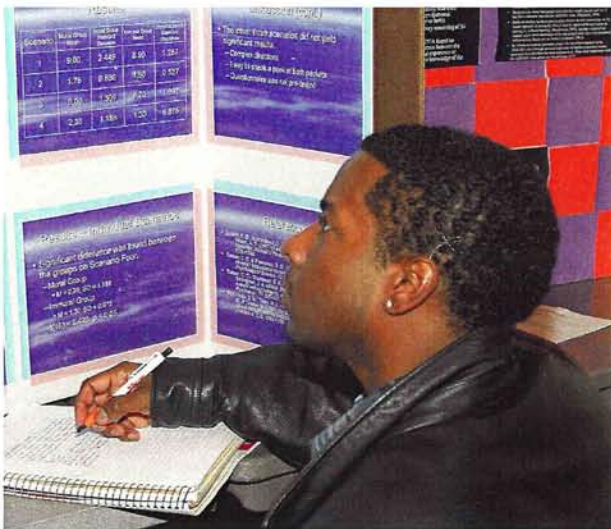


# WORD

## WestConn Research Day



*Celebrate the diversity of  
student research at WestConn.*



**April 22, 2005**

2 - 5 p.m.

Warner Hall, First Floor  
Midtown campus




WESTCONN RESEARCH DAY  
APRIL 22, 2005  
PROGRAM

- I. Opening Address**      **2:00 p.m. – 2:15 p.m.**  
First floor, Warner Hall      Dr. James Schmotter, President
- II. Poster Presentations**      **2:15 p.m. – 5:00 p.m.**  
First floor, Warner Hall      Undergraduate student posters  
Graduate student posters
- III. Seminar Presentations**      **2:30 p.m. – 5:00 p.m.**
- Seminar Session I*      *2:30 p.m. – 3:30 p.m.*  
Warner Hall – Room 201      Moderator: Dr. Richard Bassett
- Seminar Session II*      *2:30 p.m. – 3:30 p.m.*  
Warner Hall – Room 226      Moderator: Dr. Catherine Rice
- Seminar Session III*      *3:45 p.m. – 4:45 p.m.*  
Warner Hall – Room 201      Moderator: Dr. Robin Flanagan
- Seminar Session IV*      *3:45 p.m. – 4:45 p.m.*  
Warner Hall – Room 226      Moderator: Dr. Colleen Delaney

Refreshments will be served during the conference on the first floor of Warner Hall.

*Compliments of Student Affairs.*





**Seminar Session I**  
**2:30 PM – 3:30 PM**  
**Room 201 Warner Hall**

*Faculty Moderator: Dr. Richard Bassett*

**COMPUTER FORENSICS:  
AN ESSENTIAL INGREDIENT FOR CYBER SECURITY**

*Linda Bass\*, Paul O'Brien\**

*(Dr. Richard Bassett, Dept. of Management Information Systems)*

**(Abstract #24)**

**SECURITY AND OWNERSHIP OF  
PERSONAL ELECTRONIC DEVICES**

*Jason Foster\*, Rita Mack\* and Andrew Swiatlon\**

*(Dr. Richard Bassett, Dept. of Management Information Systems)*

**(Abstract #27)**

**WIFI AND CHEATING IN HIGHER EDUCATION**

*Nick Georgakopoulos\*, Erin Palomba\*, and Jennifer Windels\**

*(Dr. Richard Bassett, Dept. of Management Information Systems)*

**(Abstract #29)**

**LOOSING OUR PRIVACY:  
COOKIES, SPYWARE, AND USER PROFILING**

*Brian Gong\* and Elpidio Pinto\**

*(Dr. Richard Bassett, Dept. of Management Information Systems)*

**(Abstract #30)**

**\* = undergraduate presenters**



22. **TAX IMPLICATIONS OF THE SALE OF GOVERNMENT GRANTED WATER RIGHTS**  
*Shaun Wayawotzki (Dr. Michele Ganon, Dept. of Accounting)*

A partnership was granted an allocation of water from a federal irrigation project. After several years the partnership no longer required the water rights and chose to sell them to an adjacent land owner. The tax consequences of this sale depend on the nature of the gain and the partnership's basis in the water rights. Through the use of traditional legal research methods it was determined that the gain on the sale was capital, and the partnership could allocate some of the initial purchase price of the land.

