

The Thirteenth Annual

Undergraduate Expo



March 21-22

2011

Undergraduate Expo 2011

Western Carolina University

March 21-22

Welcome

The thirteenth Undergraduate Expo features 263 student presenters and 77 faculty sponsors, spread over thirty departments and programs and two days. Through this event, Western Carolina University celebrates undergraduate achievement, with presentations representing the creative thinking, research, practice, service, calculation, writing, and editing that occurs every day our institution is open, in studios, labs, classrooms, and out in the field. *Please take some time to attend a presentation, even one that is out of your discipline, to learn more about what is taught and learned at your university.*

The Expo Reception

The reception for students, faculty sponsors, and the community at large will begin at **5:30 p.m. on Monday, March 21, in the Grand Room at the University Center.** A brief program will start at 6:00 p.m. in the Grand Room, where the RODIN award will be announced.

Poster Session

The Expo Poster Session will be held in and around the University Center Grand Room from 5:00 p.m. to approximately 6:30 p.m. on Monday, March 21.

Press Releases for Student Presenters

WCU's Office of Public Relations routinely sends news releases about student activities and honors to the students' hometown/local newspapers. Participants in the Undergraduate Expo who wish to take advantage of that service should visit the Web site <http://www.wcu.edu/22961.asp> to fill out an online form and submit it via e-mail to the Public Relations Office.

The Public Relations Office also can send photographs of students to their hometown/local newspapers to accompany the news releases. Students who wish to take advantage of that service are invited to come to Room 420 in H.F. Robinson Administration Building to have their photographs taken between 2 p.m. and 5 p.m. on one of these days: Wednesday, April 6; Wednesday, April 20; or Wednesday, May 4.

Students with scheduling conflicts that prevent them from taking advantage of these photo sessions may make a special appointment to have a photograph taken by calling the Public Relations photography office at 828-227-3081. Students' personal photos will be considered for use, depending on quality. Portrait-quality head-and-shoulders shots may be e-mailed to rholcomb@wcu.edu.

National Conference on Undergraduate Research (NCUR)

This year NCUR will be on the campus of the Ithaca College, Ithaca, New York, March 30 - April 2. Please check the program on the next page for the complete list of the 69 NCUR25 abstracts accepted; this year, **WCU is fourth in the nation in the number of accepted abstracts and once again number one in North Carolina.**

Acknowledgments

Without students to do the work and faculty members to mentor them, there would be no Expo. Many thanks to them, and to the deans, associate deans, directors, and department heads who did so much to help promote the Expo this year!

National Conference on Undergraduate Research 2011

Below are the projects accepted, titles, student presenters, and their sponsors for NCUR25. Funding for travel to NCUR25 was made possible by Honors College Advisory Board members and assistance from the Office of the Chancellor.

Anthropology & Archeology

*Cross Cultural Comparison of Medicine And
Medicine Folklore: Cherokee and Irish*

Bethel Bower, presenter
Anne Rogers, sponsor

*Exploring Cherokee Foodways Through Raman and
Fourier Transform Infrared Spectrometry*

Tina Crowe, presenter
Jane M. Eastman, sponsor

Mass Graves of Guatemala

Neisha Harding, presenter
Dr. James D. Davis, sponsor

*Applying Microanalysis Techniques to Forensic Cases
Involving Dismemberment*

Lacy Hoyle, presenter
Cheryl Johnston, sponsor

Art & Media Studies

Dream Time

Brandon Chapman, presenter
Brian Railsback, sponsor

Business/Finance/Accounting

*Don't Go with Your Gut: Using Data-Driven
Analyses to Determine Budget Cuts*

Jay Aldridge, presenter
Barbara Jo White, sponsor

Code of Ethics?

Michael McLamb, presenter
Kyuho Lee, sponsor

*Cell & Molecular Biology Interactions Between
Chemotaxis-Like Signal Transduction Pathways in Azo-
spirillum Brasilense*

Tess Branon, presenter
Gladys Alexandre - U. of Tennessee, sponsor

Chemistry

*Lanthanide-Based Nanomaterials with Enhanced
Luminescence and Magnetic Properties for
Biomedical Imaging Applications*

Lauren Runken, presenter
Dr. Channa De Silva, sponsor

Communications

*How Clarence Thomas Squeaked By a Senate
Judiciary Vote by Benefit-of-the Doubt Strategy*

Christopher Younts, presenter
Pamela Harris, PhD., sponsor

Criminology

*Los Estados Unidos Drogados: Narcotics, Violence and
the Mexican-American Connection*

Erin Andrews, presenter
Dr. James D. Davis, sponsor

*Comparison of Self-Reported Crime and Official
Crime Statistics at Western Carolina*

Donnielle Foster, presenter
Cyndy C. Hughes, sponsor

*The CSI Effect: A Few Rare Cases or a Changing
of Juror Mentality?*

Cayli Meizel, presenter
Leonard Knight, sponsor

Ecology & Organismal Biology

*The Effect of Germination Time on Acorn
Predation*

William Ford, presenter
Beverly Collins, Kathy Mathews, sponsor

*Salamanders and the Ecology of Fear: Behavioral
Responses to Predation Risk*

Mariah Hornby, presenter
Joseph H.K. Pechmann, sponsor

Economics

Income Inequality in the United States and Historical Solutions

Matthew Sutter, presenter
Inhyuck Ha, sponsor

An Economic and Policy Analysis of South Korea as the Top Producer in the World's Ship Building Industry

Eun-jung Woo, presenter
James M. Arnott, sponsor

Education

Perceptions of Special Education and General Education Teachers on Students with Physical and Intellectual Disabilities in the Classroom

Ashley Anderson, presenter
Valerie M. Mazzotti, PhD, sponsor

Special Education Teachers Perceptions of Using "Scientificallly-Based" Research Practices to Teach Students with Moderate/Severe Disabilities

Amber Anderson, presenter
Valerie M. Mazzotti, PhD, sponsor

Researching Farm to School: Integrating Farm Field Trips, Nutrition, Cooking, and Gardening into an Already Filled Third Grade Curriculum

Sarah Malcolm, presenter
Dr. Patricia Bricker, sponsor

Connecting Farm to School Activities and Required Curriculum: An Action Research Project in a Kindergarten Classroom

Carol Norris, presenter
Dr. Patricia Bricker, sponsor

Civic Education for Teenagers: Educating Effective Citizens

Amanda Smith, presenter
Dr. Christopher Cooper, sponsor

Enhancing the Learning Experience

Christine Weathers, presenter
Dr. Terry Rose, sponsor

English

Feminism, Sexuality, and Myth in H.D.'S Sea Garden

Kayla Beauduy, presenter
Dr. Annette Debo, sponsor

John Keats, the Apothecary Surgeon of "Ode To A Nightingale"

Taylor Fie, presenter
Brent E. Kinser, sponsor

Things Fall Apart: The Real Housewives of Igbo Culture

Kayla Jones, presenter
Laura Wright, sponsor

"You Rememory Me?": The Role of the Past in Toni Morrison's Beloved

Elizabeth Nissly, presenter
Dr. Annette Debo, sponsor

Environmental Studies & Sciences

Actual Versus Perceived Recycling by Western Carolina University Students

Austin Brooks, presenter
Dr. Laura Dewald, sponsor

Film/Photography Studies

The Hitchcock Blonde and How She Drives the Thriller

Donnie Lambert, presenter
Dr. Elizabeth Heffelfinger, sponsor

Health Sciences & Public Health

Joint Hypermobility in a High School Female Athlete

Ashley Bracken, presenter
James Scifers, sponsor

Traumatic Facial Nerve Palsy in a High School Football Player

Heather Brown, presenter
James Scifers, sponsor

Health Sciences and Public Health

(continued)

