leisure Studies
Rob Andrejewski, Kari Benson, Carol Nawarro, Brian Torrey, Lisa Tuxill, Jason Webb, Graduate Students

The Tioughnioga Waterfront Development Commission is spearheading an exciting project to revitalize the Tioughnioga River along its 30-mile corridor. An important part of this effort is development of the Tiougnioga River Trail, a land- and water-based trail that will run 26 miles, and accommodate hiking, biking, fishing, skiing, canoeing, kayaking, and other activities. The purpose of this study was to assess the preferences and intended use of the River Trail by Cortland County residents. Three samples were used: 1) A random sample of 300 households in the mile-wide corridor along the river who completed a door-to-door survey; 2) A random sample of 800 Cortland County residents who completed a telephone survey, and 3) Recreation providers/educators, who participated in focus groups to determine how they envision using the new trail in their programs. The results of this study will be presented, as well as future recommendations for the Tioughnioga River Trail.

#### **KEYNOTE ADDRESS**

12:00 - 12:45 p.m. Brown Auditorium

#### POSTER SESSION

12:45 - 1:45 p.m.

The 1894 Missouri River Commission Map Makeover: Vectorizing and Reprojecting Old Maps to Satellite Imagery

David Miller, Professor and Chair, Geography

Jeff Ayers, Matt Germain, Rachel Hutchinson, Michael Reid, Ethan Rogati, Chris Tortora, and Ben Youngs, Undergraduate Students

This project demonstrates procedures developed to reproject and accurately position 100-year old Missouri River Commission maps on current day LandSat satellite imagery. In essence, ink lines are digitally collected and massaged into a modern-day projection using ArcView GIS software that has been enhanced with

additional programming. Accurate reprojection of old map features onto current-day imagery allows derivation of their GPS coordinates. Thus, "lost" features - such as abandoned settlements, burial grounds, and old forts - can be found. An article detailing the procedures has been submitted to ArcUser Magazine.

Warnings and the Social Contagion of False Memories Michael P. Toglia, Professor, Psychology Christopher J. Barnum, Kerri A. Peck, Undergraduate Students Todd B. Fahey '02, Charles A. Goodsell '02

We examined how warnings and retention interval influenced the social contagion effect in ecologically valid environments. In Experiment 1, individuals and a confederate collaboratively recalled objects present in a graduate student's office in which they were previously seated. The confederate recalled either only items actually present (Control condition) or additionally reported 2 items not in the room (Contagion condition). Subsequently, Contagion participants recognized more contagion items, but did not differ from Control subjects on recognition of presented and nonpresented items. A week later contagion information was experienced with as much phenomenological detail as were true memories. In Experiment 2 after collaborative recall some participants were explicitly warned with examples of false memories and advised that the other "subject" may have falsely recollected some objects. These warnings did not affect recognition performance, replicating the results of Experiment 1 and providing further testament to the robustness of the social contagion effect.

Personality Correlates of College Adjustment Marisa Sano and Joann Lanari, Undergraduate Students Michael D. Berzonsky, Professor, Psychology

The purpose of this study was to examine the role that identity processing styles play in how effectively first-semester freshmen adjusted to college. Identity styles refer to differences in how students make decisions, solve problems, and process self-relevant information. First-semester freshmen completed a battery of tests including measures of three identity styles, self-clarity, self-regulation, and subjective adjustment to college. The results indicated that student adjustment was positively related to the utilization of an informational identity style and negatively associated with a conforming, normative style. An indirect negative relationship between a procrastinating, diffuse-avoidant style and adjustment was found. Diffuse-avoidance was negatively associated with self-clarity and effective self-regulation: Both, in turn, were positively associated with adjustment to college. The relationship between an informational style and adjustment was positively mediated by self-regulation.

Bi-Ocular Retinal Detachment in a Collegiate Basketball Player: A Case Study Julie Whitehead, Undergraduate Student Farron Bernett, Athletic Trainer/Lecturer, Exercise Science and Sport Studies

The athlete is a 22 year-old collegiate men's basketball player. The patient has a history of nearsightedness in both eyes and used contacts to correct his vision. The athlete had no personal or family history for predisposition for retinal detachment. On the initial day that signs and symptoms were noted, the athlete reported no incidence of trauma. The athlete complained only of blurry spots in the field of vision, known as floaters, and of general discomfort in the left eye. Evaluation revealed that the athlete had full neuromuscular motor function. No foreign body was found, and the contact lens was unaltered. On the following day the athlete's visual acuity decreased further. The athlete described a completely dark visual field in the left eye. The athlete was referred to an ophthalmologist where it was later determined he had a bi-ocular retinal detachment. The presentation will show the progression of the signs and symptoms, diagnostic and surgical intervention as well as return to play criteria for this athlete.

### Gender Differences in the Frequency, Types, and Effects of Gambling among SUNY Cortland Undergraduates

Bryan Lee and Mark Gillen, Undergraduate Students Sharon L. Todd, Assistant Professor, Recreation and Leisure Studies Department

Studies show that large percentages of college students gamble during their leisure time, often on a weekly basis, occasionally resulting in financial, academic, and psychological problems. The purpose of this study was to examine gender differences in the frequency, types, and effects of gambling on SUNY Cortland undergraduate students. During November 2002, 100 questionnaires were distributed to a systematic random sample, stratified by gender and housing. Results indicated that 87% of the sample had gambled, primarily to win money and for excitement. Although nearly a third gambled 1-5 times in the past year, 16% admitted gambling more than 50 times, with playing the lottery being most prevalent. While 43% spent less than \$5 each time they gambled, 14% averaged more than \$50 per bet. Less than half claimed any negative effects of gambling. However, males gambled more frequently and for higher amounts, resulting in more negative financial effects than females.

