RANDOLPH-MACON COLLEGE RESEARCH DAY

MAY 15, 2009

SCHEDULE OF EVENTS

Randolph-Macon College
Research Day Presentations
May 15, 2009
Schedule of Events

8:00 – 10:00
Presentation Session One

Student Research Presentations

Art History, Musicology, and Religious Studies Presentations, Old Chapel 114

Adam Kelchner/Jim Doering
Dmitri Shostakovich's Musical Struggle Against Soviet Oppression: History and Analysis of the Eighth String Quartet

Anne West/Evie Terrono
A Shift from Idolatry to Spiritual Representation: Theological Debates on the Depiction of Holy Figures

Krista Speicher/Evie Terrono
Beautiful Retreats: The Aesthetic Lives of Oscar Wilde and James McNeil Whistler

Hannah Tisson/Evie Terrono
Re-investing Meaning: The Readymade Object and Socio-Cultural Consciousness in the Work of American Feminist Artists

Adam Kelchner/Harold Breitenberg
John Wesley, the Doctrine of Sanctification, and Early Methodist Hymnody

Biology Research Presentations, Copley 101

8:00 **Jillian Dixon**/Jon Allen
The effects of larval food concentration on post-metamorphic growth and survival in the green sea-urchin, *Strongylocentrotus droebachiensis*

8:15 **Marlene Graf**/Traci Stevens
Interactions of Bcr-Abl to Alter Cell Migration

8:30 **Brandon Nunnally**/Jim Foster
From the Virginia IVF and Andrology Clinic to R-MC: A Search for the AM50 Protein in the Acrosomal Matrix of Human Sperm

9:00 **Diane Blackburn**/Wallace Martin
Laboratory Infection Experiment with a Possible New Species of Gonapodyaceae and a Potential Parasite of Snail Eggs

9:15 **Aubree Parker**/Wallace Martin
A preliminary phenetic study of the genus Allomyces (Fungi, Blastocladiomycota) based on morphological and cytological attributes

9:30 **Brittany Wampler**/Wallace Martin
Morphological and Molecular Studies of Aquatic Microorganisms: Couchia circumplexa and an Unknown Zygomycete

Computer Science Presentations, Copley 214

Ryan Allen/Ben Burrell
Building a Community Forum Using C# .NET and SQL Express

Ambrose Phillips/Ben Burrell
Guest House Reservations System – A Windows Application

Earl Seay/Ben Burrell
Brothers 4 Change, Dot Com

Hassan Shonekan/Ben Burrell
DIII To The Next Level – Web Application

Charlie Tanzini/Ben Burrell
A Simple Server-Client Document Sharing System

Adam Traub/John Rabung
Monty Shell: A Python-based Linux Shell

German Presentation (9:30), Haley 102

Ricky Twisdale
Felix Mendelsohn und seine Zeit

International Studies Seminar, Fox 108

Panel I 8:00–8:45 Globalization and Cultural Issues

Shafer Busch/Tom Badey
The Media's Influence on Americans' Perception of Pimp-Controlled Prostitution

Kaitlyn Allan/Aouicha Hilliard
Living in France with the Veil

M. Saskia Alemar/Tom Porter
The Communication Barriers between the U.S. and China

Panel II 8:45–9:30 Globalization and International Relations

Blanka Mazakova/Tom Badey
Divorce or Separation: Russia's Influence and Control in the Baltic States

Jeremy Robinson/Tom Badey
The Challenge of Iranian Nuclear Proliferation

Kate Savage/Dave Brat
Peak Oil and Saudi Arabia's Future

Panel III 9:30–10:00 Globalization and International Law

Nicole Benitez/Debra Rodman
Rogue Nation? The United States and International Death Penalty Law

Adam Lindberg/Debra Rodman
International Law Enforcement in a Globalized World

Modern Languages: Spanish Cultural Video Projections, Haley 106

Elementary students of Spanish 112 and 115 will show the cultural video productions in which they will be acting a role-play in different countries of the Hispanic world from checking into a hotel to asking for directions to buildings and making purchases. They will be in Spanish but at the same integrating basic cultural knowledge of those countries.

