



School of Arts & Sciences

Student Achievement Newsletter

Summer 2005

Number 1

Student Achievement Newsletter

August 2005

Dear Colleagues.

It is my pleasure to present the first annual Student Achievement Newsletter. In much the same fashion that our Arts & Sciences Newsletter showcases the work and accomplishments of our faculty, this newsletter is meant to highlight student achievements across the academic year. It also provides a means to observe the progress of A&S students as they move forward on their academic and professional paths.

Thank you to all who provided information on students for this inaugural issue. We should all feel proud of their accomplishments and fortunate to have played a part in shaping their future.

*Sincerely,
Mary Jane Chase*

PROGRAMS

COMMUNICATION

Miranda Taft and Jessica Faulkner won Westminster's 2005 Outstanding Student Awards in Communication.

Miranda Taft presented her *Communication Portfolio* at the Spring 2005 Undergraduate Research Fair.

COMPUTER SCIENCE

Elisha Hughes won Westminster's 2005 Outstanding Student Award in Computer Science.

ENGLISH

Timothy Asay won Westminster's 2005 Outstanding Student Award in English.

Michael Nielsen presented a paper on Henry James at the National Undergraduate Literature Conference at Weber State University (NULC), and another paper about humor and jokes for the Utah Society of Folklore in March 2005.

Brianna Lange, Jillian Gleave, Krystal Cook, and Amanda Crane also presented at the NULC.

2004-2005 Undergraduate Research Fair English Student Presentations:

Verity Erickson – *Appropriating the Feminine Subtext in T.H. White's, "The Once and Future King"*

Leslie C. Lee – *"The Best of Islands:" Environmentalism in Geoffrey of Monmouth and Mary Stewart's Merlin*

HISTORY

Pepper Hayes and Basil Eisenman won Westminster's 2005 Outstanding Student Awards in History.

Christopher Wharton won Best Paper in Modern History at the Utah Regional Phi Alpha Theta Conference for *The Hammer and Sickle: Propaganda and the Success of the Russian Revolution*.

2004-2005 Undergraduate Research Fair

History Student Presentations:

Peter Markowski – *Stanley Kubrick: Patron Saint of the Individual, Pioneer of the System*

Benjamin Austin – *Cold War Contradictions: the United States and Tibet 1942-1974*

Cory Heller – *From Rambo to Platoon: Popular Acceptance of 1980's Viet Nam Films*

Christopher Wharton – *The Hammer & Sickle: The Role of Symbolism and Rituals in the Russian Revolution*

Nicholas A. Schou – *Black Dreams of Spain, Anarchism and the Spanish Revolution*

Bryan Banker – *Brothers in Arms; Ernesto Guevara and Fidel Castro*

Andrew Hyun Pak – *The Success and Failures of Ed Wood*

Jayda Moore – *Counter-Productive Bombing, Brought to You by the U.S. Government*

Thomas R. Dubach – *Innocent III St. Peter's Illegitimate Heir*

HONORS

At the 2004 Graduation, Melissa Dallof was presented the Trustees' Character Award and

Pepper Hayes was given the President's Leadership Award.

Alana Dela Cruz gave a paper at the annual meeting of the Folklore Society of Utah. Her paper, an analysis of Amy Tan's use of folk belief in *The Joy Luck Club*, was selected for publication in the Society's publication *The Folklore Annual*.

Freshman Sara Vandermolen has been to England, France, Italy, Greece, and Australia with the People to People Student Ambassador program and this year she received her second nomination as Student Ambassador of the Year. Sara also won an award for her painting in the Avenues Street Fair and one of her poems was published in the 2003 *Anthology of Poetry for Young Americans*.

Heather Brown, Ray Bradford, Stewart Anderson, and Eric Glissmeyer published their research in the Summer 2004 issue of *The Myriad*, Westminster's online Academic Journal. Pepper Hayes served as chair of the ASWC Academic Journal Committee and was the student editor of the inaugural issue.

