

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 Djebbar, and “Des Femmes et des Assassins,” by Malika
Mokkedem

Spanish Capstone Presentations

Allison Koste

La mujer y el feminismo contra el hombre y la sociedad

Melissa Rodriguez

Desensitizing the Reader: Violence in Gabriel García Márquez's *Crónica de una muerte 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: Cosmvision 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 Boshier, Laura Eister, J.D. Jump, Tim Nelson, Dalton Sandler, 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 Re-
sponses 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 sig-
nificant 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 ²D 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 Connors

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 Responsibility

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

2:30–4:30

**Honors Convocation,
Blackwell Auditorium**