Physics / Environmental Studies Presentation (9:00), Copley 220

Will Carroll
Low-Cost Savonius Wind Turbine: A Study

Psychology Posters (9:45), Copley 132

Catherine Daw, Lindsey Harper, and Rachel Jeter (Developmental RATS)
Academic Delay of Gratification in Greek and Non-Greek Affiliated College Students

Hillary Callahan, Tommie Gearhart, and Amanda Harris (Developmental RATS)
Professor, Student, and Self Taught: Differences in Teaching Instructors on Student Learning

Courtney Bateman, Ryan Bell, Caitlin Blake, Kennan McVey, and Alexandra Rhone (Cognitive RATS)
The Effect of Scent on Memory

Katie Hall, Stephanie Karsner, and Grayson M'Coy (Psychobiology RATS)
The Effect of Play on Attention and Focus in Juvenile Rats

Leslie Hainley, Ashley Encinas, and Corey Ryan (Psychobiology RATS)
An Investigation of the Effects of Coping Style and Stress on Cutaneous Wound Healing

FYEC Presentation

FYEC 113/114 Identity: Me, Myself, and I; We, You, and Them: Professors Klaaren and Mattys, Old Chapel 212 (Topping Room)

Students in the Identity FYE will present their autobiographies in the form of 5 minute films.

10:00 – 12:00
Presentation Session Two

Student Research Presentations

History Research Presentations, Washington Room, Washington-Franklin Hall

10:00 **Carolyn Browder**
For Theirs is the Kingdom of Heaven: The Paradox of Flagellant Piety in the Reformation

10:30 **Meagan Moore**
Dichotomy in Depictions of Women in Victorian France and England

11:00 **Madeline Forrest**
Failures of American Policy in Vietnam

11:30 **Brittany Thomas**
Randolph-Macon College: Its Boydton, Virginia Beginnings

Modern Languages Research Presentations (10:00–12:30), Haley 101

French Capstone Presentation

Julia Childrey
In Search of their Identity; Representation of Women in three Algerian Literary Works: "La Femme Sauvage," by Leila Sebbar, "Femmes d'Alger dans leur appartement," by Asia Djebar, and "Des Femmes et des Assassins," by Malika Mokkedem

Spanish Capstone Presentations

Allison Koste
La mujer y el feminism contra el hombre y la sociedad

Melissa Rodriguez
Desensitizing the Reader: Violence in Gabriel García Márquez's *Crónica de una muerta anunciada* and Ernesto Sabato's *El túnel*

Andrew Wills
Persuasion, rhetoric, narration and the function of clothes in Cervantes' *Don Quijote* and in Galdós' *Tristana*

Sarah Witte
Uncovering their Worlds: Cosmovision in Short Fiction by Horacio Quiroga, Jorge Luís Borges, Juan Rulfo y Julio Cortázar

Special Topics Panel: Perceiving Perception in Julió Cortázar's Rayuela

Melissa Rodriguez
Getting of the Center of Things: The Character of La Maga in *Rayuela*

Tamia Taylor
Opening the Doors of PerSEXcion: Love and Sex in *Rayuela*

Prof. Patricia Reagan
Crossing the Bridge: Challenging Communication in *Rayuela*

Music: Music Technology Presentations (10:00–11:00), Old Chapel 115

Dr. Christopher O. Ryder, faculty supervisor

Original Music Compositions for Symphony Orchestra
Adam Kelchner and E.J. Seay, student composers

Advanced MIDI Applications
J.D. Jump, student presenter

This is a modified "poster" type session that includes multimedia. Observers will have the opportunity to hear the compositions and ask questions. Compositions by Kelchner and Seay were completed as part of the MUSC 270: Introduction to Music Technology class. J.D. Jump will present a multi-media project created in an Independent Study in Advanced MIDI (Musical Instrument Digital Interface) Applications.

Music: Recording Techniques Presentations (11:00–12:00), Old Chapel front entrance/Old Chapel 115 in case of rain

Roland Karnatz, faculty supervisor
Bill McElroy, Artist in Residence

Multi-track Recording Projects
Meg Bosher, Laura Eister, J.D. Jump, Tim Nelson, Dalton Saddler, and Anthony Kouri Williams; student presenters

Students in the MUSC 280: Recording Techniques class will present recording projects. The recordings will be played on a continuous loop, and student presenters will be on hand to discuss their work, answer questions, and to demonstrate the software used for producing the recordings.