#### Looking for Dangerous Bacteria in Ground Beef Kristen M. Polasik, Undergraduate Student

Barry L. Batzing, Professor, Biological Sciences

Several bacteria can be transmitted in ground beef to cause foodborne illness. This investigation is being undertaken to survey different grades of ground beef for their total bacterial burden and for the presence of specific bacterial pathogens, such as *Escherichia cdi*. Non-irradiated and irradiated raw ground beef samples are being analyzed. Ground beef hamburger patties subjected to varying degrees of cooking are being assayed to measure the effectiveness of cooking for reducing bacterial populations. Various microbiological methods are being employed, including total plate counts, streaking on selective and differential growth media, and physiological testing of isolated bacteria using a miniaturized multi-test system.

#### Fitness Attributes of Cortland Firefighters

Heidi Fralick, Undergraduate Student James Hokanson, Assistant Professor, Exercise Science and Sport Studies Philip Buckenmeyer, Assistant Professor, Exercise Science and Sport Studies

The purpose of this project is to determine the physical fitness levels of City of Cortland firefighters. Firefighters will complete an informed consent prior to their participation. A cardiovascular risk profile will be completed. These participants will also be assessed for height, weight, age, muscular strength and power, muscular endurance, flexibility, agility, body composition, and aerobic fitness. Descriptive statistics will be utilized to obtain means and standard deviations for each of the firefighter's attributes. A Pearson Product Correlation will be conducted to determine the relationship between their present fitness status and level of cardiovascular risk. Results from this project may be beneficial in providing appropriate physical activity programming to reduce cardiovascular risk in City of Cortland firefighters.

#### Physical Activity Demographics of Cortland County Residents

Cindy Adams, Undergraduate Student
Philip Buckenmeyer, Assistant Professor, Exercise Science and Sport Studies
James Hokanson, Assistant Professor, Exercise Science and Sports Studies

The purpose of this project is to determine the physical activity levels of Cortland County residents. In collaboration with the Cortland County Health Department, a physical activity survey will address physical activity awareness in Cortland County, the amount of activity conducted by residents, and types of activities

that residents participate in. The level of activity will be correlated with the body mass index of adults and children. A Pearson Product Correlation will then be utilized to evaluate the relationship between level of physical activity and body composition. Results from this project may be beneficial in providing appropriate physical activity opportunities for Cortland County residents.

Effect of Dietary Protein on Nutrition of the White-Footed Mouse Liz Csikar, Undergraduate Student

Mary Beth Voltura, Assistant Professor, Biological Sciences

Levels of atmospheric carbon dioxide will double over the next century, and the consequences will not be limited to global warming. With more CO<sub>2</sub> available, plants are better at capturing it during photosynthesis and require fewer enzymes. As a result, plant tissues grown at high CO<sub>2</sub> levels contain less protein. This may have serious consequences for the animals who feed on the plants. This study examines the effects of reduced protein on nutrition in a small mammal, the white-footed mouse (*Peranyscus leuopus*). Captive mice are fed diets with different protein levels. Data will be presented on body mass, food intake, and diet digestibility.

Top Down Processing: The Effect of Suggestion on the Perception of Ambiguous Auditory Stimuli Karen Hanly and Kristin Grosso, Undergraduate Students

The effect of suggestion on the perceptoin of ambiguous auditory stimuli was examined. The difference in the perception of words for ambiguous auditory stimuli among students given a suggestion of words vs. no suggestion of words was investigated in this experiment. Each subject was assigned to 1 of 2 conditions. The hypothesis for the experiment was that students who were exposed to a situation in which it was suggested that they would hear words would write down more words after hearing the ambiguous sound stimuli than those students who were given no suggestion. The results indicated that there was a significant effect of suggestion on words written, p<.05. Our research is consistent with the results found by other researchers who have dealt with the way suggestion influences perception.

The Effects of Viewing Distance on Visual Judgements of the Muller-Lyer Illusion Kimberly Cooper, Erin Dinan and Katie Marinaro, Undergraduate Students

The purpose of this study was to examine the effect of viewing distance on the visual judgments of a Muller-Lyer illusion task. The Muller-Lyer visual judgment task was administered to a group of 22 undergraduate college students. The participants all viewed the apparatus from 3 different distances. Four judgments were made by the participants at each of the 3 distances. Results indicated that visual judgments on the Muller-Lyer task were more accurate at closer distances than at farther distances, p<.001. Possible explanations for the results and their inconsistency with major theories are discussed.

The Effects of Experimenter Suggestion on Performance in the Embedded Figures Tests Amy Ferrara and Nicole Baird, Undergraduate Students

Our intended presentation will describe an experiment designed to test the effects of experimenter suggestion on the performance of the Embedded Figures Test, where students from an undergraduate psychology class were placed into 1 of 3 conditions. In one experimental condition it was suggested that the task was easy, while in the other experimental condition it was implied that the task was difficult. A control condition was also used in which participants received no suggestion about the difficulty of the Embedded Figures Test. Performance was measured using the time to locate a simple figure embedded within a more complex figure in a series of Embedded Figures Test items. Results indicated that

suggestion had no effect on performance of the Embedded Figures Test. However, there was a significant effect of the stimulus presented to the participants, p<.05. It took longer for participants to locate the embedded figure within Stimulus A than for Stimuli E, F, and G. It also took participants longer to locate the embedded figure within Stimulus C than for Stimulus G. Because of this external validity issue, results cannot be generalized implying that suggestion has no effect on performance at all. Instead, results are specific to the Embedded Figures Test. This research requires further investigation to test whether the present results are similar when the experiment is applied with a task that measures performance without the differences in stimuli.

