14th Annual Salisbury University Student Research Conference
Friday, April 24, 2015

12:30pm-1:30pm
Registration

1:30-2:45pm
Session 1: Oral Research Presentations
Henson Hall

3:00-4:15pm
Session 2: Oral Research Presentations
Henson Hall

4:30-5:45pm
Session 3: Oral Research Presentations
Henson Hall

6:00-7:30pm
Welcome with Provost Diane Allen
Performance by Squawkapella

Poster Session with Refreshments
Wicomico Room, Guerrieri Center

The Registration & Information table will be open:
12:30pm - 1:30pm Henson Hall Lobby
1:30pm – 4:30pm Henson Hall Lobby
5:00 pm - 6:00pm Guerrieri Center, Wicomico Room entrance
**Brief Program Outline**

**Welcome:** 12:30 p.m. – 1:30 p.m. - Registration

**Session 1:** 1:30 p.m. – 2:45 p.m.  
**Oral Research Presentations in Henson Hall**

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**Session 2:** 3:00 p.m. – 4:15 p.m.  
**Oral Research Presentations in Henson Hall**

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**Session 3:** 4:30 p.m. – 5:45 p.m.  
**Oral Research Presentations in Henson Hall**

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<td>3F</td>
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**Session 4:** 6:00 p.m. – 7:30 p.m.  
**Poster Session with Refreshments**

**Wicomico Room, Guerrieri University Center**

Research Poster Displays, Refreshments, and Outstanding Research Mentor Award
12:30-1:30  Registration
Henson Hall Lobby

1:30-2:45  First Session of the Oral Presentations

1A  Academia  Henson Hall 115  Moderator: Brent Fedorko

1:30-1:45  Exploring the Psychosocial Development of Undergraduate Senior Education Students Throughout Their Student-Teacher Internships.
Kevin Knudsen
*Faculty Mentor - Nancy Michelson, Education Specialties

1:50-2:05  Salisbury University's STARS Ranking
Veronica Petrik
*Faculty Mentor - Sarah Surak, Political Science

2:10-2:25  STARS Academics
Brandon Moore, Evan Hefner, Colleen Moore
*Faculty Mentor - Sarah Surak, Political Science

2:30-2:45  The validity of affect and social exchange as predictors of undergraduate GPA.
Michael Heeke
*Faculty Mentor - Kyoung Rae Jung, Psychology

1B  Across the Globe  Henson Hall 113  Moderator: Mou Chakraborty

1:30-1:45  Scotland: SU Values Abroad
Taylor Rogers, Felicia Warfield
*Faculty Mentor - Jennifer Cox, Communication Arts

1:50-2:05  Where 'Mummy' came from the origin of Egyptian Mummification.
Daniella Bramble
*Faculty Mentor - Elizabeth Ragan, History

2:10-2:25  The Character of the Kaiser: How the Personality of Wilhelm II Led Germany to War
Shawn Reagin
*Faculty Mentor - Richard Bowler, History
2:30-2:45  Scotland and the Wars of the Roses  
Alexandra Fox  
*Faculty Mentor - Kristen Walton-Wade, History

1C  Animal Diversity  Henson Hall 103  Moderator: Aaron Hogue

1:30-1:45  Inferring differential predation in two color morphs of the red-backed salamander, *Plethodon cinereus*  
Alexa Grant  
*Faculty Mentor - Eric Liebgold, Biological Sciences

1:50-2:05  Ant Species Richness and Diversity in E.A. Vaughan Wildlife Management Area  
Hunter Mann, Emily Rowe  
*Faculty Mentor - Dana Price, Biological Sciences

2:10-2:25  Change in Dung Beetle Communities Across Seven Counties of Maryland's Eastern Shore  
Patrick Simons, Michael Molina  
*Faculty Mentor - Dana Price, Biological Sciences

2:30-2:45  Temperature Induced Changes in Gene Expression in Icelandic Arctic Charr  
Kyle Kowalczyk, Lindsey Gateau, Mark Hewes  
*Faculty Mentor - Eugene Williams, Biological Sciences

1D  Arts  Henson Hall 109  Moderator: Tim Wemer

1:30-1:45  Savage...Brutal-- AUTHENTIC!: The Sociopolitical Realities of Cannibal Holocaust (1980) and Post-colonial Exploitation Cinema  
Zachary Wheeler  
*Faculty Mentor - David Johnson, English

1:50-2:05  Corrupting Individuals and Societies: The Manual of Sabotage in Short Fiction by Ha Jin and Sherman Alexie  
Simona Griffith  
*Faculty Mentor - John Kalb, English

2:10-2:25  It's More Important to be Human than to Have Good Taste: A Brechtian Look at Sasha Baron Cohen's Bruno  
Dacey Booker  
*Faculty Mentor - Elsie Walker, English

2:30-2:45  Poetry and Politics: How Roman Poets Shaped Politics in the Augustan Age  
Katherine Potvin  
*Faculty Mentor - Leslie Yarmo, Theatre and Dance
1E  Culture  