Pepper Hayes and Teresa Elias won third place in this year's National Collegiate Honors Council (NCHC) newsletter contest. Pepper also gave a paper on suffrage at the Phi Alpha Theta Regional Conference. Trisina Dickerson and Rachel McDonald served as editors of *Ellipsis*, Westminster's literary magazine.

Ray Bradford and Rebecca Givens were elected as executive cabinet members in ASWC as Vice President and Director of Clubs and Organizations.

**HONORS PROGRAM INDEPENDENT SUMMER
RESEARCH GRANTS:**

- Heather Brown – *Their Bodies, Their Selves: Sexuality, Marriage and Maternity in 20th Century Italian Women's Literature*
 Tristan Glenn – *Individualism, Liberalism, and the New Face of American Zen*
 Meghan Hamilton – *Meditation and the Posner Paradigm: influence of mental training on response time and accuracy of attention tasks*

**HONORS STUDENTS WRITING AWARDS
2004-2005**

**BEST PAPERS OF THE YEAR IN HONORS
SEMINARS:**

- Category I (Humanities): Ray Bradford, *When an End Becomes a Means: Self-Expression in Marx and Shelley*
 Category II (Sciences): Carlin Felt, *Where's the Stuff?*
 Category III (Social Sciences): Meghan Hamilton, *Examining the Reality of ADD/ADHD*
 Best Paper Overall: Carlin Felt, *Where's the Stuff?*

**PRESENTATION AT THE NATIONAL
COLLEGIATE HONORS COUNCIL MEETING –
NEW ORLEANS, NOVEMBER 2004:**

- Nicki Blair, Ray Bradford, Mary Dirks, Jen Morrison, *Instituting a New Student-Directed Honors Orientation Program*

**PRESENTATION AT THE WESTERN REGIONAL
HONORS COUNCIL MEETING –
LAS VEGAS, APRIL 2005:**

- Mary Dirks, Jennifer Morrison, Carlin Felt, Seth Longhurst, *Using Current Events as Material for an Honors Seminar*

**2004-2005 Undergraduate Research Fair
Honors Student Presentations:**

- Ray Bradford – *Happiness and Social Acceptance in Aristotle and Shakespeare*
 Heather Brown – *Gender and Identity in Shakespeare's Hamlet: A Modern Interpretation of Ophelia*
 Elisia Taylor – *Beyond Universals: An Agnostic Theory of Literature*

Moving On:

Rachel McDonald will graduate this year and has received a scholarship to the Professional Writing and Editing Master's Program at the University of Cincinnati. Stewart Anderson was accepted this year at SUNY Binghamton to study modern European history and historiography this fall; he's on the M.A./Ph.D. track. Carlin Felt was accepted to Middlebury College's prestigious foreign language program to study Italian during Summer 2005. Pepper Hayes received a scholarship to Boston University Law School where she will be enrolling in Fall 2005.

JUSTICE STUDIES

Tiffani Mantlo and Kimberly Hamlet co-authored *The Juris Doctorate Does Not a Criminologist Make: The Law School Experience of Lawyers to Teach Criminology and Criminal Justice* with Al Patenaude. This paper presented at the 42nd Annual Meeting of the Academy of Criminal Justice Sciences, Chicago, Illinois. March 16-19, 2005. Tiffani Mantlo and Matthew Johansen also attended the conference where they were introduced to prospective graduate schools.

LANGUAGES

Carla Valencia won Westminster's 2005 Outstanding Student Award in Spanish.

Dawn Brockett won Westminster's 2005 Outstanding Student Award in French.

MATHEMATICS

Elisha Hughes won Westminster's 2005 Outstanding Student Award in Mathematics.

Chris Davis attained a High Score on the Putnam Exam.

2004-2005 Undergraduate Research Fair Mathematics Student Presentation:

Aaron Searle – *A Detailed Study of Algorithms Converging to Pi* (Paper and Poster Presentation)

MCNAIR SCHOLARS

MCNAIR SCHOLARS ATTENDING GRADUATE SCHOOL IN FALL 2005

Reece Peck, 2004 Graduate of Westminster College, will attend the University of California, San Diego, for a Ph.D. in Communications.