Political Science Seminar (10:00–12:15), Fox 108

Panel I 10:00–11:00 Institutions

Travis Kickler
Illegal Immigration

Sarah Allison
Unilateralism and the American Presidency

Emily Sullivan
Supreme Court Agenda Setting and the Effect on Public Opinion

Scott Landolt
United States v. Booker (2005): How this Case Changed Federal Sentencing and Legal Challenges to Federal Sentences

Panel II 11:00–11:45 Threats and Counterthreats

Kurt Henegan
The Role of Public Opinion in Adapting American Counterterrorism Policy

Sam Cappellanti
Counter-Terrorism 1988 to the Present: The Ebb and Flow of Reactive Change

Jade Jackson
A Consideration of Women's Involvement in Political Violence and Acts of Terror

Panel III 11:45–12:15 Resources and Politics

Nick Simons
Energy Policy in the 21st Century: Renewable Resources and Green Technology Application to United States Policy

Amanda Hiltunen
Natural Resource Curse: African Success Stories

Psychology Presentations, Copley 132

10:00 **Stephanie Karsner**/Kelly Lambert
Parenting-Induced Neuroplasticity in Peromyscus Mice: Explorations of Sex and Species

10:30 **Amanda Rzucidlo**/Kelly Lambert
Maternal Resilience: Neurobiological and Behavioral Responses Following Neurotoxin Exposure

11:00 **Leslie Hainley**/Susan Parker
Decisions, Decisions: Decision-Making in an Incarcerated Adolescent Population

11:30 **Molly Hyer**/Kelly Lambert
The Neurobiology of an Adaptive Lifestyle: Effects of Naturalistic Environments and Varied Working Conditions in Rats and Mice

FYEC Presentations

FYEC 155/156 The Great Epic Drama of the 20th Century: Professors Jefferson and Mattys (11:00–12:00), Old Chapel 212 (Topping Room)

Students will present a thirty minute theatrical depiction of a significant event or phenomenon in 20th century American history.

Industrialization: Working to Become American
Vanessa Amato, Carolyn Browder, JoAnna Longo, Chris Mereen, Brian Sommer, and Brittany Stone

Civil Rights: Teaching a New Generation
John Endean, Allison Meissler, Emily Moore, Laura Nelson, and Matthew Nicolas

FYEC 173/174 The Sound of Numbers: Professors Bhattacharya and Doering, Audiovisual Classroom, McGraw-Page Library

Seven original films based on math and music.

This FYEC studied the correlations between music and mathematics. In the first semester, students wrote original melodic and rhythmic compositions using musical and mathematical principles. In the second semester, the students divided into groups and expanded upon their original works by harmonizing the melodies, utilizing fractals to extend the composition, and adding visuals.

Mitch Bagley, Emily Kpodo, Styles Major, and Andrew Reid
Expansion of a Musical Fragment

Nicole Hebert, Charlie Mazza, Kevin McMichael, and Waite Walker
Intertwining Math and Music

Jordan Davis, Michael Leber, Brendan McFadden, and Tracy Spurrier
Mathematical Harmonies and Melodic Fractals

Katherine Gray, Phillip Simmons, and Taylor Sanders
How Fast Is Too Fast?: A Race Against Music

Christy Ewing, Joe Derlius, Charles Kesner, and Ian Stewart
The Adventures of Bob

Alex Brown, Malcolm McConner, Louisa Meyer, and Murphy Protzman
Springtime

Brad Hinshaw, Will Lothian, Enerel Munkzhul, and Caitlin Proctor
Traffic and Triads

FYEC 179/180 Physics and Economics of Sport: Professors Franz and Lang, Crenshaw Gymnasium and the Brock Center

Students working in teams have developed new sports that will be demonstrated through actual competition.

10:00 **"Coolerball" by Malcolm Ball, Ashley Lambers, Jim Muse, Matt Musser, Andrew Sloan, and Tory Spindle.**
This sport presents a combination of basketball, handball, lacrosse and flag football. Teams attempt to score by shooting the ball into the opposing team's cooler. CRENSHAW GYMNASIUM

10:25 **"Schponglaball" by Adam Desgain, Courtney Wade, Sara Van Dyke, Mark Josey, Brianna Lovell, and Jake Leddy.**
A sport that is indigenous to no land or country that demonstrates a fusion of human athleticism. The combination of sports includes the agility of dodgeball, drama of baseball, endurance of tennis, hand-eye coordination of lacrosse and the dangers of balancing. CRENSHAW GYMNASIUM

10:50 **"Hoopbase" by Lauren Legum, Blair Kersh, Rydell Poarch, John Lynn II, Mallor James, and Townsend Keeter.**
With a twist of baseball, basketball, and dodgeball, hoopbase is a new breed of sport. It takes human ability to a whole new level that tests each athlete to the best of his/her ability. CRENSHAW GYMNASIUM