**Henson Hall 111**  
**Moderator: Jenny Toonstra**

1:30-1:45  Investigating Cultural Perceptions in Language Learnability  
**Ehean Kim**  
*Faculty Mentor - Anjali Pandey, English*

1:50-2:05  Throwing Clay: Themes Throughout the Odyssey in Red-Figure Attic Pottery  
**Felicia De Pena**  
*Faculty Mentor - G. Ray Thompson, History*

2:10-2:25  Chronology Reconstruction of Tobacco Pipes from the Makemie Site: The Father of Presbyterianism and Early Colonial Commerce  
**Jessica Brannock**  
*Faculty Mentor - Elizabeth Ragan, History*

2:30-2:45  Harry Potter, Twilight Saga, Hunger Games: Are There Gender Differences In What Motivates Students to Consume Popular Media Franchises and Their Perceptions of Fictional Relationships?  
**Briana Jordan**  
*Faculty Mentor - Lance Garmon, Psychology*

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1F  Delmarva  

**Henson Hall 243**  
**Moderator: Michele Schlehofer**

1:30-1:45  Who do we remember; who do we forget?: Gloria Richardson and the Cambridge Civil Rights Movement  
**Artura Jackson**  
*Faculty Mentor - Kara French, History*

1:50-2:05  Women on the Eastern Shore of Maryland during World War II  
**Julie Messick**  
*Faculty Mentor - Kara French, History*

2:10-2:25  Fenwick Island Land Development Project  
**Shaqeal Rouse**  
*Faculty Mentor - Sarah Surak, Political Science*

2:30-2:45  Needs of Families and Youth in Wicomico County: Findings, Conclusions, & Recommendations  
**Harry Snoots**  
*Faculty Mentor - Michele Schlehofer, Psychology*
1G  Environmental  Henson Hall 211  Moderator: Susan Brazer

Kyle Barone

*Faculty Mentor - Judith Stribling, Biological Sciences

1:50-2:05  A Cost-Benefit Analysis of the use of Renewable Energy versus Nuclear Power in the Northwest United States
Andrew Sylvia

*Faculty Mentor - Dustin Chambers, Economics and Finance

2:10-2:25  1 in 7 Billion: Belief of Individual Impact on Resolving Climate Change
Victor Morales

*Faculty Mentor - Karl Maier, Psychology

2:30-2:45  Phytoplankton oxidative stress as related to summer environmental conditions in a coastal fjord (East Sound, Orcas Island, Washington)
Lyle Cook

*Faculty Mentor - Judith Stribling, Biological Sciences

3:00-4:15  Second Session of the Oral Presentations

2A  Gender  Henson Hall 115  Moderator: Yoojin Choi

3:00-3:15  Surrealism, Mannequins, and Sex Robots: The Commodification of the Appropriated Female Form
Rachael Kanagie

*Faculty Mentor - Victoria Pass, Art Department

3:20-3:35  The Development of Masculinity: A Case Study on the film Don Jon
Aaron Hutt

*Faculty Mentor - Elsie Walker, English

3:40-3:55  Here She Comes: Mechanics of Female Sexuality and Impact on Body Image in Women
Emily Depasse

*Faculty Mentor - Kara French, History

4:00-4:15  Women as Property: a feminist/environmentalist understanding of oppression
Tabitha Kanagie

*Faculty Mentor - Robert Kirsch, Philosophy
2B  Vertebrata  

**Henson Hall 103  Moderator: Haven Simmons**

3:00-3:15  *Bat Populations and the Environment of the Delmarva Peninsula: A First Look*

Emma Fare

*Faculty Mentor - Aaron Hogue, Biological Sciences

3:20-3:35  *Effects of Location of Ground Nesting Birds in Delmarva*

Jared Novia

*Faculty Mentor - Tami Ransom, Environmental Studies

3:40-3:55  *Fine Scale Genetic Variation in a Central American Frog Population*

Caitlin Minton, Adam Dunn, Taylor Bevan, Hakeem Bushera

*Faculty Mentor - Kimberly Hunter, Biological Sciences

4:00-4:15  *DNA Methylation Patterns in Tungara Frog Populations*

Tyler Bowling, Laurie Adler, Whitney Handy, Carlie Simpson

*Faculty Mentor - Ryan Taylor, Biological Sciences

2C  Influence  

**Henson Hall 111  Moderator: Lincoln A. Gibbs**

3:00-3:15  *The Underpinnings of Tuareg Rebellion: Ethnic Marginalization and its Interrelatedness to Terrorism*

Thelonious Williams

*Faculty Mentor - Joseph Venosa, History

3:20-3:35  *Effects of 9/11 on the IRA*

Gavin Jones

*Faculty Mentor - Kristen Walton-Wade, History

3:40-3:55  *Secret Wars and How to Win Them: An Analysis of the Aims, Approaches, and Aftermaths of Proxy Warfare*