Laura Richey, Graduate of Westminster College, will attend the State University of New York, Binghamton, for her Ph.D. in Behavioral Neuroscience.

Carla Valencia, August Graduate of Westminster College, will attend Westminster College for her M.B.A.

Sara Hogan, graduate of the University of Utah, will attend Johns Hopkins University for an M.A. in Public Health – Bioethics.

Sarah Jackson, graduate of the University of Utah, will attend the University of Michigan for a Ph.D. in Mass Communications with certificate in African-American Studies.

Amaita Livoyochi, graduate of the University of Utah, will attend the University of Utah for a Ph.D. in Economics.

Jim Moreno, graduate of the University of Utah, will attend Northwestern University for his Ph.D. in Performance Studies.

PHILOSOPHY & RELIGION

Emily Price won Westminster's 2005 Outstanding Student Award in Philosophy.

2004-2005 Undergraduate Research Fair Philosophy/Religion Student Presentation:

Allison Owens – *Nietzsche's Aphorism*
Stewart Anderson – *Workings Towards a New Philosophy of History*

PSYCHOLOGY

Lynnette Averill, Leslie Hermansen, and Laura Richey won Westminster's 2005 Outstanding Student Award in Psychology.

2004-2005 Undergraduate Research Fair Psychology Student Presentations:

Meghan Hamilton – *Exploring the Reality of ADD/ADHD*
Laura Richey – *The Relationship Between Risk Taking and Adolescent Pubertal Status*

Nicki Blair – *The Impact of Sleep Deprivation on the Post Adolescent Brain*
 Chris Brinkerhoff – *Gender Differences and Single-Gender Treatment*
 Jennifer Morrison – *Gender Differences in the Development of Aggression During Puberty*
 Lauren White – *Adolescent Pubertal Status, Depressive Moods, and Cognitive Functioning*
 Tamara Villa – *Adolescent Sleep and its Relation to Self-Regulation*
 Marie Tueller – *The Social Implications of Borderline Personality Disorder in Women*
 Lynnette A. Averill – *To Sleep Perchance To Dream: Trauma Response and the Function of Nightmares and Rumination in Trauma Survivors*
 Lynnette A. Averill, Andrea Breinholt – *The Illusion of Control: What's Luck Got To Do With It?*
 Crystal Pratt – *Using Manipulation Methods in Math with Children with Learning Disabilities*

SCIENCES

2004-2005 Undergraduate Research Fair Science Student Presentations:

Melissa Smith, Jennifer Poulson, Stephanie Aldred – *Is Your Meat Safe?*
 Jennifer Sibbett – *Bioinformatics and Microarray Analysis*
 Jana Novak, Jonathan Newman, Lindsey Cutler – *Isolation and Purification of mRNA from Enterococcus faecalis*
 Stacy Vroman – *Protein-Protein Interactions Downstream of LRP in Drosophila and Caenorhabditis elegans*
 Jason Rupp, Ashlee Allred – *DNA Repair and Photoprotection in Halophilic Archaea*
 Michael King, Ashley Metcalf – *Comparison*