Reconstructing Wetland Development Histories Using Ground Penetrating Radar, Coring and Stratigraphic Analysis

Amanda Buboltz and Rachel Hutchinson, Undergraduate Students Christopher P. Cinno, Associate Professor and Chair, Geology

Wetlands hold a wealth of information regarding their development, function and hydrologic connections with groundwater in their stratigraphy and depth profile signatures. We have used ground penetrating radar (GPR), sediment and peat coring, soil texture analysis, and mineralogy to assist in the determination of the three dimensional structure of a set of wetlands in the Adirondack Region of New York State. Interest in the function of these wetlands stems from their pristine state and their role in maintaining water quality in the headwaters of the Hudson River system. Profiles of soil texture and mineralogy reveal systematic differences between beaver meadows, slope wetlands, and first-order riparian floodplains. We present data showing the two-dimensional structure of wetlands linking GPR information with sediment profiles to hypothesize wetland development and history. Layers of alluvial sands dispersed within organic layers characterize floodplain wetlands. Slope wetlands and abandoned beaver meadows have deeper peat deposits and greater irregularity in channel deposits across the wetland. Structural similarities in wetland depth profiles are being compared along the Appalachian Chain to assist in the construction of regional wetland models.

Observations and experiments on the terrestrial flatworm Bipalium adventitium Gina Shaw and Jacquelyn DeLisle, Undergraduate Students Peter K. Ducey, Professor, Biological Sciences

Bipalium adventitium is an invading flatworm from Asia that is impacting the ecosystems of North America. The purpose of this project is to study the reproductive parameters of a population of these flatworms from California to better predict the potential impact. In laboratory experiments, the flatworms were separated into three groups and held on a specific feeding regime to test the short-term effects on reproductive output for a two-month period. We found that egg capsule size was correlated with female size and that larger egg capsules yielded more offspring. Surprisingly, short-term increases in feeding did not increase the number of egg capsules produced. In addition, we are performing a staining technique that shows abundance and location of sperm in mating flatworms.

Predatory behavior of the flatworm *Bipalium adventitium* in the soil column Cara L. Fiore, Undergraduate Student
Peter K. Ducey, Professor, Biological Sciences

The flatworm Bipalium adventitium is an invasive species that has quickly spread across North America. As earthworms are the main prey of Bipalium, the flatworm may have a significantly negative impact on the soil ecosystem. Previous studies have reported some predatory behaviors exhibited by Bipalium during an attack on earthworms at the soil surface. The purpose of this study is to record the success and behavior of Bipalium as a predator on earthworms within the soil column. Because different earthworm species use different antipredatory strategies, we used two local earthworm species that exhibit contrasting behavior when attacked (Lumbricus and Eisenia). The trials were run in vertical, soil-filled test chambers that allowed view of predator-

prey interactions underground. We hypothesized that *Bipalium* will track the prey within the tunnels, use the walls of the tunnel to prevent the prey from escaping, and have a high predatory success rate underground.

Solvent Effects on Absorption Spectra of Rhenium(I) Bipyridyl Tricarbonyl Anion Compounds Sharron L. Lunas, Undergraduate Student Arden P. Zipp, Distinguished Teaching Professor of Chemistry

Several compounds with the formula; Re(bpy)(CO)<sub>3</sub>X, have been prepared and characterized where bpy represents the bidentate bipyridyl molecule and X is one of the anions; Cl<sup>-</sup>, CN<sup>-</sup>, CNO<sup>-</sup>, I<sup>-</sup>, and CF<sub>3</sub>SO<sub>3</sub><sup>-</sup>. All compounds have been characterized by means of elemental analyses, infra-red, ultraviolet and visible spectra. In addition their luminescence spectra and excited state lifetimes have been determined. The visible spectra of these compounds undergo notable solvent-induced shifts. The origin of these shifts will be discussed as will their possible use for inferring the degree of ionic character in the Re-X bond.

Synthesis and Characterization of 1,10-phenanthrolinedichloroplatinum(II) Compounds
Robert McGuire and Robert Swarthout, Undergraduate Students
Arden P. Zipp, Distinguished Teaching Professor of Chemistry

Several phenyl-substituted 1,10-phenanthroline ligands have been synthesized. These have been used to prepare a series of new square-planar platinum(II) chloride compounds. The platinum(II) compounds have been characterized by means of elemental analyses and infrared, nuclear magnetic resonance, ultra-violet and visible spectra. The relationship between the spectroscopic behavior and the nature of the phenanthroline ligands will be discussed as will the potential application of these compounds in photochemical or photoelectrochemical devices.

Sex Differences in the Effects of PCB Exposure on Ethanol Consumption by Rats David F. Berger, Professor, Psychology John P. Lombardo, Professor, Psychology Peter M. Jeffers, Professor and Chair, Chemistry Students from PSY 411

The aim of this research was to examine the effects of PCB exposure on ethanol (ETOH) consumption by female and male rats. Thirty-four Sprague-Dawley rats were randomly assigned to either PCB-exposure (9 females and 9 males) or control (8 females and 89 males) groups. Daily, from postnatal day 35 to 64 (around puberty), the PCB groups were given half a Nilla Wafer cookie on to which 0.1 ml of corn oil containing 1 mg/kg of Aroclor 1248 was placed. The wafers given to female and male control groups contained 0.1 ml of corn oil alone. After that, all animals were given increasingly higher concentrations of ETOH or water in two-bottle tests for 11 days, and the amounts consumed of each were recorded. The PCB-exposed females drank significantly more 5% ETOH than PCB-exposed males and all control rats. Results are discussed in terms of impaired dopamine synthesis in the nucleus accumbens.