John-Michael Kuna

*Faculty Mentor - Eric Rittinger, Political Science

4:00-4:15  *Social Factors that Influence the Criminal Justice System*

Stephanie Mizansky

*Faculty Mentor - Timothy Dunn, Sociology

2D  Information  

**Henson Hall 109  Moderator: Gaylord Robb**

3:00-3:15  *Best-Hitting Shortstops*

Allegra Sciandra

*Faculty Mentor - Lee May, Math and Computer Science
3:20-3:35  *Learning Android: One Block At a Time*
  William Bowen
  *Faculty Mentor - Sang-Eon Park, Math and Computer Science*

3:40-3:55  *Graphicity: I Can Read Graphs, Can I?*
  Erin McLean
  *Faculty Mentor - J. Craig Clarke, Psychology*

4:00-4:15  *The moment when you learned the answer: Children's reported methods of learning novel and factual information*
  Kristen Beck
  *Faculty Mentor - Rhyannon Bemis, Psychology*

2E  **Knowledge**

3:00-3:15  *Progress towards the synthesis of Pestacin: Scope and Limitations*
  John Thomas
  *Faculty Mentor - Seth Friese, Chemistry*

3:20-3:35  *Exploration of phenolic protecting groups for the generation of organo-lithium nucleophiles.*
  Iram Sarfraz
  *Faculty Mentor - Seth Friese, Chemistry*

3:40-3:55  *Protein and Environmental Determinants of OMP Fate in Liposomes*
  Mark Culver
  *Faculty Mentor - Alison Dewald, Chemistry*

4:00-4:15  *Manipulating Wave Propagation to Clean Oil-Spills*
  Katherine Murphy
  *Faculty Mentor - Mark Muller, Physics*

2F  **Media**

3:00-3:15  *Unifying our Social Chambers*
  Shannon Wiley
  *Faculty Mentor - James Burton, Communication Arts*

3:20-3:35  *Social Media Activism in the 21st Century*
  Abby DeCrenza
  *Faculty Mentor - James Burton, Communication Arts*
3:40-3:55  Dance and Media Production: An Annotated Bibliography
Lisa Redmond
*Faculty Mentor - Victoria Hutchinson, Theatre and Dance

4:00-4:15  Transformative Applications of New Media Technologies by Religious Communities
Kathryn Norman
*Faculty Mentor - James Burton, Communication Arts

2G  Medicine & Ethics  Henson Hall 211  Moderator: George Whitehead

3:00-3:15  The Science and Bioethics of Three-Parent Babies
Beverly Tripari Villaplana
*Faculty Mentor - Les Erickson, Biological Sciences

3:20-3:35  Performance Competency in Point of Care Drug Testing by Untrained Subjects
Kyle Bowen
*Faculty Mentor - Diane Davis, Health Sciences

3:40-3:55  The Ancient Roman Bath: Medicine for the Mind and Body
Megan Findle
*Faculty Mentor - Leslie Yarmo, Theatre and Dance

4:00-4:15  The impact of physical activity on working memory.
Emily Boland
*Faculty Mentor - Scott Mazzetti, Health and Sport Sciences

4:30-5:45  Third Session of the Oral Presentations

3A  Injury  Henson Hall 211  Moderator: Karen Rayne

4:30-4:45  A Partially Torn Pectoralis Major in an Out-of-Season Player
Kelsey Reilly
*Faculty Mentor - Jenny Toonstra, Health and Sport Sciences

4:50-5:05  Core Muscle Injury in a 19 Year Old Male Lacrosse Player
Korinna Sachs
*Faculty Mentor - Jenny Toonstra, Health and Sport Sciences
5:10-5:25  
**Achilles Tendon Rupture in a 23 year old Men's Lacrosse Player**  
Patrick Driscoll  
*Faculty Mentor - Jenny Toonstra, Health and Sport Sciences*

5:30-5:45  
**Head Injuries in High Contact Sports**  
Hannah Ennerfelt  
*Faculty Mentor - Echo Leaver, Psychology*

### 3B  Rights  
**Henson Hall 115**  
**Moderator: John LaManca**

4:30-4:45  
**Gay Rights in Contrast: Latin America and the United States**  
Mark Oberly  
*Faculty Mentor - Emily Story, History*

4:50-5:05  
**Defending Rights: A Comparison of Indigenous and African Court Cases in Colonial Peru**  
Mayra Melendez  
*Faculty Mentor - Emily Story, History*

5:10-5:25  
**The effectiveness of the European Ombudsman as a form of institutionalized alternative dispute resolution in the European Union**  
Alexandra Ginta Martin  
*Faculty Mentor - Vitus Ozoke, Conflict Analysis and Dispute Resolution*

### 3C  Science  
**Henson Hall 243**  
**Moderator: Alexander Halperin**

4:30-4:45  
**ChIP-Seq for Nuclear Factor IB in human prostate cancer cells.**  
Stephen Kelly  
*Faculty Mentor - Philip Anderson, Biological Sciences*