of the 12 S Ribosomal Subunit of Phalaenoptilus nuttallii and Chordeiles minor
 Sarah Cano, Leilani Ireland – *Polyribonucleotides as Inhibitors of the RdR Polymerase of the West Nile Virus*
 Michael Clifford, Jihyei Jang, Maxi Miller – *Electroporation of Enterococcus faecalis*
 Ashle Crane, Megan Fraiser, Aaron Thomas – *Determining Susceptibility of Known and Unknown Strains of Bacteria by Antimicrobial Testing*
 Eric Glissmeyer, Michael King, Ashley Metcalf – *Identification of Mouse T-cell Receptor Accessory Protein CD4 Using Fluorescence Microscopy*
 Stacy Vroman, Megan Macay, Alex Meyers – *Inducible Antimicrobial Proteins in the Innate Immune Response of Caenorhabditis elegans*
 Michael Acord – *Survey of the North Arm of Great Salt Lake Population Diversity*
 Eric Glissmeyer – *Genetic and Clinical Characteristics of 127 Patients with Pulmonary Arterial Hypertension*
 Brian Fairbanks, Ashley Phillips, Marie Smith – *Distribution of CD8 Molecules on Porcine Spleen Cells*
 Corianne Baird, Michael Goble, Trista Lammers – *In Vitro Culture of Lymphocytes*
 Juliette B. Lanvers – *Fluoride Analysis in Green Tea*
 Elisha Hughes – *Digital Reconstruction of Fossils from Serial Image Data*
 Adam Ware, Chari Sorenson – *Effects of Glucose Concentration on Esp Gene Expression in Enterococcus faecalis*
 Mark Gurling – *Transduction of Arginine Synthesis in E. coli by Temperate Bacteriophang*

Cortney Seggermann, Mark Gurling – *Avian Phylogeny According to 18S & 12S Gene Sequences*

Daniel Perez – *Adherence Studies of E. faecalis Using an In Vitro System*

Jason DeHerrera – *Researching the Best Temperatures to Store Bacteria*

Ben Brisbay – *Coliform Bacteria are Reliable Indicators of Water Quality*

Mayo Miller – *Predicting the Outcome of Kidney Transplants Using Artificial Neural Networks*

Brian Dorich – *Synthesis of poly (1-propargyl inosinic acid). A Proposed West Nile Virus inhibitor.*

Janice F. Spencer-Priebe – *Pb and Se in the Sediment of the Great Salt Lake*

Ashlee Allred, Michael Acord, Jihyei Jang – *The Pink Waters of Great Salt Lake: The Role of Archaeal Carotenoid Pigments in Photoprotection*

Michael Acord, Ryan Helber – *Biochemical Characterization of Novel Isolates from the Great Salt Lake*

Jennifer L. Day – *The Revival of Halophilic Archaea from Recently Formed Halite Crystals Obtained from the Great Salt Lake*

Matthew Mietchen, Derek Parkin – *Antibody Staining-Assay for Detection of Developmental Gene Products in Artemia*

Michael Clifford, Ryan Rigby – *Molecular Taxonomy: 16S rDNA Isolation from Halophilic Microorganism*

Jana Novakova, James Johnson – *The Effects of Curcumin on C. elegans sel-12 Mutants*

Ryan Black, Scott Stanfield – *Measuring DNA Damage: A Dot Blot Immunoassay for Thimine Dimers*

Ashle Crane, Maxi Miller, Trista Lammers – *Lipid Analysis as a Method of Differentiating Bacteria from Archaea*

BIOLOGY

Michael Clifford, Michael King, and James Johnson won Westminster's 2005 Outstanding Student Awards in Biology.

Ashlee Allred and Michael Acord presented at two National conferences this spring: the American Association for the Advancement of Science (AAAS) and the American Society for Limnology and Oceanography (ASLO). Ashlee's title was *The Pink Waters of Great Salt Lake: The Role of Archaeal Carotenoid Pigments in Photoprotection*. Mike's title was *Archaea, Bacteria, and Viruses in Great Salt Lake: Complexity in a Simple Ecosystem*.

Jennifer Day presented a poster at the National Conference on Undergraduate Research (NCUR), entitled *The Revival of Halophilic Archaea from Recently Formed Halite Crystals Obtained from Great Salt Lake, Utah*.

Research:

Adam Ware and Daniel Perez worked with Dr. Larry Anderson on adherence of *E. faecalis* to human cells and the expression of adherence genes using RT-PCR. Paul Steinman examined gene expression of a plasmid into *E. faecalis*. Daniel presented his work at the TriBeta National Meeting in Grand Junction, CO, and at the University of California, Berkeley, during the National Meeting of McNair Scholars.