Physical Education in American Schools Today Catherine Goods, Graduate Student

More persons are overweight or obese than in any other previous generation. There are a variety of factors contributing to this national epidemic. The overweight/obesity epidemic involving our nations' youth is especially serious. One of the most notable factors is the decrease in daily physical exercise in our increasingly sedentary lifestyles. This research project highlights the current trends, policy implications, and recommendations for decreasing childhood/adolescent obesity and increasing physical education within our school systems. The research finds that daily, quality physical education programs can improve overall health;

physically, social, and emotionally. To provide our nation's children with anything less is disadvantageous to the individual and to the future health of our country's most valuable resource.

Movement of Cyanide Through the Gut of the Fall Webworm

Ashlie McCarthy, Undergraduate Student Terrence D. Fitzgerald, Distinguished University Professor, Biological Sciences Peter M. Jeffers, Professor and Chair, Chemistry

The caterpillars of the fall webworm (*Hyphantria*) feed on the cyanogenic leaves of black cherry. Although previous reports indicate that the cyanide potential (HCN-p) of leaves declines to low levels by mid-summer when webworms are feeding, leaves we assayed by ion chromatography had a HCN-p of  $1522 \pm 234$  (SE) ppm (range: 617-3812). Much of the cyanide contained in the leaves consumed by the caterpillars survived transit through their guts and was concentrated in stable form as CN- in the frass of the insect. Frass collected from under trees in which the caterpillars fed overnight had a mean concentration of  $1806 \pm 266$  ppm CN- (range: 603-7131). This is many times higher than previously reported for any other caterpillar and suggests a unique pathway by which cyanide is channeled through the larvae.

#### CONCURRENT SESSIONS III

1:45 - 3:00 p.m.

Hydrological Classifications of Wetlands in the Adirondack Region: A New Paradigm Christopher P. Cinno, Associate Professor and Chair, Geology

Wetlands comprise approximately 15% of the "Adirondack State Park" jurisdictional area. Relatively few of these wetlands have been surveyed or studied in depth hydrologically, and on-site investigations of surface water flow and chemistry have historically centered studies involving acid deposition, trace metal cycling and nitrogen transport. Groundwater moves through relatively thin deposits of glacial till and outwash, as well as through thin soils and organic deposits, and "depth of till" is thought to control many local hydrological and biogeochemical interactions. Current research focuses on lake-stream-wetland surface water interactions with local groundwater systems, and on the role of wetlands and saturated zones in contributing to and altering hydrologic and biogeochemical signatures of watershed drainage. A new paradigm for the classification of wetlands from a hydrologic viewpoint serves water quality and watershed protection initiatives in the region, and recent findings suggest previously unsuspected interactions between surface and groundwater.

### Hubbard Glacier and the Ongoing Blockage of Russell Fiord: Geologic Perspectives on an Environmental Catastrophe

David Barday, Assistant Professor, Geology

In June 2002 the terminus of Hubbard Glacier advanced across the entrance of Russell Fiord and began to convert this saltwater inlet into a freshwater lake. Two months later the ponded waters of "Russell Lake" broke out through the ice and sediment dam in an outburst flood that peaked at 30 times larger than the greatest recorded discharge of the Mississippi River. Research by Dr. Barclay has shown that "Russell Lake" has formed and catastrophically drained at least six times during the past 8000 years. In addition, reconstruction of the history of Hubbard Glacier provides insight into the dynamics of this iceberg-calving glacier and suggests that "Russell Lake" will probably form permanently within the next few decades. This will cause ecological change as saltwater Russell Fiord becomes a freshwater lake, flooding around a regionally important airport, and destruction of a world-class steelhead fishery.

### Marine Bivalves from Western North America and the End-Triassic Mass Extinction Christopher A. McRoberts, Asssistant Professor, Geology, Emily K. Hopkin, Undergraduate Student

Although the end-Triassic mass extinction event, some 200 million years ago, is one of the five biggest biotic crises in Earth's history, it remains one of the least studied and poorly known. We present new data on the diversity, paleoecology, and temporal distribution of bivalved mollusks from northeastern British Columbia, Arctic Alaska, and Nevada, which not only better constrain the Triassic/Jurassic boundary but provide insights into potential causes. Analysis of the stratigraphic distribution of bivalve species, intercallibrated with ammonoids and conodonts, now permit recognition of the Triassic/Jurassic boundary in the three regions. These Late Triassic and Early Jurassic bivalve faunas can be divided into two main paleoecological groups: (i) those from nearshore shallow-water paleoenvironments, and (ii) those from offshore, deep-water settings. In both paleoenvironments, species level extinction was severe—approaching 99%. Although Late Triassic diversity metrics differ from different ecologic settings, the low-diversity post-extinction Jurassic faunas are ecological homogenous, comprised mostly of pectinaceans (scallops), utilizing generalist (r-selected) strategies. Ecologic assessment of surviving species suggests food was a limiting factor in the extinction.

