VMI UNDERGRADUATE RESEARCH SYMPOSIUM
19 APRIL 2012

ORAL PRESENTATIONS IN THE CLASSROOM

SESSION 1: HEALTH CARE: 221 MH*
Moderator: COL Wade Bell

0800-0815	Development of Dry Powder Inhalers for Enhanced Lung Delivery - Cadet: Michael Everett (Mentor: MAJ Ryan Taylor)
0820-0835	Factors of Influencing Self-Esteem and the Use of Alcohol: A Correlational Study - Cadet: Lindsey Parkman (Mentor: COL James Gire)
0840-0855	Adapting perceptions on palliative care and assisted dying in the elderly - Cadet: Ethan Betts (Mentor: COL James Gire)

SESSION 2: MECHANICAL ENGINEERING SENIOR DESIGN PROJECTS: 434 NEB
Moderator: COL Timothy Hodges

0800-0815	LSET: Lead Screw Extraction Tool - Cadets: Chan-Yi Liao (team leader), Martin Tucker (Mentor: LTC Jay Sullivan)
0820-0835	Analysis and Comparison of a Tanked versus a Tankless Hot Water System - Cadets: Joseph Fleshman (team leader), Szu-ning Chang, Matthew Dickinson (Mentor: MAJ Joyce Blandino)

SESSION 3: MATTERS MILITARY: 502 SSH
Moderator: LTC Timothy Dowling

0800-0815	*America's Army* and America's Army: The Use of Videogames as Recruiting Tools - Cadet: Wesley Jacobs (Mentor: CDR Alexis Hart)
0820-0835	A Comparison of Soviet Field Regulations 1929 and 1936: The Development and Adoption of Deep Battle Theory as Soviet Military Doctrine - Cadet: John Bolen, Jr. (Mentor: COL Geoff Jensen)
0840-0855	Martial Law in Elizabethan England and in *Henry V* - Cadet: Frederick Dawson (Mentor: COL Emily Miller)

SESSION 4: LEADERSHIP AND SOCIAL PERSUASION: 106 SSH
Moderator: MAJ Scott Frein

0925-0940	The Effectiveness of Peer Assessments and Followership Styles as Predictors of Leadership Styles - Cadet: Charles Jones (Mentor: COL Tom Meriwether)
0945-1000	The Effects of *The Colbert Report* and *The Daily Show* on Political Attitudes: Humor and the Brain – Presenter: Whitney Reed, Southern Virginia University (Mentor: Dr. Jeremiah John)
1005-1020	Measuring the Effect of Efficacy on Emotional Intelligence and Performance Outcomes - Cadet: David Stradford (Mentor: COL Tom Meriwether)

SESSION 5: ARAB WORLD: 401 SSH
Moderator: Prof. Heba El-Shazli

0925-0940	Understanding the Storms: Saddam Hussein and the Gulf Conflicts - Cadet: Zeke Dodd (Mentor: Prof. Heba El-Shazli)
0945-1000	The Role of the Internet in the Arab Spring - Cadet: Kelly Maggio (Mentor: Prof. Khadija Bentouhami)
1005-1020	King Abdullah of Jordan – Cadet: Briana Hogan (Mentor: Prof. Heba El-Shazli)

SESSION 6: CIVIL WAR: 109 SSH
Moderator: LTC Keith Kline

0925-0940	The Fort Pillow Massacre – Cadet: James Burton (Mentor: COL Cash Koeniger)
0945-1000	William T. Sherman's North Georgia Campaign and its Effects on the American Civil War - Cadet: Brandon Butler (Mentor: COL Cash Koeniger)
1005-1020	Andrew Bush's Civil War Experience - Cadet: Alexander Stalnaker (Mentor: COL Cash Koeniger)
1025-1040	Bloody April: The Last Week of the Civil War in the Eastern Theater - Cadet: Matthew Fisher (Mentor: COL Cash Koeniger)