4:50-5:05  
**Using Next-Generation Sequencing Data to Identify Markers for Bacterial Source Tracking**  
Chris Baqir  
*Faculty Mentor - Philip Anderson, Biological Sciences*

5:10-5:25  
**Identification and Characterization of Mutants Related to LRS1 in Arabidopsis Thaliana**  
Heather Yerecic  
*Faculty Mentor - Patti Erickson, Biological Sciences*

5:30-5:45  
**RNA interference of mrck-1 and It's Effect on Oxidative Stress in Caenorhabditis elegans.**  
Michael Robben  
*Faculty Mentor - Patti Erickson, Biological Sciences*
3D Analysis

Henson Hall 113  Moderator: Thomas Anderson

4:30-4:45  Reasons for the rapid growth of Alibaba Group
Yupeng Ou

*Faculty Mentor - Jing Quan, Information and Decision Sciences

4:50-5:05  Marketing Strategy of Muji
Yiwen Xie

*Faculty Mentor - Jing Quan, Information and Decision Sciences

5:10-5:25  The economics analysis of European debt crisis
Xi Wu

*Faculty Mentor - Jing Quan, Information and Decision Sciences

3E Strategy

Henson Hall 111  Moderator: Lance Garmon

4:30-4:45  Comparative Analysis of International Arts Programs Management
Arielle Champagne

*Faculty Mentor - Richard Hoffman, Management and Marketing

4:50-5:05  Advertising in South Korea
Krista Setera

*Faculty Mentor - Bryan Horikami, Communication Arts

5:10-5:25  The Cuban Embargo: It’s More Than Cuban Cigars
Patty Miller

*Faculty Mentor - Carolina Bown, Modern Languages

5:30-5:45  Words & Music...& Painting
Tessa Stultz

*Faculty Mentor – Brooke Rogers, Art

3F Graphics

Henson Hall 103  Moderator: Rhyannon Bemis

4:30-4:45  Digitally enabled product using an arduino microprocessor
Michael Schiavone, Billy Green

*Faculty Mentor - Eugene Hahn, Information and Decision Sciences

4:50-5:05  Arduino RFID Smart Shopping Cart
Eric Church

*Faculty Mentor - Eugene Hahn, Information and Decision Sciences
5:10-5:25  *Dog Alert*
Zachary Towns
*Faculty Mentor - Eugene Hahn, Information and Decision Sciences*

5:30-5:45  *Exploring four dimensions: perceiving 4-D shapes and relating dimensions.*
Sean DiFatta
*Faculty Mentor - Lori Carmack, Math and Computer Science*
6:00-7:30pm- Poster Session with Refreshments
Wicomico Room, Guerrieri University Center

Putting PR Tactics to Use in a Business Setting
Megan Crabill
* Faculty Mentor - Jennifer Cox, Communication Arts

Candlestick Charts: A Winning Look at the S&P 500 Composite Index?
Katherine Burris
* Faculty Mentor - Lori Carmack, Math and Computer Science

Students’ Perception of the Effectiveness of Substance Abuse Treatment Programs
Nicole Kay
* Faculty Mentor - Cecilia Acocella, Psychology

Quantitative analysis of spices and their antimicrobial effects on bacteria
Allyson Davis
* Faculty Mentor - Elizabeth Emmert, Biological Sciences

Scheduling Optimization for LTL Terminal Employees
Paul Curlings
* Faculty Mentor - Steven Hetzler, Math and Computer Science

RNA analysis of soil profiles from Eastern Shore Watersheds
Dustin Parsons
* Faculty Mentor - Katherine Miller, Chemistry

Differential Equations as Used in Clinical Medicine with Mechanical Ventilation
Christopher Wilson
* Faculty Mentor - Melissa Stoner, Math and Computer Science

Need a Little Needle?: How Pine Needles May Affect Warbler Nesting Success
Melissa Carson
* Faculty Mentor - Tami Ransom, Environmental Studies

Progression-Free Survival as a Surrogate for Overall Survival in Advanced Cancer
Eric Gillies
* Faculty Mentor - Veera Holdai, Math and Computer Science

Student Knowledge and Perception of Caffeinated Alcoholic Beverages and Alcohol Mixed with Energy Drinks
Sarah Cukier
* Faculty Mentor - Cecilia Acocella, Psychology
Chemical and Physical Properties of Family Cemetery Soils and Surrounding Fields on the Lower Eastern Shore of Maryland

**Michael Molina**

* Faculty Mentor - Christopher Briand, Biological Sciences

Promoting Spontaneous Labor to Reduce Non-Medically Indicated Elective Inductions

**Amanda Goodman, Ashly James**

* Faculty Mentor - Rita Nutt, Nursing

A Comparative Statistical Analysis on Coastal Property Values of Three Maryland Counties

**Waverly Thompson**

* Faculty Mentor - Mara Chen, Geography and Geosciences

Developing Proficiency in Grade 6 Common Core Statistics

**Kristen Kent**

* Faculty Mentor - Randall Groth, Education Specialties

Differences in various behaviors exhibited by two color morphs of Plethodon cinereus