#### Kundalini: An Innate Metaphysical Precept Depicted in the Hindu Tradition Angela DeRico, Undergraduate Student

The Indian term Kundalini depicts a metaphysical phenomenon clearly described and put into practice by the Vedic tradition and the Hindu religion in the form of Kundalini yoga. The concept of Kundalini does not just play a functional, psychological, or symbolic role in the Hindu religion and therefore defies the typical anthropological conception of religious activity.

#### Social Change in Bali: Surviving in the Modern World System Matthew G. Schneider, Undergraduate Student

This paper examines the Southeast Asian island of Bali, including the historical events resulting in the present Balinese economy and social structure. The paper will take a brief look at the effects of the world system and tourism on Balinese culture—in the past, and today.

### Sikhism and Zoroastrianism: How Religious Practice is Affected by Origin Cassidy Withey Perreault, Undergraduate Student

The presentation will discuss the changes and continuities found in several religious traditions that have experienced migration from their area of origin. There will be a focus on historical and social-economic circumstances in the region of origin and regions of migration.

#### Service-Learning Outcomes in English Composition Courses Richard Kendrick, Associate Professor, Sociology/Anthropology John Suarez, Lecturer, English

This activity reviews the results of a study conducted during the Spring 2002 semester, and first presented at the Second Annual International Conference on Service-Learning, in Nashville, TN, during October 2002. The study compared traditional English composition classes with service-learning versions. Kendrick and Suarez address the question, "On what measures does service-learning improve students' writing skills and attention to social issues?" The presenters argue that current service-learning research, by focusing on differences between service-learning and traditional courses in students' understanding of traditional course content, misses the value added by service-learning.

#### Distorted Images: Gender Sterotypes in American Cartoons

Erica Capozzi, Katie Loizides, Jason Rose, Christina Tortorelli, Undergraduate Students

This panel presentation is comprised of four undergraduate papers that look at the construction of gender stereotypes in American cartoons. Drawing on the work of Julia Wood (2001) and Jeanne Kilbourne (1999) these papers negotiate both covert and overt gendered media representations. Additionally, the papers look at cartoons not only as products that affirm gender expectations, but also in some cases, may act as sites of resistance to the mainstream interpretations of contemporary animated programs. Media artifacts (cartoons) examined include *Popeye*, the Flintstones, Ginger, and Oswald.

### Testing the Limits: Arguments For and Against Standardized Testing Elizabeth Bethea, Christina DiPietrantonio, Adrian Lopez, Michael Karbowiak, Undergraduate Students

The debate surrounding standardized testing has intensified due to the call for more accountability for educational institutions. The panel will present arguments both for and against modern standardized tests. Issues such as bilingualism will be examined as it affects standardized testing as well as how testing practices affect high school students and school communities. Finally, alternatives to standardized testing will be presented and discussed.

#### America's Oxycontin Problem Walter Kent, Undergraduate Student

During the 1980s a time-release painkiller, Oxycontin, has emerged as a drug of abuse. This paper traces the epidemic, as well as efforts to control it.

#### Drug Abuse and Pregnancy Shamel Pinkard, Undergraduate Student

Drug abuse by pregnant women can lead to severe health problems in their unborn children. What steps are appropriate for preventing such tragedies? For instance, should expectant mothers be drug-tested, and should the results of positive drug tests be turned over to legal authorities? This paper examines this question, its civil liberties implications and the unintended consequences that legally-mandated prenatal drug testing may have.

### Drug-Related Police Corruption Katie Benson, Undergraduate Student

During the 1920s, American's attempt to prohibit the manufacture and sale of alcoholic beverages resulted in widespread corruption of law enforcement personnel. The current war on drugs has also led to an increase in police corruption. The temptation for police officers to multiply their income by cooperating with drug traffickers is quite strong, and the "war" analogy that underlies drug control can be used to justify violations of civil rights.

#### The Drug Laws and the Prison Population Brad Cole, Undergraduate Student

The declaration of a "war on drugs" during the 1980s has had a major impact on state and federal prison systems. This paper details how the imposition of mandatory minimum drug sentences and a seemingly minor revision in the conspiracy provision of a mid-1980s federal drug law contributed to a quadrupling of the size of the prison population in America and to the development of a "prison-industrial complex."

American History as Local History: Cortland's 1890 House as a Teaching and Learning Tool Kevin B. Sheets, Assistant Professor, History
Melissa Yeager, Jennifer Mayack, Lindsay Maynard, Undergraduate Students

Panel discussion with history faculty and students about the effectiveness of using local resources in teaching and learning about national themes in American history.

A Portrait of the Woman as an Artist: Charlotte Perkins Gilman and the World of Art Denise D. Knight, Professor, English

In this presentation, Knight examines the role that art played in the life of American feminist author Charlotte Perkins Gilman (1860-1935). In the years before she attained success as a writer, Gilman depended on her skills in painting as a primary source of income. Later, the subject of art and artists would appear in several of her essays, poems, and stories. Significantly, her first published book, Gems of Art for the Home and Fireside, published in 1888, celebrated the art world by featuring illustrations by mostly famous artists, which Gilman accompanied with lively narratives describing the artist's style or technique. Her first husband, Charles Walter Stetson, became one of the nation's premiere landscape artists, and their daughter, Katharine, was an accomplished sculptor and painter. This talk, which is illustrated with various slides of Gilman's artwork, looks at the role that art played in Gilman's life, biographically, economically, and even therapeutically.

#### 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, four College Writing Contest winners will present their papers. Listed are the titles, authors, courses in which the papers were written, and the instructors of the respective courses.