Stacy Vroman worked with Dr. Brain Avery for two years on a project entitled *A conserved network of protein interactions downstream of LRP proteins exists in mouse and Drosophila*. She made presentations at national and regional TriBeta meetings and Dr. Avery presented their work at the Society for Developmental Biology

meeting in Calgary in July 2005. Rylan Larsen is continuing this work, and Valerie Gonzales is using RT-PCT to identify genes involved in the development of *Artemia*.

Stacy Vroman, Ashley Phillips, Christopher Averill, Jason Rupp, and Nicholas Hanson were awarded competitive research grants by the TriBeta Research Foundation to support their research. Alex Meyers took 2nd place and Ashlee Allred took 3rd place in the poster category at the 2004 National Tri-Beta Undergraduate Research Conference, a biological honors society. Ashlee Allred was selected at the 2004 Goldwater Scholar.

Michael Clifford and Charles Kuhn spent the summer of 2003 with Dr. Ty Harrison doing field research in Albion Basin. The Friends of Alta funded a two-year cooperative project with Utah State University Remote Sensing Laboratory called *The Albion Basin Eco-Geography Project*. Under the direction of Dr. Harrison, Shawn Larsen and Brent Woodsen gathered information on the drought tolerance of two native grasses in Dimple Dell Regional Park in Sandy. Sam Miller and Dr. Harrison conducted a community partnership with the Granite School District, helping to create and manage the Gayen Wharton Environmental Center at Oakridge Elementary School.

Michael Acord received a grant from the American Society of Microbiology which will pay him a summer stipend to work on research with Bonnie Baxter. The title of his project is *Microbial Diversity of Great Salt Lake: Characterization of Isolated Halophilic Microorganisms and Bacteriophage*.

Moving On:

Michael King will attend USC for Dental

School. Alex Myers will go to St. Louis for Medical School. Michael Clifford will attend Grad School at Northern Arizona for Ecology. Charlie Jones will attend Utah for Grad School for Molecular Biology. Cameron Grange will attend St. George's for Medical School.

CHEMISTRY

Juliette Lanvers and Ashley Phillips won Westminster's 2005 Outstanding Student Awards in Chemistry.

Juliette Lanvers presented research at the National American Chemical Society meeting in Spring 2005.

Research:

Ike Moran and Chris Gallatii worked with Dr. Paul Hooker to study the bioaccumulation of Selenium by *Artemia Franciscana* of the Great Salt Lake. Nicole Albano also worked on Selenium in the Great Salt Lake. Also in conjunction with Dr. Hooker, Phung Nguon studied *Ergosterol Content of Leaves*. Amie Christenson presented a poster, *Mineral Analysis of Total Cereal*, at the Spring 2003 Undergraduate Research Fair. Melissa Smith studied *Environmental Lead Assessment of a Turn-of-the-Century Farmhouse*. Finally, Juliette Lanvers worked with Dr. Hooker to study the *Fluoride Content of Green Tea* and she presented her findings at the National ACS Conference in Spring 2005 in San Diego.

Leloni Anderson and Sarah Cano, supported by a Gore Summer Research Fellowship, spent the summer of 2003 with Dr. Robyn Hyde, investigating methods towards the synthesis of two novel inosine derivatives. Their work culminated in the efficient synthesis of 1-propargyl inosine and this work was presented at the Spring 2003 Undergraduate Research

Fair. During Summer and Fall 2004, Michael Markosian and Brian Dorich continued this project and have synthesized the monophosphate and diphosphate derivatives of the propargyl construct. These studies are all a part of a drug design project leading towards an effective polymer inhibitor of the RNA-directed RNA polymerase of the West Nile Virus.