"The Effect of Substituting Resistant Starch for All Purpose Flour in Wheat Bread on Fiber and Flavor"

Frances Childers, presenter

Mary Baldwin Sanders, sponsor

Taste Acceptance of Bread Made with Resistant Starch Compared to All Purpose Flour

Chloe Greene, presenter

Mary B. Sanders, April Tallant, sponsor

Not In My Backyard...Unless I'm Poor, Uneducated or a Person of Color: The Toxicity of PCBs,

Midnight Dumping, and Environmental Racism in Warren County, North Carolina

Erin Gymburch, presenter

Dr. Burton Ogle, sponsor

Farm Fresh Taste: Acceptability of Local Produce among School-Aged Children

Patricia Hipgrave, presenter

April Tallant, sponsor

Impacted Zygomatic Tripod Fracture in a High School Soccer Player

Andrea Kaufman, presenter

James Scifers, sponsor

Potential Use of an Ozonator to Improve Air Quality in Unoccupied Spaces

Amanda McQueen, presenter

Dr. Burton Ogle, sponsor

Comparison of Noise Emissions of Standard Electric and Gas-Powered Chainsaws

Amanda McQueen, presenter

Dr. Burton Ogle, sponsor

Non-Contact Posterior Hip Subluxation in a Collegiate Football Player Resulting in an Acetabular Fracture

Emily Whittington, presenter

Ashley S. Long, sponsor

History

Between the Lines of Longitude: An Alternate Look into the Longitude Problem and John Harrison's Prize

Hope Alwine, presenter

Dr. Richard Starnes, sponsor

Interdisciplinary Studies

"My Eiffel Tower is No Minaret" - Anti-Islamic Discrimination in France

Corey Atten, presenter

Dr. James D. Davis, sponsor

Framing Liberation in Latin American Social Movements

Mary Beth Fallin, presenter

Lori Oxford, sponsor

Literature

Santiago's Ascension: Mortality and Transcendence in Ernest Hemingway's The Old Man and The Sea

Andrew Benton, presenter

Brent E. Kinser, sponsor

Portrait of a Monster: Class Differences in John Fowles's The Collector

Travis Mullen, presenter

Dr. Annette Debo, sponsor

Satan is America: John Milton, Thomas Jefferson, and the Foundations of A New Republic

Christopher Rollins, presenter

Mary Fenton, sponsor

Time: A True Miltonic Villain

Kimberly Waddell, presenter

Dr. Mary Fenton, sponsor

Management

Mama Always Said, "You Shouldn't Say Shut Up," Was She Right?

Shannon Owen, presenter

Theresa A. Domagalski, sponsor

Microbiology & Immunology

Prokaryotic 16s rDNA and Ammonia Monooxygenase

Gene Diversity from an Imperiled Keystone Tree

Species

Julie Carter, presenter

Dr. Sean O'Connell, sponsor

Music

*Now You Hear It, Now You Don't: Observing
Constructive and Destructive Interference of Sound
and How it Pertains to Instrumental Ensembles*

Kelsey Stover, presenter

Dr. Eldred Spell, sponsor

Physical/Occupational Therapy/ Speech Language Pathology

A Life Without Knees: Restructured and Redeveloped

Jessie Conner, presenter

Joseph Mathews, sponsor

Poetry & Creative Writing

Clearest Minds of a Clouded Generation

James Ruff, presenter

Beth Huber, sponsor

Political Science

*The Problem With No Child Left Behind: A Study
on the Correlation Between Community Type and
a School's Adequate Yearly Progress Score in North
Carolina Schools*

Hope Alwine, presenter

Dr. Daniel Bromberg, sponsor

Drug Bust: The War on Drugs and is it Working?

Mitchell Bridges, presenter

Dr. Chris Cooper, sponsor

*The Sound of Music; Examining Cultural Differences
in Political Parties*

Lea Anna Bright, presenter

Dr. Chris Cooper, sponsor

Does Type of Government Affect Overall Happiness?

Catherine Denning, presenter

Dr. Christopher Cooper, sponsor

*The Technological, Economic, and Political Potential
of the Alternative Energy Industry*

Mitchell Rosewall, presenter

Dr. Christopher Cooper, sponsor

Terrorism: The Effects of Corruption

Hayden Smith, presenter

Niall Michelsen, sponsor

*How September Eleventh Changed the United States
and Pakistan Relationship*

Catherine Stiers, presenter

Jennifer Schiff, sponsor

Psychology

*The Necker Cube: An Alternative Measure of Direct
Attention*

Jessica Hurlbut, presenter

Windy Gordon, sponsor

The Freshman 15; How Real is Race

Rachel Lockett, presenter

Dr. John Habel, sponsor

*Sex Differences in Cognitive Mapping and Sense of
Direction*

Amanda McNally, presenter

James Goodwin, sponsor

*Mammification of the African-American Woman;
How Black and White College Students Perceive
Aunt Jemima*

Mahogany Smith, presenter

Dr. John Habel, sponsor

*An Analysis of Attachment and Attachment
Disorder in Early Childhood*

Alisha Smith, presenter

Dr. John Habel, Mickey Randolph, sponsor

Sociology

Game On—Understanding The Nintendo Ds as a Socializer in Childhood: From the Child's Perspective; From The Adult's Perspective

Nicholas Weitzel, presenter

Marilyn Chamberlin, sponsor

The Culture War's Littlest Crusaders: The Orthodox Allies' Last Hope

Mary Beth Fallin, presenter

Peter Nieckarz, sponsor

Theatre/Drama

Theatre Games/Exercises and their Effect on Thespians

Benjamin Chafetz, presenter

Deryl Victor Caitlyn, sponsor

Creating a 1938 Period Look for Women With Contemporary Eveningwear.

Sarah Hardy, presenter

Susan K. Brown-Strauss, sponsor

Women and Gender Studies

"Is it a Choice?"

Amanda Bienhaus, presenter

Lorrie Willey, sponsor

End the Silence: An In-Depth Look at Why the Congo is Still the Rape Capital of the World

Kayla Coe, presenter

Robin Payne, sponsor

Undergraduate Expo 2011

Presentations will be held at Western Carolina University, March 21-22, according to college and department. Below are the project titles, presenters, sponsors, time, and place of presentation.

* ~ denotes a presentation also selected for NCUR25

Monday, March 21, 2011

Poster Session

5:00 - 6:30 PM ~ University Center Grand Room & Lobby

Students are invited to set up posters in the Grand Room after 4:30 p.m.