**Sabrina Aronis**

* Faculty Mentor - Eric Liebgold, Biological Sciences

Eastern Shore Running Club

**John Giffin**

* Faculty Mentor - Chrys Egan, Communication Arts

Life Crisis: Benefits for the Community

**Lisa Junkin**

* Faculty Mentor - Chrys Egan, Communication Arts

Art and Math: M.C. Escher's Circle Limits

**Sarah Dobry**

* Faculty Mentor - Jathan Austin, Math and Computer Science

Perpetration Experience and Gender Predicting Empathy with a Stranger or Acquaintance Rapist

**Ruby Orth**

* Faculty Mentor - Suzanne Osman, Psychology

Vaccines: The More You Know

**Beza Webshet**

* Faculty Mentor - Chrys Egan, Communication Arts

Science Meets Design

**Emily Rossbach, Samantha Rodrigues**

* Faculty Mentor - Dana Price, Biological Sciences
Narg diversity in soil profiles from the Beaver Dam Creek watershed

Brady Travis

* Faculty Mentor - Katherine Miller, Chemistry

Bicycle and Vehicle Safety: Insight to Individual? s Utilization and Perception of Bicycle and Vehicle Safety

Alison James

* Faculty Mentor - Chrys Egan, Communication Arts

Success in the YMCA Culture and Environment: Through Employee and Member Perspectives

Jessica Cunningham

* Faculty Mentor - Chrys Egan, Communication Arts

Antioxidant Effects of Nordihydroguaiaretic Acid on Oxidative Stress in Caenorhabditis elegans

Andrea Korell

* Faculty Mentor - Patti Erickson, Biological Sciences

Contextualizing teaching research: Is the discussion section too little, too late?

Madeline Smith

* Faculty Mentor - Thomas Tomcho, Psychology

Why do you think that? Misconceptions and unscientific thinking.

Leigh Flounlacker

* Faculty Mentor - Jason McCartney, Psychology

Global and Cultural Environmentalism in the Classroom

Katie Rulapaugh

* Faculty Mentor - Michael Lewis, Environmental Studies

Investigating Students Interest In Learning

Kaitlyn Phillips

* Faculty Mentor - Alexander Pope IV, Teacher Education

Sophomores, a Work in Progress: A Reflection of the Importance of the Sophomore Year and an Evaluation of the Sophomore Year Experience (SYE) Program

Samantha Rinker

* Faculty Mentor - Lance Garmon, Psychology

Analyzing genetic diversity of small birds using blood and buccal samples and a large number of microsatellite DNA loci

Taylor Walter

* Faculty Mentor - Eric Liebgold, Biological Sciences

It won't happen to me! Defensive processing and threat orientations

Katherine Helenek

* Faculty Mentor - Michele Schlehofer, Psychology
Quantification and Visualization Forecast of Economic and Environmental Vulnerability of Crisfield, Maryland to Sea Level Rise by 2050 and 2100

Adam Phipps-Dickerson
* Faculty Mentor - Arthur Lembo, Geography and Geosciences

Functional Analysis of DUF1 in Saccharomyces cerevisiae

Brittney Lozzi
* Faculty Mentor - Les Erickson, Biological Sciences

Anxiety and Climate Change Stress: Does it Matter How Much You Think About it?

Caitlyn Powers
* Faculty Mentor - Karl Maier, Psychology

Team Saferide

Rachel Hollis, Mitchell Lord, Cale Bowen, Ryan Mulligan
* Faculty Mentor - Xiaohong Wang, Math and Computer Science

Using Remote Sensing Image Classification Techniques to Detect Small Water Bodies in Wicomico County, Maryland

John Buppert
* Faculty Mentor - Daniel Harris, Geography and Geosciences

Effect of Hyperglycemia on the Rate of Axonal Degeneration and Regeneration of Neurons in Zebrafish Larvae

Derrick Miller
* Faculty Mentor - Jessica Clark, Biological Sciences

Graphicacy: Are Psychological Statistical Textbooks Raising the Bar and Crossing the Line

Ginetta Ricci
* Faculty Mentor - J. Craig Clarke, Psychology

Campus Sustainability using STARS: Operations

Erin Jones
* Faculty Mentor - Sarah Surak, Political Science

A GIS based multi-criteria model to identify optimal locations for Ring-necked Pheasant reintroduction in Maryland

Paul Byerly
* Faculty Mentor - Arthur Lembo, Geography and Geosciences

An Exploration of Folding in Outer Membrane Proteins

Stephanos Gozali
* Faculty Mentor - Alison Dewald, Chemistry
Identifying the Statistical Significance of Selected Environmental Variables that Contribute to Low Dissolve Oxygen Areas (Dead Zones) in the Chesapeake Bay Using GIS and Regression Analysis

**Tyler Wilson**

* Faculty Mentor - Arthur Lembo, Geography and Geosciences

Variation in Microbial Soil Communities Relative to Depth

**Jacqueline Tower**

* Faculty Mentor - Katherine Miller, Chemistry

Genetic Diversity of a population of Red-Backed Salamanders on the edge of its range