Chemistry major Ashley Phillips and Dr. Tricia Shepherd worked in collaboration with Professor Ward Thompson at the University of Kansas (KU) studying the energetics and dynamics of chemical reactions in solvents confined within nanoscale frameworks using Monte Carlo and molecular dynamics simulations. Ashley participated in the National Science Foundation Research Experience for Undergraduates (NSF-REU) program at KU. Ashley presented her research on *Monte Carlo Simulations of the Conformational Isomerization of Dichloroethane in Nanocavity Systems* at the National American Chemical Society (ACS) meeting in Spring 2004. In Summer 2004, Ashley and Dr. Shepherd studied the dynamics of a model diatomic molecule with a charge-transfer electronic transition in solvents confined within nanoscale frameworks using Langevin dynamics simulations. At the end of the summer, Ashley presented her research at the annual MERCURY Conference in Computational Chemistry, a national conference devoted solely to undergraduate computational chemistry.

Thomas Jerant and Dr. Shepherd performed Monte Carlo simulation in conjunction with free-energy perturbation calculations to evaluate binding free energies for a series of test mutations of increasing computational

complexity. Ultimately they desire to use this method to quantify the strength of protein-ligand or protein-protein interactions which play a central role in many biological processes.

Moving On:

Chad Owens will attend Georgetown for Medical School. Juliette Lanvers will attend the University of Utah's Chemistry Ph.D. Program, and Ashley Phillips will attend Georgia Tech's Chemistry Ph.D. Program. Ike Morgan was accepted to dental school in Kentucky and Chris Gallatti attends Mercer Medical School in Georgia. Nicole Albano and Amie Christenson attend the University of Utah Medical School. Melissa Smith is now employed at Watson Labs and is applying to pharmacy school. Phung Nguon attends the University of Utah Pharmacy School.

GEOLOGY

Research:

Jonathan Newman and Dr. David Goldsmith presented a paper entitled *Multiple Competitive Displacement Events in Two species of the Neogene Gastropod *Prygulopsis** at the Geological Society of America meeting in Seattle.

PHYSICS

Research:

Heidi Edwards worked with Dr. Chris Cline to study the physics of sound production of an acoustic guitar.

Cory Kearns and Mayo Miller will present their papers with Dr. Peter Conwell at the National Conference of Undergraduate Research in Virginia in April 2006. Cory's paper is *Data Mining the National Kidney Database with self-organizing feature maps* and Mayo's paper

is *Predicting the outcome of kidney transplants with radial basis functions*.

SOCIAL SCIENCES

ANTHROPOLOGY

2004-2005 Undergraduate Research Fair

Anthropology Student Presentation:

Ashley Jorgensen Gurling – *An Ethnographic Study of Paganism*

POLITICAL SCIENCE

Courtney Armour won Westminster's 2005 Outstanding Student Award in Political Studies.

SOCIOLOGY

Alison Marrelli won Westminster's 2005 Outstanding Student Award in Sociology. She also directed and produced the DVD *Our Stories, Our Selves: Weaving the Threads of Identity*, which was presented as part of the Westminster College's Diversity Lecture series. Alison presented a paper at the Popular Culture/American Culture Association Annual Meeting in San Diego in Spring 2005. She has been accepted, and will attend, the University of Utah's Mater's of Social Work Program in Fall 2005.

Mario Castillo presented a research paper at the University of California in Berkeley in Summer 2004 as part of his research as McNair's Scholar student. Lynnette Averill presented a paper at the Popular Culture/American Culture Association Annual Meeting in San Diego.

Moving On:

Brenda Gonzalez graduated Spring 2005 and will serve in the Peace Corps over the next two

years. Amie (Sanders) Smith graduated Spring 2005 and will work at, as well as attend, the University of Utah's Nursing Program in Fall 2005. Leslie Hermansen was accepted into, and will attend, the University of Utah's Mater's of Social Work Program in Fall 2005. Lynnette Averill was accepted into, and will attend, the University of Utah's Doctoral Program in Psychology in Fall 2005.

2004-2005 Undergraduate Research Fair

Sociology Student Presentation:

Lynnette A. Averill – *A Woodstock Compilation: Yesterday's Music as Today's Sociology*