College of Arts and Sciences

Biology

16s rDNA of Bacteria and Archaea and amoA of Archaea and Bacteria Obtained from Root and Soil Samples Collected from Three Eastern Hemlock Trees (Tsuga canadensis) in the Great Smoky Mountains National Park Along the Keport Prong Trail
Student Presenter: Julie Carter
Faculty Sponsor: Sean O'Connell

Using a Catalytic Beacon to Identify Effective siRNA Target Sites
Student Presenter: Susan Clark, Olena Northrup
Faculty Sponsor: Christopher Coburn

Use of Pteridine and Lipofuscin Fluorescence for Age Determination in Apis mellifera
Student Presenter: Christina Kotraba
Faculty Sponsor: Christopher Coburn

PR Meets Wellness
Student Presenter: Gabby Robinson
Faculty Sponsor: Weaver Haney

HERDA: A Genetic Disease in Horses
Student Presenter: Kathy Turnbull
Faculty Sponsor: Indrani Bose

Chemistry & Physics

Perceived vs. Actual Recycling Among Students at WCU
Student Presenter: Austin Brooks*, Kindra Foy
Faculty Sponsor: Laura E. DeWald

Planetary Fit
Student Presenter: Sarah Dinkins
Faculty Sponsor: Enrigue Gomez

Dirty Bombs: Destruction or Distraction?
Student Presenter: Adam Flaherty
Faculty Sponsor: Matthew Rave

A Laboratory Evaluation and Comparison of The Release Rates of Oriental Fruit Moth in Soy, Paraffin, and Microcrystalline
Student Presenter: Afton Harris
Faculty Sponsor: Cynthia Atterholt

Antitumor Oplopane Sesquiterpenoids from Arnoglossum atriplicifolium
Student Presenter: Kristin M. Naylor
Faculty Sponsor: Jason Clement

Lanthanide-based Nanomaterials with Enhanced Luminescence and Magnetic Properties for Biomedical Imaging Applications
Student Presenter: L. Blair Runken*
Faculty Sponsor: Channa De Silva

Chemistry and Physics (continued)

DNA Extraction from Bone Demineralization

Student Presenter: Alexandra Witter

Faculty Sponsor: Brittania Bintz

English

MacDonald's Spiritual Evolution in Narnia's Animals

Student Presenter: Anne Catherine "Kate" McRae

Faculty Sponsor: James Addison

Charles Dickens: His Life and His Work

Student Presenter: Elizabeth Nissly

Faculty Sponsor: Brent Kinser

Charles Dickens the Revolutionary Reader: A Christmas Carol on Stage

Student Presenter: Christopher Rollins

Faculty Sponsor: Brent Kinser

Geosciences & Natural Resources

Groundwater Flow Through Fractures in Crystalline Rock at Coweeta Hydrologic Laboratory, North Carolina

Student Presenter: Lily Savitsky

Faculty Sponsor: Cheryl Waters-Tormey

The Effects of Magnetic Interactions and Concentrations on Magnetic Remanence and Magnetic Fabrics

Student Presenter: Michael D. Stillwagon Jr

Faculty Sponsor: Cheryl Waters-Tormey

Assessing Ruffed Grouse Populations and Habitats at Balsam Mountain Preserve

Student Presenter: Kyle Underwood

Faculty Sponsor: Ronald Davis

Mathematics & Computer Science

Developing Mobile Applications for Use in Teaching a Mobile Applications Development Course

Student Presenter: Christopher Blades

Faculty Sponsor: Mark Holliday

Modern Foreign Languages

"My Eiffel Tower is no Minaret" - Anti-Islamic Discrimination in France

Student Presenter: Corey Atten

Faculty Sponsor: Jamie Davis

Mass Graves of Guatemala

Student Presenter: Neisha Harding*

Faculty Sponsor: Jamie Davis

Political Science and Public Affairs

What's Happening? Acceptance and Use of New Media in Parliament and Congress

Student Presenter: Caroline Wright

Faculty Sponsor: Gibbs Knotts

College of Business

Accountancy, Finance, Information Systems and Economics

Unemployment; How it is Affecting our Economy?

Student Presenter: Steven Blake Boley

Faculty Sponsor: Robert Mulligan

Fuel Consumption of Panamax Ships vs New Panamax Ships

Student Presenter: Brittany Burch

Faculty Sponsor: Robert Mulligan

Forecasting Home life with Regression

Student Presenter: Sydney Burruss

Faculty Sponsor: Robert Mulligan

Unemployment Forecasting

Student Presenter: Jacob Calloway

Faculty Sponsor: Robert Mulligan

Job Availability for Upcoming College Graduates

Student Presenter: Andrew Carter

Faculty Sponsor: Robert Mulligan

Fuel Consumption and Emissions for 4500 and 9000 TEU Ships

Student Presenter: Benjamin Collette

Faculty Sponsor: Robert Mulligan

Panama Canal Expansion: Good For the Environment?

Student Presenter: John Cory Combs

Faculty Sponsor: Robert Mulligan

Forecasting 2011 Unemployment

Student Presenter: Matthew Core

Faculty Sponsor: Robert Mulligan

Environmental Impacts of Expanding the Panama Canal to Allow for Larger Panamax Container Vessels

Student Presenter: Dakota Cutshall

Faculty Sponsor: Robert Mulligan

An Environmental Comparison of a 4,000 TEU Panamax and a 10,000 TEU New Panamax Container Vessel

Student Presenter: Travis Dean

Faculty Sponsor: Robert Mulligan

Using the Phillips Curve and FRED Data to Forecast Unemployment

Student Presenter: Jason Eades

Faculty Sponsor: Robert Mulligan

By Land or By Sea: Is the New Panamax 10000 TEU Ship a More Environmental and Economically Sustainable Way to Ship Cargo?

Student Presenter: Krisha Faw

Faculty Sponsor: Robert Mulligan

Estimating the Phillips Curve and Unemployment Rate for 2011

Student Presenter: Vickie Funk

Faculty Sponsor: Robert Mulligan

Forecast Unemployment for January to December 2011

Student Presenter: Barbara A. Garner

Faculty Sponsor: Robert Mulligan

Environmental Impact of Panama Canal Expansion

Student Presenter: George Hahn

Faculty Sponsor: Robert Mulligan

Will New Panamax Vessels Travel More Efficiently With Fewer Emissions?

Student Presenter: Wesley Hall

Faculty Sponsor: Robert Mulligan

Unemployment Rate for 2011

Student Presenter: Benjamin Harrison

Faculty Sponsor: Robert Mulligan

Accountancy, Finance, Information Systems and Economics (continued)

Comparing the Energy Requirements for Two Sizes of Panamax Vessels (4000 TEU And 11000 TEU) to Those of Semi-Trucks and Trains

Student Presenter: Andrew Harsey
Faculty Sponsor: Robert Mulligan

2011 Unemployment Forecast based on Historical Unemployment and Inflation Rates

Student Presenter: Jonathan Jeuck
Faculty Sponsor: Robert Mulligan

Projected Unemployment Rate for 2011

Student Presenter: Reed Jones
Faculty Sponsor: Robert Mulligan

Effects of the Canal Expansion Project on Efficiency between Current Ship Sizes, New Ship Sizes, and Ground Transport, as well as Pollution Concerns

Student Presenter: Robert G Kreza
Faculty Sponsor: Robert Mulligan

Evaluating the Environmental Impact of the Panama Canal Expansion Project

Student Presenter: Patrick Lacienski
Faculty Sponsor: Robert Mulligan

2011 Rise and Fall of Unemployment

Student Presenter: Brodie Lowe
Faculty Sponsor: Robert Mulligan

Where Are the Jobs?