**Sarina Mossa**

* Faculty Mentor - Eric Liebgold, Biological Sciences

Quantifying Mangrove Loss and Change in Carbon Sequestration in Coastal Ecuador Over 40 Years History

**John Talbot**

* Faculty Mentor - Arthur Lembo, Geography and Geosciences

The Effect Of Population Change From 1990 To 2010 And Its Impact On Overcrowding In The Montgomery County School District With Considerations For Facility Expansion

**Nicholas Ward**

* Faculty Mentor - Arthur Lembo, Geography and Geosciences

Stress Reduction from a Musical Intervention

**Veronica Fallon**

* Faculty Mentor - Echo Leaver, Psychology

Wicomico Partnership for Families and Children. How to spread awareness of the programs this organization offers.

**Eric Kluge**

* Faculty Mentor - Chrys Egan, Communication Arts

A GIS and statistical quantifying the contributing environmental and human factors impacting chlorophyll levels in the Chesapeake Bay tributaries.

**James Janis**

* Faculty Mentor - Arthur Lembo, Geography and Geosciences

Theories and Mechanisms of Change Across Psychology's Sub-Disciplines: A Content Analysis

**Rachel Silverstein**

* Faculty Mentor - Thomas Tomcho, Psychology

RNA interference expression constructs for wdr-20 and wdr-48 in Caenorhabditis elegans

**Nicholas Gephardt**

* Faculty Mentor - Patti Erickson, Biological Sciences
Conundrum from above: Determining the origin of an alleged meteorite using Petrography and Geochemistry

Robert Landis
* Faculty Mentor - Thomas Cawthern, Geography and Geosciences

Livable Sustainability utilizing Solar Energy

Samuel Brown
* Faculty Mentor - Joseph Howard, Physics

Peer Mentoring Initiative in Math and CS Club : A Feasibility Study

Robert Close
* Faculty Mentor - Xiaohong Wang, Math and Computer Science

Graphacy; figures, captions oh my!

Gregory Bisset
* Faculty Mentor - J. Craig Clarke, Psychology

Multi-criteria GIS Model to Identify Suitable Habitat Locations for Piping Plover (Charadrius melodus) on The Delmarva Peninsula

Margaret Cummings
* Faculty Mentor - Arthur Lembo, Geography and Geosciences

Cognitive processing and threat orientations: Thoughts about threats

Meaghan Twomey
* Faculty Mentor - Michele Schlehofer, Psychology

Status Reassessment of the Carpenter Frog (Lithobates virgatipes) in Maryland

Jacqueline Darrow
* Faculty Mentor - Ronald Gutberlet, Biological Sciences

Hidden Fractals in the Dynamics of a Double Pendulum

May Palace
* Faculty Mentor - Jeffrey Emmert, Physics

Microbial Activity of Wicomico County Agricultural and Cemetery Soil

Ashley Hawkins
* Faculty Mentor - Elizabeth Emmert, Biological Sciences

Classroom activities using Galleria mellonella as a suitable model for studying the innate immune system in mammals

Megan Millen
* Faculty Mentor - Elizabeth Emmert, Biological Sciences

The ability of hunter phenotype Bdellovibrio bacteriovorus to control soft rot in carrots

Jennifer Krieck
* Faculty Mentor - Elizabeth Emmert, Biological Sciences
All for naught? Limits to the external validity of teaching research
Lisa Dixon
* Faculty Mentor - Thomas Tomcho, Psychology

GIS based Market Analysis and Penetration for Red Bull North America's Collegiate Marketing Team
Scott Purdy
* Faculty Mentor - Arthur Lembo, Geography and Geosciences

CY-Aquarius: A Variable Star
Marcus Schwarz
* Faculty Mentor - Andrew Pica, Physics

CY Aquarius: A Variable Star
Jon Rothermel
* Faculty Mentor - Andrew Pica, Physics

Computer Simulated Orbital Mechanics
Chris Viqueira
* Faculty Mentor - Michael Bardzell, Math and Computer Science

Real Time Prediction of Summer Crime Activity in Ocean City, Maryland to Aid in Police Patrol Placement with Consideration for Type of Crime and Time of Day
Christopher Truitt
* Faculty Mentor - Arthur Lembo, Geography and Geosciences

Citizens, Government, Drug Cartels: On the Front Lines of the Mexican Social Media War
Taylor Goebel
* Faculty Mentor - James Burton, Communication Arts

Cartesian Robot
Kassandra Spicer
* Faculty Mentor - Joseph Howard, Physics

CY Aquarius: A Variable Star
Sam Williams
* Faculty Mentor - Andrew Pica, Physics

STARS: Engagement
Evan Heffner
* Faculty Mentor - Sarah Surak, Political Science

A GIS Analysis of the Spatial and Temporal Shift of Calls for Service in Dorchester County, Maryland between 2007-2013
Ashley Samonisky
* Faculty Mentor - Arthur Lembo, Geography and Geosciences
Humorism Day Spa
Heather Lowe
* Faculty Mentor - Leslie Yarmo, Theatre and Dance