"A Woman Not Fit for Our Society:" Social Order, Gender, and Authority in the Late 17th Century Boston

Adam Brechner, History 490 - Seminar; Instructor, Dr. Judith Van Buskirk

The Dark Glory

Mario Hemandez, English 502 - Seminar in the Composing Process: Rhetoric and Analysis; Instructor, Dr. Mary Lynch Kennedy

Baby Doll

Lesczyk Krempel, English 205 - Introduction to Professional Writing; Instructor, Dr. Victoria Boynton

Rent: Reinventing the Musical Genre Through the Limitations of Representation Rori Nogee, English 205 – Introduction to Professional Writing; Instructor, Dr. Victoria Boynton

#### CONCURRENT SESSIONS IV

3:15 - 4:30 p.m.

The Role of Wetlands in Water Quality Maintenance in the Catskill/Delaware Watershed Michael Reid, Undergraduate Student Christopher P. Cirmo, Associate Professor and Chair, Geology Laurie Machung, Research Scientist, NYC Deptartment of Environmental Protection

With the agreement between the New York City Department of Environmental Protection (DEP) and the US Environmental Protection Agency to grant a "filtration avoidance permit" to the City of New York, it is mandatory that the City maintain the integrity and protection of its water supply "watersheds" in the Croton Reservoir System (east of the Hudson River) and in the Catskill/Delaware Reservoir System (west of the Hudson River). As part of this initiative, the classification, landscape influence, and water quality maintenance function of wetlands near and in the catchments of these reservoirs are being determined. In the summer of 2002, we began the initial stages of this effort in the "West of Hudson" system, by determining and ground-truthing a set of wetlands which will serve as "sentinel or reference" study wetlands. Four of these wetlands will be intensively monitored for two years to determine chemical mass balances, water budgets and the function of wetlands in maintenance of water quality and sediment removal during storms and snowmelt. A larger set of wetlands will be monitored for baseflow in summer and winter and sampled synoptically. This collaborative project between the DEP, SUNY Cortland and Syracuse University, is a step toward establishment of "permanent" reference wetland sites for the State of New York.

Climate Changes and Fluctuations of Scott Glacier in Southern Alaska Michael Kloczko, Undergraduate Student David Barclay, Assistant Professor, Geology

Scott Glacier is located in the Prince William Sound region of southern Alaska. Studies of this valley glacier were done in 1993 and 2002 to determine the history of glacial advances and retreats, and to reconstruct the climatic changes responsible. Subfossil trees buried in outwash were discovered about two kilometers down valley from the present terminus position. Tree-ring cross-dates show that fifteen of these trees died between 1844 and 1868, and this corresponds with the advance of Scott Glacier during the late Little Ice Age. During this time, a cooler climate led to less melting allowing glaciers in the region to expand. Trees growing on the outermost moraine were cored and suggest that this landform was ice free by 1899. This indicates that Scott Glacier had begun to retreat at this time following the end of the Little Ice Age.

Biochronology of Halobiid Bivalves in Nevada: Using Fossil Clams to Divide Geologic Time Emily K. Hopkin, Undergraduate Student, Christopher A. McRoberts, Asssistant Professor, Geology

Because the stages of the Triassic have yet to be formally defined, new high resolution biochronologic data from bivalves can better aid in refining Triassic time. Halobiid bivalves (Daonella, Enteropleura, and Halobia) are sometimes the only macrofossils found in Triassic strata and have a very high speciation rate of 1-2 million years making them excellent fossils for biochronology. Integrating bivalve occurrences with ammonoid zones that currently divide the Triassic, new zones are established for Nevada. Halobiids were collected from three localities in the Humboldt Range and in the vicinity of the New Pass Range in Nevada. The Anisian (early Middle Triassic) can be divided into three bivalve zones (Enteropleura new species; Daonella sturi; Daonella dubia). The Ladinian stage can be separated into two bivalve zones (Daonella rieberi; Daonella lonelli). The lowest Camian (early Upper Triassic) can be divided into two bivalve zones (Daonella elegans; Halobia zitteli). These bivalve zones make it possible to correlate strata to other localities in North America (northeastern British Columbia and Arctic Canada) and to Europe where the stages were first described.

### Spain and Russia: The Last Myth of the Left Gordon Beadle, Professor, History

The conventional wisdom of the Left is that while the democracies – Britain, France and the United States – were cynically neutral during the Spanish Civil War, Russia alone rushed to the aid of the beleaguered Republic. Stalin is now belatedly recognized as a monster, but he alone was on the right side of the great crusade in Spain. The truth is that Stalin and the Russians robbed, cheated, and betrayed the Republic and the Revolution in Spain and cynically attempted to use Spain to further the Russian foreign policy agenda. This paper will deal with the nature and extent of the Russian betrayal of the Revolution in Spain.

### The "Next War" and Appearement Jacquine Abbott, Undergraduate Student

The considered judgment of history has been harsh in its view of Neville Chamberlain and his German foreign policy. Many have come to agree with Winston Churchill's oft-quoted assertion that "the old lord mayor looked at foreign affairs through the wrong end of the municipal drainpipe." But Chamberlain, the appeasers, and to a large extent the British people were also influenced by influential "experts" and highly credible "next war" predictions that made "peace at any price" seem like a sensible alternative to war with Germany in 1938. This paper will examine the extent and credibility of the predictions of various "experts" about the expected nature of the next war.