Student Presenter: Michael McLamb
Faculty Sponsor: Robert Mulligan

Comparison Between Truck, Train, and Panamax Shipping Vessels to Determine the Most Efficient Delivery Method

Student Presenter: Lacy McMinn
Faculty Sponsor: Robert Mulligan

2011 Unemployment Forecast

Student Presenter: Naim Mehovic
Faculty Sponsor: Robert Mulligan

With the Expansion of the Panama Canal, new Panamax Vessels will have Lower Emissions

Student Presenter: Benjamin Melton
Faculty Sponsor: Robert Mulligan

Forecasting the Unemployment Rate with the Phillips Curve

Student Presenter: Natalie Navi
Faculty Sponsor: Robert Mulligan

Unemployment Regression Forecast 2011

Student Presenter: Matthew Page
Faculty Sponsor: Robert Mulligan

Freight Transportation by Ship: an Evaluation of Panama Canal Expansion and the Effects of Ship Size, Efficiency, and Pollution on the Environment

Student Presenter: Thomas Pagels
Faculty Sponsor: Robert Mulligan

Unemployment Rate Forecast for 2011

Student Presenter: Rachel Pedo
Faculty Sponsor: Robert Mulligan

Evaluation of Pollution Emissions Between 5000 TEU Panamax and 12500 TEU New Panamax Ships

Student Presenter: Paul Pittman
Faculty Sponsor: Robert Mulligan

Unemployment Forecast for 2011

Student Presenter: Scott T. Richmond
Faculty Sponsor: Robert Mulligan

The Phillips Curve and Its Significance In Forecasting Unemployment

Student Presenter: David Ross
Faculty Sponsor: Robert Mulligan

New Panamax Ships vs Old Panamax Ships Due to the Panama Canal Expansion

Student Presenter: Christopher Sandel
Faculty Sponsor: Robert Mulligan

Accountancy, Finance, Information Systems and Economics (continued)

Fuel Consumption and Emissions Comparison of Current and New Panamax Ships
Student Presenter: Jacob Sinclair
Faculty Sponsor: Robert Mulligan

Comparing Oil Consumption, Carbon Dioxide, and Nitrogen Oxide Emissions between Panamax Vessels and Trucks/Trains
Student Presenter: Joshua Tipps
Faculty Sponsor: Robert Mulligan

Is the Expansion of the Panama Canal a Positive Step Forward for Lowering Transportation Emissions?
Student Presenter: Kyle Underwood
Faculty Sponsor: Robert Mulligan

The Unemployment Dilemma
Student Presenter: Austin Walker
Faculty Sponsor: Robert Mulligan

Comparison of Energy Usage, Emission Levels, and Fuel Consumption of Panamax and new Panamax Vessels Traveling from Los Angeles to New York City
Student Presenter: Ben Watkins
Faculty Sponsor: Robert Mulligan

The Unemployment Rate: Will it Rise or Fall?
Student Presenter: Michael Whitlock
Faculty Sponsor: Robert Mulligan

An Economic and Policy Analysis of South Korea as the Top Producer in the World's Ship Building Industry
Student Presenter: Eun-jung Woo*
Faculty Sponsor: James Mike Arnott

Business Administration and Law and Sport Management

Who Needs a Jury When We Have Nancy Grace? - The Influence of Media Publicity on High-Profile Court Cases
Student Presenter: Natalie Cannon
Faculty Sponsor: Janet Ford

Is Free Speech Going to Hell? Thank God for Fervent Funeral Protesters
Student Presenter: Kyle Smith
Faculty Sponsor: Janet Ford

Global Management and Strategy

Title IX, Is it Really Fair?
Student Presenter: Andrew Fowkes
Faculty Sponsor: Gary Fetter

Education and Allied Professions

Elementary & Middle Grades Education

David Wiesner- Not your Ordinary Author
Student Presenter: Alisha A. Smith
Faculty Sponsor: Roya Scales

Health, Physical Education & Recreation

Kinesiology in Gymnastics
Student Presenter: Elizabeth Hill
Faculty Sponsor: Maridy Troy

Human Services

Basics of Effective Mentoring
Student Presenter: Kriston Haynes
Faculty Sponsor: Marie-Line Germain

Psychology

A Multicultural Approach in the Elementary Education Classroom

Student Presenter: Tia Hughes

Faculty Sponsor: John Habel

"Using the Necker Cube to Measure Attention"

Student Presenter: Jessica L. Hurlbut*,

Christopher J. Macemore

Faculty Sponsor: Winford A. Gordon

*Abortion, Animal Rights, and Anthropomorphism:
The Relationship Between Anthropomorphism and
Moral Values*

Student Presenter: Jonathan Long

Faculty Sponsor: Hal Herzog

Direct Attention and Fatigue

Student Presenter: Seth M. Sherrin

Faculty Sponsor: Winford Gordon

*A Formal Observation of Study Habits of College
Students at a College Library*

Student Presenter: Nicholas A Stevens, Michelle
McCall

Faculty Sponsor: Thomas Ford

Fine and Performing Arts

School of Art and Design

Swarovski Crystal: Chic or Bleak?

Student Presenter: Megan Garrett

Faculty Sponsor: Erin Adams

School of Stage and Screen

The Dreaming Tree

Student Presenter: Carey McKelvey, Liz Oslund

Faculty Sponsor: Jack Sholder

Arts Advocacy: Using the Arts To Promote Awareness

Student Presenter: Amanda Wilson

Faculty Sponsor: Glenda Hensley

Health and Human Sciences

Criminology and Criminal Justice

Latin American Children: Stress, Location and Gang Membership

Student Presenter: Irene Diaz Clark
Faculty Sponsor: Lisa Briggs

Guilty by Science

Student Presenter: Sarah Zucca
Faculty Sponsor: Albert Kopak

Effectiveness of Domestic Violence Shelters

Student Presenter: Brittany Banks, Seth Carver
Faculty Sponsor: Jamie Vaske

Domestic Violence Services in North Carolina

Student Presenter: Brittany Burke
Faculty Sponsor: Jamie Vaske

DRD2 and Environmental Interaction on Externalizing Behavior

Student Presenter: Christina Foster, Mike Gaffigan
Faculty Sponsor: Jamie Vaske

Interaction of MAOA and the Environment on Antisocial Behavior

Student Presenter: Chelsea Fountain, Brandon Edwards
Faculty Sponsor: Jamie Vaske

Interaction of DRD4 and the Environment on Antisocial Outcomes

Student Presenter: Luke Gilliland, Michael Reardon
Faculty Sponsor: Jamie Vaske

Interaction of DAT1 and the Environment on Risk Taking Outcomes

Student Presenter: Destiny Green, Ashley Malone
Faculty Sponsor: Jamie Vaske

Effectiveness of Mandatory Penalties for Domestic Violence

Student Presenter: Kellie Hayes, Brittany Burke
Faculty Sponsor: Jamie Vaske

Effectiveness of Batterer Intervention Programs

Student Presenter: Alex Hunt, Drew Dotson
Faculty Sponsor: Jamie Vaske

Effectiveness of Mandatory Prosecution Policies for Domestic Violence

Student Presenter: Kerri Hunter, Shay Scruggs
Faculty Sponsor: Jamie Vaske

Interaction of DRD2 and the Environment on Antisocial Outcomes

Student Presenter: Paige Jones, Aimee Nieto
Faculty Sponsor: Jamie Vaske

Interaction of DAT1 and the Environment on Antisocial Outcomes

Student Presenter: Brandon Livingston, Matthew Wabby
Faculty Sponsor: Jamie Vaske