Network Analysis for Navigating the Potomac River for recreational exploration
William Eichhorn
* Faculty Mentor - Arthur Lembo, Geography and Geosciences

Salisbury University STARS Assessment: Planning & Administration
Ryan Kuhn
* Faculty Mentor - Sarah Surak, Political Science

CPU/GPU Workload Distributions for Sieve Factoring Methods and Elliptic Curves
Zachary Johnson
* Faculty Mentor - Donald Spickler, Math and Computer Science

Examining Eigenvalues & Eigenvectors in the Time Evolution Map
James Goodwyn
* Faculty Mentor - Michael Bardzell, Math and Computer Science

A GIS-based Multi-Criteria Model to Identify Optimal Locations for Wind and Solar Energy Solutions on Maryland’s Lower Eastern Shore
Suzanne Ketcham
* Faculty Mentor - Arthur Lembo, Geography and Geosciences

Developing a Subtle Animal Attitudes Measure
Andrew Olah
* Faculty Mentor - Larence Becker, Psychology

Are Teaching Activities Relevant? A Content Analysis of Teaching of Psychology Interventions
Chris Bolgiano
* Faculty Mentor - Thomas Tomcho, Psychology

Object Avoidance Robot using Arduino
Antonio Anderson
* Faculty Mentor - Joseph Howard, Physics

Social Media for Business: A Content Analysis of a Fashion Showroom’s Marketing and Media Documents
Natalie King
* Faculty Mentor - Darrell Mullins, Communication Arts

Route Optimization for Summer-Long Music Festival Pilgrimage with Consideration for Time and Budget Constraints
Jefferson Smith
* Faculty Mentor - Arthur Lembo, Geography and Geosciences
Analyzing the expression of the MRCK-I protein from RNA interference (RNAi)-treated C. elegans using immunoblots

Marie Lockard

* Faculty Mentor - Patti Erickson, Biological Sciences

Volunteerism and the Impact on the Community

Cindy Saavedra

* Faculty Mentor - Linda Dwyer, History

GIS Based Multi-criteria Weighting Model of Identifying Potential Scenic Sunset Locations Overlooking Soldiers Delight Natural Environmental Area

Collin Woodyard

* Faculty Mentor - Arthur Lembo, Geography and Geosciences

False Consensus Effect and Attitude Importance relating to Climate Change

Amber Lahay

* Faculty Mentor - Karl Maier, Psychology

Estimating growth rates of the Red-backed Salamander, Plethodon cinereus, an abundant indicator species.

Joshua Biddle

* Faculty Mentor - Eric Liebgold, Biological Sciences

Benefits of Inclusion in the Elementary Physical Education Setting: How communication and physical performance improves for students with disabilities

Heather Giovenco

* Faculty Mentor - Gwen Beegle, Health & Physical Education
**Outstanding Research Mentor Award**

The Salisbury University Student Research Conference Committee is pleased to announce the Outstanding Research Mentor Award at the poster session to be held from 6:00-7:30pm in the Wicomico Room (Guerrieri Center). This award celebrates faculty mentors who have proven excellent supervisors of student research or creative work. The 2015 Outstanding Research Mentor Award Nominees are:

- Ms. Colleen Clark – Music
- Dr. Eric Liebgold – Biological Sciences
- Dr. Joseph Howard - Physics
- Dr. Kara French – History
- Dr. Karl Maier - Psychology
- Dr. Lori Carmack – Math and Computer Science
- Dr. Michele Schlehofer - Psychology
- Dr. Suzanne Osman – Psychology
- Dr. Tom Tomcho – Psychology

**Outstanding Student Research**

Salisbury University’s commitment to student research is evident in both the number and quality of the presentations at our annual student research conference. However, many of our students are being recognized for their work in off-campus settings. The following are highlights from Salisbury University students during the last year.

**Student Publications**

Celeste Reeb published "How Disney's "Hell Fire" Illuminates the Struggle of the Subconscious" in the *Artifice*, June 2014.


**Student Presentations**

Alexis Perno and Andrea Widdowson presented "Developing fraction proficiency in fourth grade mathematics" at the National Conference on Undergraduate Research in Spokane, WA, April 2015.
Alison Hallock presented "Sexual victimization and partnership with perpetrator predicting satisfaction with a current partner" at the Eastern Psychological Association annual meeting, Philadelphia, PA, March, 2015.

Andrew Olah and George Whitehead presented "Creating a scale to assess volunteer attitudes in high school students" at NCUR, April 2015.


Domenique Palagruto, Veronica Turley, Samantha Vail, Kelly Giambelluca, Heather Dove, and Kaylee Herbert presented "Opinion and Information Writing" at the State of Maryland International Reading Association Conference, Baltimore, MD, April, 17, 2015.