### Research: Empowerment for Teachers Mary Lynch Kennedy, Distinguished Teaching Professor, English

Kennedy will discuss teachers' dual roles as critical consumers of research and as teacher researchers. She will compare the Big R Research usually conducted by university professors, with the down-in-the-trenches research teachers, including the teacher candidates in the Masters of Arts in Teaching English Program, undertake in their own classrooms.

### Does the Writing Workshop Approach Draw Disengaged Students into the Classroom Community? Brooke Blizzard, Graduate Student

The writing workshop offers students freedom of expression and movement and encourages collaboration. Does it promote higher levels of involvement for unmotivated students? The purpose of this case study is to examine the effect of writing workshop on student engagement. Blizzard discusses what happened when disengaged middle school students – low-level participators in class and participators in negative activities – were part of a writing workshop setting which redefined teacher-student roles and emphasized process rather than product.

#### How Do English Teachers Learn Behavior Management? Megan Smith, Graduate Student

Research indicates that classroom discipline is the number one problem for inexperienced teachers. The purpose of Smith's study is to investigate English teachers' behavior management techniques. She observed and interviewed a random sample of recent Cortland graduates to obtain answers to the following questions: When do English teachers learn behavior management theories? At what point in their profession do they feel established in this realm? How long did it take before they had control over their classrooms?

### The Effects of Formal Grammar Instruction Alternatives on Student Learning Scott Stratton, Graduate Student

Research has shown that formal grammar instruction, grammar taught in isolation, through workbooks and exercise handouts, has little, if any, positive effect on student writing. What is the effect of alternative methods of instruction? The purpose of this study is to discover how the teaching of a grammatical concept using two non-traditional methodologies – teaching in context and sentence combining – and a Constructivist approach to teaching, followed by occasional review and exercise of that concept, influence students' use of that concept in future writing. Data collection will involve collecting student writing samples over the span of four weeks.

### Does Peer Conferencing Bolster Apprehensive Writers? Renœ Slayton, Graduate Student

Many highly apprehensive writers suffer from writer's block. Slayton looks at the relationship between writing apprehension and peer conferencing. She will determine whether or not peer conferencing alleviates the burden of writing for highly apprehensive writers and, in turn, makes them more confident. The study will be conducted in two high school classrooms.

#### What are the Reading Preferences of High School Students? Nathan Abel, Graduate Student

The New York State Education Department has made changes to the English Language Arts Core Curriculum requiring that high school students "be exposed to regular and varied opportunities to read 25 books or their equivalent per year." This new standard provides a compelling rational for the reexamination of the place of Young Adult literature in the English classroom. For this purpose, Abel conducted a survey of students in grades eight through twelve to determine the characteristics of the novels they choose to read on their own rather than for an in-class assignment. He inquires into traits of character, including age, sex, and ethnicity, displayed in the self-selected texts. In so doing he examines the place of Young Adult literature in the secondary school.

### Do High School Writers Have Adequate Word Processing and Keyboarding Skills? Michaelene L. Heieman, Graduate Student

Are student writers concentrating on critical thinking and composing or are they laboring over the mechanics of keyboarding? The purpose of this study is to determine if high school students possess the basic keyboarding skills necessary to make full use of the work processing software used in the composition classroom. Heierman collected her data by observing students in computer lab settings and by interviewing computer specialists in a sample of area schools.

#### Trials and Tribulations of Gangs

Ana Rodriguez, Dana Guardarramas, Suzanne Holzer, Jonathan Woody, La Toya Paige, Undergraduate Students

Groups such as gangs have been a part of history for thousands of years and their roots run deep into American's past and culture." The panel will explore the history of gangs to the present day. There will be an in-depth examination of the Bloods and Crips, street gangs and drug gangs as well as urban and suburban gangs. Issues of violence and prevention will also be included.

Family Altruistic Behavior, Informal and Formal Home Care, and Nursing Home Entry Decisions Kerneth J. Tomaszewski, Assistant Professor, Health

Decisions about nursing home entry, home-based informal care, and formal home care are extremely important. This project examines altruistic family behavior in these decisions. Neo-classical economic hypotheses are formally derived. These models assume families care about elders' well-being, defining utility dependence. Longitudinal Study of Aging 1984-1990 (LSOA) data are used for hypothesis testing with simultaneous trivariate probit models estimated for each dependent variable (nursing home entry, formal home care, and informal care). The results are that family utility dependence increases the likelihood of informal care and decreases formal home care likelihood. Informal care and financial support increase the likelihood of formal home care while informal care decreases the chance of entering a nursing home. These findings imply that informal care complements home care and substitutes for nursing home use. The trivariate probit has advantages over previous approaches. Complex long-term care decision-making extends beyond patients to their children.

#### The Relationship Between Child Physical Abuse and Depression Amanda Kathman, Undergraduate Student

Child physical abuse is becoming an increasingly common reality in children's lives. Physical abuse is a multifaceted problem that has many debilitating aftermath effects. The findings in this research paper, supported by non-clinical and clinical research studies, are organized around the relationship between physical abuse and childhood depression. This relationship provides a means by which readers can understand the risk factors and effects of childhood depression due to physical abuse. The risk factors addressed in this paper include gender, age, ethnicity, socio-economic status, parental psychological problems and high stress family environments. Additionally, this paper addresses the fact that childhood depression due to physical abuse can result in educational problems, social obstacles and possible young adult problems that could possibly lead to suicide.