Effectiveness of Domestic Violence Shelters and Services

Student Presenter: Katie McCoy, Amber Poe
Faculty Sponsor: Jamie Vaske

The Interaction of 5-HTTLPR and the Environment on Antisocial Outcomes

Student Presenter: Jeff McCrorey, Jacob Bowers
Faculty Sponsor: Jamie Vaske

What's on Your Strip? Hotel Key Cards and Personal Information

Student Presenter: Amber Poe
Faculty Sponsor: Jamie Vaske

Criminology and Criminal Justice (continued)

Effectiveness of Mandatory Arrest Policies for Domestic Violence

Student Presenter: Kayla Russell, Jordan Peters
Faculty Sponsor: Jamie Vaske

Gene, Environment Interaction of Gene DRD4 on Antisocial Behavior Outcomes

Student Presenter: Meridia Sanders, Lindsey Harper
Faculty Sponsor: Jamie Vaske

Interaction of MAOA and the Environment on Antisocial Outcomes

Student Presenter: Jacon Stamey, Peggy Johnson
Faculty Sponsor: Jamie Vaske

School of Health Sciences – Athletic Training

Traumatic Knee Injury in a Collegiate Cheerleader

Student Presenter: Brandi L. Anders
Faculty Sponsor: Jill Manners

Lateral Knee Pain in a Collegiate Football Player

Student Presenter: G. Britton Harper
Faculty Sponsor: Doug Branch

Non-Contact Posterior Hip Subluxation in a Collegiate Football Player Resulting in an Acetabular Fracture

Student Presenter: Emily K. Whittington
Faculty Sponsor: Ashley Long

School of Health Sciences – Environmental Health Sciences

Identifying Deficiencies in Construction Injury/Illness Reporting

Student Presenter: Layne Arnold
Faculty Sponsor: Tracy Zontek

Measuring Ambient Air Concentrations in a R & D Clean Room Environment

Student Presenter: Samantha Connell
Faculty Sponsor: Burt Ogle

School of Health Sciences – Liberal Studies

Pricing and Availability of Gluten-Free Products on Campus at Western Carolina University

Student Presenter: Melanie Boeyer, Lauren Fleming
Faculty Sponsor: April Tallant

Facial Paralysis in a High School Football Player

Student Presenter: Heather A Brown*, Matthew M. Fortune
Faculty Sponsor: James Scifers

Irregular Breakfast Eaters Consume Soda More Often Than Regular Breakfast Eaters

Student Presenter: Kyrie Carlson, Rebekah Fortney
Faculty Sponsor: April Tallant

Optimal Gluten Free Foods on Campus at Western Carolina University

Student Presenter: Lauren Fleming, Melanie Boeyer
Faculty Sponsor: April Tallant

Regular Breakfast Eaters Consume More Fruit Than Irregular Breakfast Eaters

Student Presenter: Rebekah Fortney, Kyrie Carlson
Faculty Sponsor: April Tallant

Farm Fresh Taste: Acceptability of Local Produce Among School-Aged Children

Student Presenter: Patricia C. Hipgrave*
Faculty Sponsor: April Tallant

Facial Trauma in a High School Soccer Player

Student Presenter: Andrea N. Kaufman*
Faculty Sponsor: James Scifers

School of Health Sciences – Nutrition and Dietetics

Investigating Weight Reduction Diets: Comparing the Costs of One Day Menus for MyPyramid, Atkins™, Slim Fast®, and Weight Watchers® Weight Loss Programs

Student Presenter: Krystal Arrington, Annie Pauley
Faculty Sponsor: Wayne Billon

Eating Habits of College Freshmen

Student Presenter: Kristian Belk, Whitney Hinceman
Faculty Sponsor: Wayne Billon

Comparing a Regular Diet, Pesco-Vegetarian Diet, Vegan Diet, and Vegetarian Diet in Athletes

Student Presenter: Chloe Greene, Mindy Toler
Faculty Sponsor: Wayne Billon

Determining Cost When Adopting a Plant-Based Diet

Student Presenter: Mary Hackney, Rebecca Rolon
Faculty Sponsor: Wayne Billon

Common Conditions and Contributing Factors Seen at the Good Samaritan Clinic

Student Presenter: Caroline Holland
Faculty Sponsor: Wayne Billon

Knowledge of Diabetes in Diabetic and Non-diabetic Students of Western Carolina University

Student Presenter: David Lightner
Faculty Sponsor: Wayne Billon

School of Nursing

Errors Related to Fatigue in Nursing

Student Presenter: Whitney Benfield
Faculty Sponsor: Steve Forst

Exploring Atrial Fibrillation: A Student's Perspective

Student Presenter: Chelsea Dennis
Faculty Sponsor: Steve Forst

Office of the Provost

The Program for the Study of Developed Shorelines

Mapping Western Carolina University using High Resolution Aerial Photographs

Student Presenter: Rachel Phipps
Faculty Sponsor: Adam D. Griffith

The Kimmel School

Construction Management

Solar Powered Fountain

Student Presenter: Lyndsey GentryNathan Pierce
Faculty Sponsor: Dr. George Ford

Monday, March 21, 2011

Presentations

College of Arts and Sciences

Anthropology & Sociology

Place: McKee 114

Time: 12:15 PM

Cadaver Dogs as Part of the Archaeological Survey Process

Student Presenter: Paul S. Martin

Faculty Sponsor: Anne Rogers

Time: 12:35 PM

Game On—Understanding the Nintendo DS as a Socializer in Childhood: From the Child's Perspective; From the Adult's Perspective

Student Presenter: Nicholas A. Weitzel*

Faculty Sponsor: Marilyn Chamberlin

Time: 12:55 PM

Irish Kinship

Student Presenter: Elaine Tolbert

Faculty Sponsor: Philip Coyle

Time: 1:15 PM

Second Hand Emotion: Romantic Love from an Anthropological Perspective

Student Presenter: Shakita Holloway

Faculty Sponsor: Philip Coyle

Biology

Time: 9:00 AM Place: Natural Sciences 123

The Effect of Germination Time on Acorn Predation

Student Presenter: William D. Ford*

Faculty Sponsor: Beverly Collins, Katherine Mathews

Communication

Time: 2:30 PM Place: Stillwell 149

Community and University Engagement and Partnerships

Student Presenter: Jasna McElrath

Faculty Sponsor: Betty Farmer

History

Time: 1:00 PM

Place: Killian 114

The Meat on Their Bones: Diets, Food Practices, and Nutritional Status of Antebellum Slaves

Student Presenter: Rebekah Fortney

Faculty Sponsor: Andrew Denson

The Destruction of Bolshevik Hopes

Student Presenter: Alice Lapoint

Faculty Sponsor: David R. Dorondo

Time: 2:30 PM

Place: McKee 209

Manual of the Theophilanthropes:

Theophilanthropists and the Importance and Role of this Religion in France During the French Directory

Student Presenter: Zachary Williams

Faculty Sponsor: Elizabeth Yale

Wealth, Society and Marriage: Representations of

Gentry Women in Pride and Prejudice

Student Presenter: Samantha Matott

Faculty Sponsor: Andrew Denson

For Sacred Germany: A History of the German

Military Resistance to Adolf Hitler, 1938-1944

Student Presenter: Adam Ray

Faculty Sponsor: David Dorondo

Mathematics & Computer Science

Time: 1:00 PM

Place: Killian 114

Rediscovering Archimedes

Student Presenter: Cynthia Dayton

Faculty Sponsor: Sloan Despeaux

Modern Foreign Languages

Time: 1:25 PM **Place: McKee 135**

Japan and I (Past, Current, Future)