11:15 **"Dropball" by Chad Waltman, Kevin Soltis, Otis Henderson, Kellianne Mullin, and Matty Rocawich.**
The object of dropball is to dropkick or throw a dodgeball past a goalie into a goal. There are seven players that play on a basketball court for each team. When a player has the ball, they are allowed a maximum of three steps while throwing the ball among their teammates. CRENSHAW GYMNASIUM

11:40 **"Tenackley" by Whitney Edwards, Ashley May, Chris Hassen, Ali Richardson, Amy Harrison, Jordan Walton, and Ethan Smith.**
This is a newly designed sport based on the skills, rules, and economics of racquetball, tennis, soccer, volleyball, and wallyball. This fast-paced, but easy-to-learn game is played on a racquetball court with a wallyball net and an indoor soccer ball. BROCK CENTER

FYEC 181/182 Coming to Life: Professors Foster and Rabung, Copley 201

Nathan Beall, Helena Shadid, and Katherine Rendon
Electrical Fields in Wound Healing

Lauren Henson, Daniel Crouch, and Christopher Street
The Bicoid Flow Model: Using NetLogo to Represent Bicoid Gradient Formation

Kaitlin King, Ana Ivanova, and Adam Shaw
Hippo Signaling Pathway: Different Rates and Patterns of Organ Growth

Colin Moe, Patrick Amick, and Quinesha Wooten
Sonic Hedgehog and Prostate Cancer

Margaret Roy, Steven Carper, and Mark Lotts
The Movement and Behavior of Invasive Gliomas In the Brain

Ashley Stover, Janelle Mayback, and Charles Davis
Notch Signalling in the Development of the Inner Ear

C. Jade Thompson, Brittany Ragland, and Malcolm Gray
Lens Induction

Danielle Windsor, Imani Miner, and Larry Balance
Leg Joint Formation in the Drosophila

FYEC 183/184 Medieval Muses: Professors Goodwin and Terrono, Fox 206

12:00 – 1:15
All-Campus Picnic Lunch, Fountain Plaza

1:15 – 2:30
Poster Session, McGraw-Page Library

Schapiro Undergraduate Research Fellowship Posters

Sarah Allison/Lauren Bell
Is it still "The economy, stupid?" The Role of the Economy in Post-September 11th

Sam Cappellanti/Thomas Badey
Future Threat: A Bioterrorism Threat Assessment

Julia Childrey/Thomas Badey
Democracy in Algeria: an Elusive Quest?

Catherine Daw/Kristen Klaaren
Helping, Uniforms and Guns: Differences in perception of the military, police and civilians

Kimberly Dutton/Laurie Preston
Ashland: Town-Gown Relations of the Center of the Universe

Christine Ebert/Michael Fenster, Barry Knisley
A Study of the Habitat Parameters that Control the Distribution and Abundance of the Federally-Threatened Puritan Tiger Beetle (*Cicindela puritana*) on the Bluffs and Beaches of the Upper Chesapeake Bay

Madeleine Forrest/Mark Malvasi
1861: A Year in the Civil War

Leslie Hainley/Susan Parker
Neuropsychological assessment of working memory in juvenile delinquents

Felicia Herzog/Evie Terrono
Modern Art at the Virginia Museum of Fine Arts: Critical Controversies in the 1950s

April Hines/Serge Schreiner
Investigation into the Formation of Platinum-Silylene Complexes

Molly Hyer/Kelly Lambert
The Neurotoxicity of Passive Lifestyles: Effects of decreased effort-based rewards on the emergence of depressive symptoms in Long Evans rats

Rebecca Johnsen/Joe Mattys
From Screen to Script, From Akutagawa to Ashland: *Rashomon*, A Student SURF Production

Sydney Jones/David Brat
The Mortgage Crisis and Credit Crunch: From Housing Losses to Balance Sheets to Economic Growth

Stephanie Karsner/Kelly Lambert
The Dynamic Paternal Brain: Explorations of neuroplasticity in the paternal *Peromyscus californicus* and the nonpaternal *Peromyscus maniculatus*

Nicole Klee/Serge Schreiner
Investigations into the Bioactivity of Platinum Anti-tumor Analogues