Elizabeth Bangert and Michael Burchett presented "Collection and Distribution of Scarabaeoidea across Maryland" at the Guerrieri Undergraduate Research Symposium, Salisbury University, August 2014.

Elizabeth Raley presented "Going Green while Owing Green: Argentina's Duel Battle" at the Northeast Regional Honors Council conference, Gettysburg, PA, April 12, 2015.

Hannah Ennerfelt and Mary Jeter presented "Nutrition and Cognition in Older Adults" at the Eastern Psychological Association annual meeting, Philadelphia, PA, March, 2015.

James McGall presented a poster "The High Fidelity Plasma Speaker" at the American Physics Society Plasma Meeting in New Orleans, LA in October 2014.

Jenny McFadden and Matt Swiderski presented “Using civic engagement to cultivate 21st Century civil society in a university setting to the Middle States Council” for the Social Studies Regional Conference in Gettysburg, PA.


Kristen Kent presented "Developing proficiency in Grade 6 Common Core Statistics" at the National Conference on Undergraduate Research, Spokane, WA, April 2015.

Lindsay Gordon and Felicia Depeiia presented "Developing students' understanding of decimal numeration in Grade 5" at the Research Experiences for Undergraduates Symposium of the Council on Undergraduate Research, Arlington, VA, October 2014.
Mallory Hagadorn presented "Not all dung is created equal: Dung beetles on organic and conventionally managed cattle pastures" at the Entomological Society of America Eastern Branch Meeting, Williamsburg, VA, March 2014. Mallory was awarded second place winner in the Master's Student Competition.

Mark Culver (with co-author Stephanos Gozali) presented a platform talk on "Protein and environmental determinants of OMP fate in liposomes" at the 59th Annual Meeting of the Biophysical Society in Baltimore, Maryland.

Michael Burchett and Elizabeth Bangert presented "Maryland Scarabs and Citizen Science" at the Guerrieri Undergraduate Research Symposium, Salisbury University, August 2014.

Patrick Simons presented "Changes in Dung Beetle Communities Across Seven Counties on Maryland's Eastern Shore" at the Guerrieri Undergraduate Research Symposium, Salisbury University, August 2014.

Rachel Clewer, Alison Benjamin, Abigale Mann, Breanne Byam presented "Digital Writing with Struggling Readers," at the State of Maryland International Reading Association Conference, Baltimore, MD, April 17, 2015.

Ruby Orth presented "Perpetration experience and gender predicting empathy with a stranger or acquaintance rapist" at the Eastern Psychological Association annual meeting, Philadelphia, PA, March 2015.

Sarah Gregory presented a poster entitled "Characterizing the function of a putative NAD(P)H nitroreductase" at the 7th Annual Undergraduate Research Symposium in the Chemical and Biological Sciences, UMBC, Baltimore, MD, for which she was awarded First place in the category of Chemical Sciences.

Silviya Gallo and Nicole Herrin presented "Building Third-Grade PDS students' understanding of multiplication" at the National Association of Professional Development Schools annual conference, Atlanta, GA, March 2015.

Stephanos Gozali (with co-author Mark Culver) presented a poster entitled "Outer membrane protein folding in liposomes" at the 7th Annual Undergraduate Research Symposium in the Chemical and Biological Sciences, UMBC, Baltimore, MD for which he won second place in the category of Biochemical & Molecular Biology.

Victoria DeHoyos presented "Death, It's a Part of Life: Do Personal Death Experiences Result in More Mortality Salience?" at the National Conference for Undergraduate Research conference in Spokane, Washington, April, 2015

Student Awards, Honors, and other Activities of Distinction

Zachary Wheeler's short film 'The Trail' was officially selected and screened at the John Hopkins Film Festival, February 25th. Wheeler wrote and directed.
Acknowledgements

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Beatriz Hardy, Dean of the Blackwell Library

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Rayne, English; Lance Garmon, Psychology; Larence Becker, Psychology; Laura Hanscom, Blackwell Library; Lee May, Mathematics and Computer Science; Les Erickson, Biological Sciences; Lincoln Gibbs, Health and Sport Sciences; Lori Carmack, Mathematics & Computer Science; Louise Detwiler, Modern Languages; Margo Kushner, Social Work; Meredith Patterson, Psychology; Michele Schlehofer, Psychology; Mou Chakraborty, Blackwell Library; Patti Erickson, Biological Sciences; Priscilla Davis, Academic Affairs; Rachel Buchanan, Social Work; Rhyannon Bemis, Psychology; Richard Hoffman, Management and Marketing; Sarah Loudenslager, Blackwell Library; Susan Brazer, Blackwell Library; Tim Werner, Health and Exercise Science; Tom Anderson, Theatre and Dance; Tylor Claggett, Economics and Finance; Vanessa Collins, Graduate Studies and Research; Vicky Adeniran, University Dining Services; Yoojin Choi, Health and Sport Sciences

Thank you to all our presenters, mentors, volunteers, support folks, and committee members! See you at the 15th Annual Salisbury University Student Research Conference in April, 2016!!!