Hitting the Ground Researching: Masters Candidates Designing Classroom Research Cynthia J. Benton, Associate Professor, Childhood/Early Childhood Stephanie Parrinello, Michele Baran, Julia Czerwinski, Master's Candidates

Increasing requirements for public school teaching accountability and concurrent changes in graduate programs have created conflicting emphases in two areas of young teachers' professional development. First, teachers must negotiate adjustments to their own teaching, their students' achievement and assessment, in a period of time when they are experiencing a sharp learning curve in their professional life and possible extensive personal change as well. Second, candidates must simultaneously learn and apply research techniques and fulfill requirements for a masters program with a focus on classroom application. This session explores the relationship between such perceived conflicting emphases, intending to address the following questions: Can classroom research help teachers think differently about their teaching responsibilities and student learning? How might new teachers' professional development be positively affected through the effective modeling of research techniques and definition of research problems?

#### Social Engagement as an Alternative to Reflective Practice Daniel Meyer, Assistant Professor, Adolescent Science Education

Reflective practice (Schön, 1983, 1987) has become an appealing and productive framework for teacher education programs. It advances a conception of teachers as professional practitioners who are engaged in constant reevaluation of their work. However, while the image of teachers (and other practitioners) put forth by reflective practice forms an appealing goal, there are fundamental flaws. Specifically, the theory is weak in mechanisms to insure reflection actually occurs, and has no means of validation to determine that the resulting practice is appropriate. Solutions to these problems can be found by an unambiguous embracing of

social engagement as a guiding framework. The use of the social by the current program in reflective practice is ambivalent at best. This paper will present a framework of social engagement that adopts the goals of reflective practice and addresses its shortcomings and cases of social engagement that demonstrate is utility in teacher development.

Student First Amendment Rights

Dawn Behrmann , Jennifer Walls, Erica Capozzi, Matthew Barone, Undergraduate Students, Cortland Chapter of Society of Professional Journalism

What are students' First Amendment Rights? In this presentation members of the campus chapter of the Society of Professional Journalists will conduct a mock trial on the issue, exploring constraints on speech as well as protections on speech. Ultimately, the issue revolves around student responsibilities and freedoms. This is the third year for the mock trial sponsored by SPJ and the Department of Communication Studies as a service to the campus community.

A Multidisciplinary Unit to Learn about World Cultures Susana Davidenko, Assistant Professor, Childhood/Early Childhood Karen Hempson, Lecturer, Childhood/Early Childhood Emily Klingbail and Heather Stocking, Undergraduate Students.

This presentation is designed to encourage pre-service teachers to use multidisciplinary approaches and team teaching at the elementary and intermediate school levels. The presenters show how such a unit was modeled for a cohort of PreK-6 pre-service teachers taking mathematics and social studies methods courses. Starting from the reading of a children's book, a multidisciplinary unit develops where students learn about an African country (Tanzania, the country of the book's character), its geography, economy, culture, tradition, and family values. Students in cooperative groups research the information from a variety of sources including atlases and Internet websites. Mathematics and reasoning skills are purposefully used throughout the unit. Authentic assessment could be done by teachers through the variety of tasks performed by the students and their reflections on their learning. This lesson serves as an example of how to integrate several content areas at the PreK-6 grade levels.

The Children's Reading Area: A hands-on, working resource for students, educators and families Lorraine Melita, Access Services Librarian
Emilie Kudela, Childhood/Early Childhood
Jami Bisesi, Undergraduate Student

A college library can serve as a resource for early literacy bringing together administrators, faculty, librarians, childcare staff, young children and their families. We will share our activities and give you a video tour of how we used some available space in the Teaching Materials Center of our college library to create a Children's Reading Area where everyone benefits.

COR 101 Students Offer Perspectives on an Orientation Program at Raquette Lake Thomas Mauro, Graduate Student

Research in recreation and leisure studies maintains that conscious program planning be based on best practices and the participation of stakeholders in the process. During the fall semester of 2002, COR 101 students were given an opportunity to assist in the creation of an orientation program. Needs assessment surveys were distributed to fifteen randomly selected freshman seminar classes. Students responded to questions regarding the impact of their summer orientation experience, knowledge of the Outdoor and Environmental Education Centers and their interests in an outdoor orientation experience at Raquette Lake. Results of the surveys will be presented followed by some discussion.

Phonological Awareness and Narrative Intervention with Children in Head Start Classrooms

Eileen Gravani, Assistant Professor, Speech Pathology & Audiology Jacqueline Meyer, Lecturer, Speech Pathology & Audiology Michie Swartwood, Assistant Professor, Psychology

This presentation features research that explored phonological awareness abilities in several preschool populations and compares two different procedures for targeting pre-reading skills. Initial research on middle class children identified a developmental trend in the acquisition of six phonological awareness tasks: rhyme detection and production, sentence and word segmentation and alliteration detection and production with scores improving with age and detection preceding production for rhyme and alliteration. Assessment of two Head Start classrooms revealed significant differences in all tasks compared with the earlier group. Children in one Head Start classroom received direct instruction in phonological awareness skills while children in the second received language stimulation only (narratives). Post-testing revealed a significantly higher mean in alliteration detection for the phonological awareness group. Information about assessment and intervention of phonological awareness and language skills at the pre-school level will be presented.

Red, White and Broadway

Kevin Halpin, Director, Musical Theatre, Performing Arts; David Neal, Assistant Professor, Performing Arts Kaleb Adams, Deena Badr, Jeff Brooks, Sarah Downs, Anthony Castellano, Laura Kabelka, Ashley Hyuge, Elizabeth Sinbeck, William Thomas, Undergraduate Students

This presentation is a musical revue celebrating the History of America, up to World War I, through songs from the Musical Theatre.