## UNDERGRADUATE SEMINAR SESSION PRESENTATIONS

23. **VALIDATION OF THE LOCAL ACCURACY OF ATMOSPHERIC RADIATIVE TRANSFER MODELS**  
*Daniel Asselin (Dr. J. P. Boyle, Dept. of Physics, Astronomy and Meteorology)*

Detailed characterization of atmospheric infrared radiation is critical for monitoring climate change and assessing the atmospheric energy balance. Ensuring that physics-based computer model predictions closely agree with measured radiation data is important for prediction. In our research, atmospheric temperature and humidity data from Brookhaven NY, Albany NY, and Chatham MA are inputs to radiative transfer models allowing estimation of atmospheric infrared radiation in the Long Island Sound Region. Radiative transfer model calculations are compared to actual shipboard measurements made aboard the R/V Connecticut from 26-30 July 2004.

24. **COMPUTER FORENSICS: AN ESSENTIAL INGREDIENT FOR CYBER SECURITY**  
*Linda Bass, Paul O'Brien (Dr. Richard Bassett, Dept. of Management Information Systems)*

Computer forensics uses computer investigation and analysis techniques to collect evidence regarding computer activity and its admissibility in a court of law. Computer forensics requires possession of an intricate mix of technical skills, legal knowledge and ethical behavior patterns. Computer forensics specialists use powerful software tools to uncover and sort through data and uncover the important facts that must then be presented appropriately in a court of law. Cyber crime is exploding and computer forensics is the vital discipline that has the power to control this outburst.

25. **THE LIFE EXPERIENCES OF PARENTS OF CHILDREN WITH MENTAL DISABILITIES**  
*Maria Butt (Dr. Steve Ward, Dept. of Social Sciences)*

Parents of children with disabilities are often forced to deal with a host of unforeseen complications in their daily lives. Parenting these children can be far more demanding and time-consuming than parenting children without disabilities. The objective of this research is to understand the daily life experiences of these parents, with particular focus on the ways these parents are treated by schools, friends and family. This research uses in-depth interviews of parents of children with disabilities in the Danbury area to identify common coping strategies utilized by these caregivers, as well as variations that may exist based on social class and other demographic factors.

26. **A NEW FUNCTIONAL PROGRAMMING LANGUAGE WITH DYNAMIC SYNTAX**  
*Tianran Chen (Dr. Gancho Ganchev, Dept. of Computer Science)*

The syntax of most programming languages is static and usually cannot be changed substantially by programmers. In this research, a new functional programming language was developed with no keywords and fully dynamic syntax. This allows programmers to choose their favorite style of programming – from pure functional to pure imperative – and thus may lead to more productivity. In particular, we believe that using functional style in imperative context helps write concise, elegant and well maintainable programs. The full control of the programmer over the language syntax may also result in program statements in non-English languages. A demonstration will be provided.

27. **SECURITY AND OWNERSHIP OF PERSONAL ELECTRONIC DEVICES**  
*Jason Foster, Rita Mack and Andrew Swiatlon (Dr. Richard Bassett, Dept. of Management Information Systems)*

Love them or leave them – and do we ever leave them – everywhere, as in lost or stolen. What are they? Those ubiquitous devices more commonly known as cell phones, Blackberries, portable computers, PDAs and, jump or flash drives. These devices carry confidential information, that when mishandled, may cause financial, corporate and personal problems.