Student Presenter: Dorothy Anna Hunt, Joshua Pond, Matthew Barret, Alexander Smith, Jeremy Gregory, Cassie Small, Matthew Mugrage, James Berry, Alfres Vendrell, and Stephen Parton
Faculty Sponsor: Yumiko Ono

Political Science and Public Affairs

Time: 2:30 PM

Place: McKee Computer Lab

Green: The Economic and Political Perspectives on Alternative Energy

Student Presenter: Mitchell Rosewall*
Faculty Sponsor: Chris Cooper

Time: 2:30 PM **Place: McKee 135**

Japan and I (Past, Current, Future)

Student Presenter: Dorothy Anna Hunt, Joshua Pond, Matthew Barret, Alexander Smith, Jeremy Gregory, Cassie Small, Matthew Mugrage, James Berry, Alfres Vendrell, and Stephen Parton
Faculty Sponsor: Yumiko Ono

College of Business

Business Administration and Law and Sport Management

Time: 10:10 AM **Place: Forsyth 314**

Child Abuse and Neglect and the Impact on a Child's Academic Performance

Student Presenter: Erin Keenan
Faculty Sponsor: Lorrie Willey

Time: 11:15 AM **Place: Forsyth 314**

The Chef's Special

Student Presenter: Megan Nantel
Faculty Sponsor: Lorrie Willey

Education and Allied Professions

Elementary & Middle Grades Education

Time: 11:15 AM **Place: Killian 114**

Are Charter Schools Killing Public Schools?

Student Presenter: Amanda Roberts
Faculty Sponsor: Pamela Buskey

Health, Physical Education and Recreation

Place: Reid 122H

Time: 11:15 AM

Xtreme Sports Research

Student Presenter: Nate Christian, Troy Adams, Phillip Yarborough, Saunders Southecorvo
Faculty Sponsor: Ben Tholkes

Health, Physical Education and Recreation (continued)

Time: 11:35 AM

Western Waterfall Awareness

Student Presenter: Justin Kleberg, Will Butler,
Emily Baker

Faculty Sponsor: Maurice Phipps

Time: 12:35 PM

Recreational Use of Panthertown Valley

Student Presenter: Robyn Tetterton, Sarah
Owenby, Zach Broyhill

Faculty Sponsor: Ben Tholkes

Time: 11:55 AM

Gender Equity in Publications

Student Presenter: Will Mayse, Ty Fehrenbacher,
Elliott Knoch

Faculty Sponsor: Ben Tholkes

Time: 12:55 PM

*Head High at the "Y" - A Challenge Course Business
Plan*

Student Presenter: Joseph Faison

Faculty Sponsor: Debby Singleton

Time: 12:15 PM

Outdoor Recreation Research

Student Presenter: Emily Baker, Ted Freemeyer

Faculty Sponsor: Ben Tholkes

Psychology

Time: 12:20 PM

Place: Killian 338

Personality Traits and Roommate Compatibilty

Student Presenter: Rebecca P. Smith

Faculty Sponsor: David McCord

Health and Human Sciences

Criminology and Criminal Justice

Place: Belk 412

Time: 4:00 PM

Sociopolitical Impact of Federal Response Delays

Prior to Emergency and Disaster Operations

Student Presenter: Richard L. Beauchamp III

Faculty Sponsor: Robert T. Berry, Lifetime CEM

School of Health Sciences

Place: Moore 107

Time: 4:30 PM

Health Care

Student Presenter: Alessa Lennon, Kaitlyn Levan,

Katie Sprague

Faculty Sponsor: Baldwin Sanders

Time: 4:15 PM

Disaster Logic Model: A F.A.S.T. Approach to

Survivor Triage and Stabilization

Student Presenter: Brandon L. Morgan

Faculty Sponsor: Robert T. Berry, Lifetime CEM

Time: 4:30 PM

High Fiber Substitution in Baking

Student Presenter: Nicole Levi

Faculty Sponsor: Baldwin Sanders

Time: 4:30 PM

Course Application: Applying Criminological

Theories to Real Criminal Events

Student Presenter: Lydia Scott

Faculty Sponsor: Lisa Briggs

The Kimmel School

Engineering & Technology

Place: Belk 355

Time: 4:00 PM

The Beginning of a Cross Platform Project for

Mathematical and Scientific Plotting

Student Presenter: Michael Jordan

Faculty Sponsor: Robert Adams

Time: 4:20 PM

Power Control by Pulse Width Modulation

Student Presenter: Allan Overstreet

Faculty Sponsor: Robert Adams

Tuesday, March 22, 2011

College of Arts and Sciences

Chemistry & Physics

Time: 3:00 PM Place: Natural Sciences 208

Antimicrobial Agent from a Pseudomonas sp. Strain from the Great Smoky Mountains National Park

Student Presenter: Rachel M. Bleich

Faculty Sponsor: Jason Clement

Is God A Tyrant: a Miltonic Prolusion

Student Presenter: Tabatha Bishop

Faculty Sponsor: Mimi Fenton

Time: 3:30 PM

John Milton's "A Masque": Virtue, Wisdom, and Contemplation

Student Presenter: Kimberly Waddell

Faculty Sponsor: Mimi Fenton

English

Place: Coulter 304

Time: 1:00 PM

You Rememory Me?: The Role of the Past in Toni Morrison's Beloved

Student Presenter: Elizabeth Nissly*

Faculty Sponsor: Annette Debo

John Milton and "Il Penseroso"

Student Presenter: Erik Freitas

Faculty Sponsor: Mimi Fenton

John Keats, the Apothecary Surgeon of "Ode to a Nightingale"

Student Presenter: Taylor Fie*

Faculty Sponsor: Brent Kinser

Satan is America: John Milton, Thomas Jefferson, and the Foundation of a New Republic

Student Presenter: Christopher Rollins, Travis Mullen

Faculty Sponsor: Mimi Fenton

Santiago's Ascension: Mortality and Transcendence in Hemingway's The Old Man and the Sea

Student Presenter: Andrew M. Benton

Faculty Sponsor: Brent Kinser

Time: 4:45 PM

The Dark Side of Humanity

Student Presenter: Joanna Andrews

Faculty Sponsor: Laura Samal

Time: 2:15 PM

Prolusion I

Student Presenter: Abigail Isom

Faculty Sponsor: Mimi Fenton

Little Miss Perfect

Student Presenter: Jessica Presnell

Faculty Sponsor: Margaret Bruder

Prolusion I: Blindness is Preferable to Sight

Student Presenter: Anne Catherine "Kate" McRae

Faculty Sponsor: Mimi Fenton

Understanding Culture Through a Personal Artifact

Student Presenter: Allison Dixon

Faculty Sponsor: Margaret Bruder

Mathematics & Computer Science

Place: Stillwell 434

Time: 10:00 AM

Modular Artificial Intelligence

Student Presenter: Wesley E. Holland, Jr

Faculty Sponsor: William Krehling

Time: 1:30 PM

Dynamically Load Balanced Distributed Systems

Student Presenter: Eddie Allen, Russell T. Gaskey

Faculty Sponsor: William Krehling

Time: 2:00 PM

Assignment Management and File Submission System

Student Presenter: Bradley Proctor, Calum

Anderson-Carroll

Faculty Sponsor: William Krehling

Time: 4:30 PM

Integrating Real-Time Data with Mobile Applications

Student Presenter: Christopher Blades

Faculty Sponsor: William Krehling

Modern Foreign Languages

Time: 9:30 AM **Place:** McKee 116

The Montessori Method into El Método Montessori:

Understanding Spanish Syntax through Visual and Tactile Learning

Student Presenter: Carolyn Ellison

Faculty Sponsor: Jamie Davis

Philosophy and Religion

Place: Stillwell 225

Time: 10:00 AM

Teaching Science vs. Anti-Science

Student Presenter: Jeff Lux

Faculty Sponsor: Daryl Hale

Time: 10:30 AM

Sōma - Sēma? The Body as a Prison in Hellenistic Philosophy and Early Christianity

Student Presenter: Heather Cavalier

Faculty Sponsor: Daryl Hale

Time: 1:00 PM

John Haught and a Growing God

Student Presenter: Matthew Sutter*

Faculty Sponsor: Daryl Hale

Time: 2:00 PM

Religion, Ethics, and Evolution

Student Presenter: Austin Hughes

Faculty Sponsor: Daryl Hale

Time: 2:30 PM

Social Reminders: The Problem of Freedom and Authenticity

Student Presenter: Heather E. Cavalier

Faculty Sponsor: James McLachlan

Time: 3:00 PM

Four Hikers Meet David Hume

Student Presenter: Marina Martinez

Faculty Sponsor: James McLachlan

Time: 3:30 PM

The Devil and Charlie Darwin

Student Presenter: Joshua Harris

Faculty Sponsor: Daryl Hale

Fine and Performing Arts

School of Music

Place: Coulter 357

Time: 12:30 PM

Women in Jazz: An Investigation of Gender Roles In Jazz Music

Student Presenter: Rebecca Lautier

Faculty Sponsor: Christina Reitz

Time: 12:50 PM

Irish Sreet Ballads

Student Presenter: Jacqueline Traywick

Faculty Sponsor: Christina Reitz

Time: 1:10 PM

The Role of Race in Rap Music

Student Presenter: Sarah Sheehan

Faculty Sponsor: Christina Reitz

Time: 1:30 PM

A Comparison of Philosophies and Ideologies In the Ancient and Baroque Musical Periods

Student Presenter: Rebecca Lautier

Faculty Sponsor: Christina Reitz

Health and Human Sciences

Communication Sciences & Disorders

Time: 2:05 PM

Place: Belk 138

A Comparison of Perspectives Surrounding the Influences on an Individual's Dialect Formation

Student Presenter: Rebekah Norris

Faculty Sponsor: Georgia Hambrecht

Time: 1:05 PM

Assessing Safety and Environmental Health Measures in Elderly Homes in Angoon, AK

Student Presenter: Stephanie Caler

Faculty Sponsor: Burt Ogle

Time: 1:15 PM

Water Quality Monitoring in the Carol's Cabins Community

Student Presenter: Lailani Rockholt

Faculty Sponsor: Tracy Zontek

School of Health Sciences

Place: Moore 107

Time: 12:35 PM

Not in my Backyard, Unless I am Poor, Uneducated, or a Person of Color: The Toxicity of PCBs

Student Presenter: Erin Gymburch*

Faculty Sponsor: Burt Ogle

Time: 1:25 PM

Progress Toward the Development of a Molecular Assay to Discriminate Two Species of Bed Bugs

Student Presenter: Erin Gymburch

Faculty Sponsor: Brian Byrd

Time: 12:45 PM

The Use of RFID to Improve the Effectiveness, Efficiency, and Safety of Chemical Inventories at CNMS

Student Presenter: David Craig

Faculty Sponsor: Burt Ogle

Time: 1:35 PM

Application of the Agilent BioAnalyzer for the Identification of Two Morphologically Similar Mosquitoes

Student Presenter: Virginia Hopkins

Faculty Sponsor: Brian Byrd

Time: 12:55 PM

Complete Hazard Assesment within a Gross Anatomy Laboratory

Student Presenter: Chris Caler

Faculty Sponsor: Burt Ogle

Undergraduate Academic Project Grants

Awarded 2010-2011

Initiated by Chancellor John Bardo in 1996, the Undergraduate Academic Projects Grant Program funds a variety of student projects. The committee awarded over \$28,375 this year.

Members of the UAPGP Committee are

Robert Mulligan..... Business
Hal Herzog Education and Allied Professions
Katherine Mathews Arts and Sciences
Christina Reitz Fine and Performing Arts
Douglas Kinard Kimmel School of Construction Management and Technology
Tracy Zontek Health and Human Sciences
Brian Railsback Honors College

Anthropology and Sociology

Haitian Voodoo

Student Recipient: Jer-Mayne White

Faculty Sponsor: Philip Coyle

The Kegare Concept

Student Recipient: Lauren Levine

Faculty Sponsor: Philip Coyle

Cadaver Dogs in Archaeological Survey

Student Recipient: Paul S. Martin

Faculty Sponsor: Anne Rogers

Taphonomy of Infant-Sized Remains

Student Recipient: Paul S. Martin, Spencer

Oliver, and Brittani Benton

Faculty Sponsor: Cheryl A. Johnston

Biology

The production of a DNA bank enabling the study of the genetics of aggression in song sparrows

Student Recipient: Haley Pace

Faculty Sponsor: Ron Michaelis

Chemistry and Physics

Over Expression and Purification of Stm1p Protein in E. Coli

Student Recipient: Catherine Denning

Faculty Sponsor: Michael Van Dyke

Supramolecular Chemistry: Crown ether complexes and their unique bonding

Student Recipient: Richard Overstreet, Melissa Williams

Faculty Sponsor: Carmen Huffman

Preparation and Materials Characterization of Lanthanide Metal-Based Nanoparticles for Biomedical Imaging

Student Recipient: Lauren Runken

Faculty Sponsor: Channa De Silva

BAFFLE - Bacteria Aids Fresco For Longer Existence

Student Recipient: Caitlin Williams

Faculty Sponsor: Scott Huffman

Communication Sciences and Disorders

Testing the Attentional Network in Persons with Aphasia

Student Recipient: Sarah Robbins

Faculty Sponsor: Leigh Morrow-Odom

Construction Management

EDCON and EXPO Associated Builders and Contractors (ABC) 2011 Student Chapter Competition

Student Recipient: Sarah Schultz, Lyndsey

Gentry, Anthony Solary, Matt Smith

Faculty Sponsor: David Martin

Criminology and Criminal Justice

Various Poster Presentations

Student Recipient: including Joseph Kellerman, Courtney Dameron, Christina Foster, Alindrea Rawlinson
Faculty Sponsor: Stephen Brown

The Effectiveness of Juvenile Justice Programs in North Carolina

Student Recipient: Travis Simpson, Lindsey Harper, Derek Mueller
Faculty Sponsor: Albert Kopak & Cyndy Caravelis Hughes

Engineering and Technology

Powered Ankle Orthosis, Phase 1

Student Recipient: Chris Justice, Jason McCurry
Faculty Sponsor: Martin Tanaka

English

Satan in America: John Milton, Thomas Jefferson, and the Foundations of a New Republic

Student Recipient: Travis Mullen, Christopher Rollins
Faculty Sponsor: Mary Fenton

Geosciences and Natural Resources Management

*Assessing Ruffed Grouse (*Bonasa umbellus*) Populations and habitat at Balsam Mountain Preserve*