Mandie Lever/April Marchetti
Detecting Adulteration in Honey Using SNIF NMR

Adam Maclauchlan/Rebecca Michelsen
Protonation of 1-Pentanol and tert-Butanol in sulfuric acid concentrations at cold temperatures

Ioseb Mamukelashvili/David Brat
Human Capital in Eastern Europe: Determinants of Student Test Scores; A Case Study of Georgia and its Neighbors

James Murray/Joe Mattys
Causality in Storytelling and Film

Katelyn Newton/April Marchetti
Determination of the sugar origin of alcohol samples via ^{2}D NMR analysis

Catherine Noyes/Edward Showalter
Privacy in a Genetic Age

Kevan Quinn/Serge Schreiner
Synthesis of Novel Transition Metal Catalysts for Olefin Polymerization

Lindsay Regali/Serge Schreiner
Synthesis and Reactivity of Novel Water-Soluble Ruthenium(II) Complexes

Leah Sayre/David Brat
Mortgage Meltdown: From Balance Sheets to Institutional Analysis An Ethical Assessment of Stakeholders Who should have known Better

Keith Searles/Rebecca Michelsen
Acidity of Ice and Snow

Krista Speicher/Gayla Mills
The Changing Role of a Campus Literary Magazine: Literary Expression in the *Stylus* from 1954-2007 at Randolph-Macon College

Charles Tanzini/Chuck Leska
Intrusion Detection: Understanding and Preventing Evasion Attacks

Eddie Tu/Kelly Lambert
Neurobiological Pathways to Fatherhood: An exploration of differential amygdalar neurochemical cocktails in the paternal *Peromyscus californicus* and the nonpaternal *Peromyscus maniculatus*

Ray Varner/David Coppola
Bernhard von Gudden: Neuroanatomy Psychiatrist

Shannon White and Josh Harris/Charles Gowan
Transitive interference in stream trout foraging behavior

Sarah Witte/Mark Malin
Narrative Strategies and Open Endings: The Complexity of Emilia Pardo Bazán's Feminist Project

FYEC Posters

FYEC 175/176 How Did They Do That?: Professors Fisher and Thoburn

Department and Course Posters

Business: Production and Operations Management (BUSN 342)

Designing for Production
Olivia Rosenberger and Justin Stanek
Michael Christian and E. J. Corley
Lauren Cox and Bobby Thomas

Communication Studies: Topics in Communication Studies (COMM 300)

Rebecca Robinson/Joan Conners
Candidate vs. President: Barack Obama's Economic Rhetoric

Philosophy

Britany Woodring/Donna Turney
Bio-Medical Ethics: the Case of Surrogacy

Brett Duplechaine/Donna Turney
Reproductive Technologies

Laura Eister/Donna Turney
HIV/AIDS: The Question of Moral Responsibiity

Bobby Thomas/Donna Turney
Germ Line Genetic Engineering and the New Eugenics

Political Science: Research Methods (PSCI 301)

Nick Simons
The Effect of Ethanol on United States Energy Policy

Heather Lennon
Turning Out the Vote: Voter Turnout in North America

John Chappell
Gun Control: Senate Voting Based on Political Party and Geographic Region

Jonathan Schmeelk
Politics in the Americas: Influences on Political Involvement

Laura Wilson
The Relationship Between Democracy, Ideology, and Deforestation Rates Around the Globe

Blanka Mazakova
Affluence Without Blessings: The Influence of GDP on States' Rates of Religiosity

Stephanie Johnstone
The Effect of Higher Education Choice on Presidential Nomination

Derrick Collins
Election Coverage: Analyzing Voting Behavior in the 2000 and 2004 Presidential Elections

Ben Larson
Red State, Blue State: The Changing Electoral Map of Our Country

Zach Basham
New Orleans Recovery Efforts After Hurricane Katrina

Katie Daugherty
Democrat or Republican: Age, Gender, Education Income, and How they Decide

Alex Hoskins
Battleground vs. Non-Battleground States: Differences in Presidential Campaign Spending

David Huber
Presidential Election Turnout

Andrew Miller
Economics and Public Opinion: The Dow Jones Industrial Average, Unemployment, and Presidential Approval Rating

Jon Fernandez
Mortgage Rates and Home Sales: Trials and Tribulations of the Housing Market

Kurt Henegan
Political Identification: An Indicator of Support for Stem Cell Research?

Colin Royster
Does the Government Help the Economy? The Effects of Economic Recovery Plans

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2:30–4:30
Honors Convocation, Blackwell Auditorium