28. **TBICO (THE BRIDGE TO INDEPENDENCE & CAREER OPPORTUNITIES): A NONPROFIT ORGANIZATION SERVING THE 'WORKING POOR' IN THE DANBURY AREA**  
*Ron Gainer and Dan Ryan (alumni) (Dr. Karen L. Koza, Dept. of Marketing, and LouAnn Bloomer, President & CEO, TBICO)*
- "In today's cutthroat job market, the bottom rung is as high as most workers will ever get (Business Week, May 31, 2004)." The working poor accounts for approximately 4.7% of our population (Census 2000), the majority being single women with children. TBICO assists individuals (primarily single women with children) by offering training, education, and placement services, enabling them to earn a livable wage with benefits, and hence, allowing them to break the poverty cycle affecting many families in the Danbury area. In order for TBICO to continue to successfully serve their market, they need to grow their relationships with various stakeholders (i.e., funders, volunteers, corporations, potential clients). Our study contributes to TBICO by helping this organization write and implement a marketing plan, strategically directing this organization for success within their market.
29. **WIFI AND CHEATING IN HIGHER EDUCATION**  
*Nick Georgakopoulos, Erin Palomba, and Jennifer Windels (Dr. Richard Bassett, Dept. of Management Information Systems)*
- Technological advances devised to make life more convenient for students are also making it easier for them to cheat. New technological devices are allowing students to pass answers to one another during exams, use the internet to copy and paste information, and use the rationale that "everyone cheats" to validate their unethical behavior. A US News and World Reports study found that 90% of students believe that cheaters are either never caught or have never been appropriately disciplined. We will identify the tools currently being used for cheating and the measures instructors and institutions must take to overcome this issue.
30. **LOOSING OUR PRIVACY: COOKIES, SPYWARE, AND USER PROFILING**  
*Brian Gong and Elpidio Pinto (Dr. Richard Bassett, Dept. of Management Information Systems)*
- Do you ever have the feeling that someone is watching when you are browsing the web? The truth is that your internet browser records a variety of information about you. Personal information such as your name, billing/shipping address, credit card information, social security number, and so on, are kept in a special file called "cookie." Despite the harmless name, a cookie offers the potential to track, profile, and monitor users on the internet. The extensive collection of cookies in someone's computer is considered a valuable marketing tool by marketing companies who gather this information, mostly without user's permission and/or knowledge.
31. **EXPLICITLY CORRELATING ALTRUISM AND SUCCESS TO INFLUENCE MOTIVATION FOR HELPING OTHERS**  
*Laura Skrip and Morgan McClain (Dr. Robin Flanagan, Dept. of Psychology)*
- Eighteen female undergraduates from Western Connecticut State University participated in a study investigating whether or not their awareness of a situation in which altruistic behavior was greatly, moderately, or slightly correlated to job success would influence their own willingness to engage in voluntary, altruistic acts. Each participant was randomly assigned to one of three conditions, varying only in the degree of this correlation between altruism and job rewards. Individuals' responses to a researcher-generated "Willingness Scale" were calculated and compared using a one-way, between-subjects analysis of variance. Although the statistical results revealed no significant link between the participants' independent variable levels and their willingness to engage in "help-others," volunteer acts, such results were suggestive enough for further research to be conducted in this area of job rewards and motivated altruism.
32. **CLOUD FORCING INFLUENCE ON DOWNWELLING INFRARED RADIATION**  
*Robert Tabor (Dr. J.P. Boyle, Dept. of Physics, Astronomy & Meteorology)*
- Clouds affect the amount of insolation as well as the likelihood of precipitation. Clouds also influence the amount of downwelling atmospheric infrared radiation received at the surface. Greater cloud coverage and a lower cloud deck results in more downwelling infrared radiation. In our research, data (cloud coverage and height as well as temperature and relative humidity) from National Weather Service ground stations and Long Island Sound buoys were inputted into several parameterizations. Preliminary results indicated good agreement between parameterizations and measurements. A better ability to measure cloud coverage and extent would be useful to improve accuracy.

**WestConn Research Day is co-sponsored by  
The Office of Academic Affairs and The Office of Student Affairs**

**Appreciation & thanks to the people who made this event possible:**

Dr. James Schmotter, President  
Dr. Walter Bernstein, Vice President of Student Affairs  
Dr. Gene Buccini, Vice President of Academic Affairs  
Dr. Lynne Clark, Dean of the School of Professional Studies  
Dr. Ellen Durnin, Dean of the Graduate School  
Dr. Allen Morton, Dean of the Ansell School of Business  
Dr. Linda Vaden-Goad, Dean of the School of Arts and Sciences  
Office of Publications and Design  
Office of Public Relations

*WRD Volunteers*

Alison Damon	Debbi Johnson
Sharon DeWitt	Erica Murphy
Elizabeth Panciera	Stephanie Fernandes
Kimberly Cardio	Rachel Pote
Melissa Grant	

*WRD Committee*

Dr. Richard Bassett, MIS Department  
Dr. Colleen Delaney, Nursing Department  
Dr. Robin Flanagan, Psychology Department  
Dr. Chris Kukk, Social Sciences Department  
Dr. Susan Maskel, Biology Department  
Dr. Catherine Rice, Nursing Department  
Dr. Paula Secondo, Chemistry Department