Student Recipient: Kyle Underwood
Faculty Sponsor: Ronald Davis

Measurement of Shallow Hydraulic Conductivity Profiles in Potential Landslide Initiation Zones of the Mountains of Western North Carolina

Student Recipient: Matthew Burnette
Faculty Sponsor: David Kinner

The effects of magnetic interactions and magnetic particle concentration on remanent magnetization and magnetic fabrics

Student Recipient: Michael Stillwagon
Faculty Sponsor: Cheryl Waters-Tormey

Groundwater flow through fractures in crystalline rock at Coweeta Hydrologic Laboratory, North Carolina

Student Recipient: Lily Savitsky
Faculty Sponsor: Cheryl Waters-Tormey

Analysis of Groundwater-Surface Water Interaction in a Headwaters Stream System in the Southern Appalachians, Cullowhee NC Part A and Part B

Student Recipient: W. Blake Roberts, Elizebeth Allen, Matthew Burnette, Jason Dobyne, Chad Hiatt, Ashley MacIntyre, Mark Padgett
Faculty Sponsor: Mark Lord, David Kinner

Measurement of Wxygen and Hydrogen Isotopes to Determine Groundwater Flow Paths in a headwaters Stream System in The Southern Appalachian Mountains, Cullowhee, North Carolina

Student Recipient: Chad Hiatt
Faculty Sponsor: Benjamin Tanner

Measurement of Oxygen and Hydrogen Isotopes to Determine Groundwater Flow Paths in a headwaters Stream System in The Southern Appalachian Mountains, Cullowhee, North Carolina

Student Recipient: Chad Hiatt
Faculty Sponsor: Benjamin Tanner

A Biomarker Analysis of Panthertown Bog Deposits

Student Recipient: Jessica Parris
Faculty Sponsor: Benjamin Tanner

Math and Computer Science

Laurel Cobb is our nominee this year for the NCCTM student award.

Student Recipient: Caitlynn Yench, Mary Griffin, Jennifer Bumgardner, Laurel Cobb, Arminda (Roxy) Boone, Ashley (Elizabeth) Gierok, Christine Wilson, Ericka Byrd, Judy Fleming, Ashley Staggs, Rachel Owens, Connie Abadie, Gabrielle Martin, Alisha Smith, Jeff Rousselle, Melo
Faculty Sponsor: Tuval Foguel

Philosophy and Religion

Student Recipient: Stephanie Bridges, Emily Marie Elders, Bethany Barton, Paul Horton, Molly Metz, Ryan Rutledge, Amber Shipp, Bethany Ketting (mentor)
Faculty Sponsor: John Whitmire

Political Science and Public Affairs

Terrorism: The Causal and Intrinsic Relationship to Corruption

Student Recipient: Hayden Smith
Faculty Sponsor: Nial Michelsen

Psychology

Can the Necker Cube Measure Attention

Student Recipient: Christopher J. Macemore
Faculty Sponsor: Windford Gordon

School of Health Sciences

Various Topics

Student Recipient: Heather Brown, Andrea Kaufman, Brandi Anders, G. Britton Harper, Ashley Bracken
Faculty Sponsor: Jill Manners

Potential Use of an Ozone Generator to Improve Air Quality in Unoccupied Spaces

Student Recipient: Amanda McQueen
Faculty Sponsor: Burton Ogle

Various Topics

Student Recipient: Heather Brown, Emily Whittington, Britton Harper
Faculty Sponsor: Jill Manners

WCU Nutrition Habits Survey Results

Student Recipient: Kyrie Carlson, Rebekah Fortney
Faculty Sponsor: April Tallant

NCDA research projects

Student Recipient: Krystal Arrington, Nancy Belk, Sarah Brown, Frances Childers, Chloe Green, Mary Hackney, Whitney Hinceman, Eli Hipps, Caroline Holland, David Lightner, Annie Pauley, Rebecca Rolon, Melinda Toler, Choua Vue
Faculty Sponsor: Wayne Billon, Susan Bogardus

Application of a Microfluidics-based platform (Agilent BioAnalyzer) for the molecular identification of closely two related mosquito species (Aedes atlanticus and Aedes tormentor)

Student Recipient: Virginia Hopkins
Faculty Sponsor: Brian Byrd

School of Music

Bach Prelude and Fugue in A Minor and Beethoven Egmont Overture

Student Recipient: Candice Boling, Jeff Bowman, Kayla Chipley, Savannah Forest, Andrew Gore, Mat McChargue, Elizabeth Priode, Tori Roach, Amy Shuford, Whitney Stewart, Avery Surratt
Faculty Sponsor: Travis Bennett

North American Saxophone Alliance, Region VI Conference Master Class Performance

Student Recipient: Delante Randolph, Adam Wooten, Martin Baker, Ethan King
Faculty Sponsor: Ian Jeffress

The nief-norf Summer Festival 2011

Student Recipient: Gregory Andrew Dills
Faculty Sponsor: Mario Gaetano

School of Stage and Screen

Too Much To Ask

Student Recipient: Leah Thomas, Mandy Hughes
Faculty Sponsor: Terry Curtis Fox

The Dreaming Tree

Student Recipient: Carey McKelvey, Liz Oslund
Faculty Sponsor: Jack Sholder, Terry Curtis Fox, Arledge Armenake

Honors College International Travel Grants

These grants are possible due to a fund established by Honors College Advisory Board members Dr. E.J. Tarbox and Dr. Mark and Kathy Whitehead.

Study Abroad Wales

Student: Angela Langdon

Study Abroad Netherlands

Student: Allison Ray

Study Abroad Amsterdam

Student: Cayli Meitzel

Study Abroad Australia

Student: Nikki Harrold

Study Abroad Amsterdam

Student: Marie Rawlings

Study Abroad Australia

Student: Kaitlyn Conger

Study Abroad Ireland

Student: Micheal A.Kahn

Study Abroad Hong Kong

Student: Courtney Timmons

Study Abroad Germany

Student: Benjamin Ward

Study Abroad Japan

Student: Jessica Sloan

Study Abroad Japan

Student: Max DeGrove

Study Abroad Peru

Student: Desiree Reagan

Study Abroad Wales

Student: Seth Crockett

Study Abroad Australia

Student: Emily Goodman

Study Abroad Chile

Student: Ian Youmans

Study Abroad Ireland

Student: Samuel Colin Scott

The (New) Honors College Medallion

To commemorate the tenth anniversary of The Honors College, the student Board of Directors led the creation of a College medallion. The first medallion, featuring a pen and ink rendering of Reynolds Hall—the first home of The Honors College—was in use from 2007 to 2011. The new medallion, featuring the new residences for The Honors College—Balsam and Blue Ridge Halls—was illustrated by Asheville artist Lee Panthas and the graphic design was completed by Loretta Adams and Rubae Schoen. The medallion is worn at Commencement by students who complete the Honors curriculum, the dean, and in rare cases by special friends of The Honors College. The medallion replaced the purple cord Honors graduates have worn at commencements since 1997.

The Honors College

Ad vitam paramus

Western Carolina University

HC 101 Balsam Hall

Cullowhee, NC 28723

828-227-7383

Dr. Brian E. Railsback, Dean

J. Steven Carlisle, Associate Dean

**Emily A. Sharpe, Director of Honors Advising
and Pre-Professional Programs**

Bonnie J. Beam, Executive Assistant