SESSION 7: MECHANICAL ENGINEERING SENIOR DESIGN PROJECTS: 434 NEB
Moderator: COL Timothy Hodges

0925-0940	ASME Design Project: Cadets - James Graves III (team leader), Andrew Stahling (Mentor: COL Wayne Neel)
0945-1000	ASME Design Project - Cadets: Steven Hite (team leader), Robert Rice, William Klick (Mentor: COL Wayne Neel)

SESSION 8: SPANISH LANGUAGE: 501 SSH
Moderator: Dr. Ivelise Faundez-Reitsma

0925-0940	Don Juan Religioso - Presenter: Kimberly Hyden, Southern Virginia University (Mentor: Dr. Iana Konstantinova)
0945-1000	El papel central de la Ropa en los cuentos de la Pardo Bazàn – Presenter: Tamara Nagle, Southern Virginia University (Mentor: Dr. Iana Konstantinova)
1005-1020	El control absoluto corrompe absolutamente: un analisis de tres sonetos de Garcilaso de la Vega - Presenter: Emmelin Himes, Southern Virginia University (Mentor: Dr. Iana Konstantinova)

SESSION 9: MECHANICAL ENGINEERING SENIOR DESIGN PROJECTS: 419 NEB
Moderator: COL Wayne Neel

0925-0940	Bolted Joint Analysis and Design Calculator Program - Cadets: Gabriel Dongieux (team leader), Brennan Buell, Logan McCloud (Mentor: COL Michael Hardin)
0945-1000	Data Center Energy Analysis - Cadets: Casey Riggs (team leader), Ken Cross, Raymond Delgado (Mentor: COL Howard Arthur)

SESSION 10: ROBOTICS, SCHEMATICS AND UAVs: NEB AUDITORIUM

Moderator: COL Dan Barr

1050 - 1105	Autonomous Telemetry Robot - Cadet: Thomas Kendzia (Mentor: COL Dan Barr)
1105 - 1120	Schematic Selection System - Cadet: Joakim Kiprotich (Mentor: COL Dan Barr)
1120 - 1135	Development of Instrumentation for Control System Parameter Identification for Small Rotary Wing UAVs - Cadet: Shun-Te Shih (Mentor: COL Joe Blandino)

SESSION 11: COLONIAL AMERICA: 401 SSH

Moderator: COL Don Sunnen

1050 - 1105	The Influence of the Anglican Church in South Carolina during the American Revolution - Cadet: Donnie Cox (Mentor: COL Turk McCleskey)
1110 - 1125	Revolution within Evolution: Colonial Loyalist Dissent amidst the Patriot Fight for Independence - Cadet: Christopher Cranstone (Mentor: COL Turk McCleskey)

SESSION 12: PSYCHOLOGY, EDUCATION AND COMMUNICATION: 107 SSH

Moderator: MAJ Scott Frein

1050 - 1105	Modeling Retention at a Women's College – Presenter: Kelly Winer, Sweet Briar College (Mentor: Dr. Joseph Craig)
1110 - 1125	A Cross-Cultural Look: Individualist and Collectivist Patterns and *Facebook* Use - Cadet: Samantha Jones (Mentors: COL James Gire and MAJ Scott Frein)
1130- 1145	Is Psychopathy in College Students an Adaptive Response? - Cadet: Ethan Betts (Mentor: MAJ Glenn Sullivan)

SESSION 13: MECHANICAL ENGINEERING SENIOR DESIGN PROJECTS: 420 NEB

Moderator: CAPT Robert McMasters

1050 - 1115	Water Turbine - Cadets: Christopher Venissat (team leader), Nicholas Gelles, Chelsea Nugent (Mentor: COL Howard Arthur)

SESSION 14: MECHANICAL ENGINEERING SENIOR DESIGN PROJECTS: 419 NEB

Moderator: COL Wayne Neel

1050 - 1105	Utilization of a Flow Bench to Determine the Flow Characteristics of Different Engine Components - Cadets: Tracey Fisher (team leader), Spencer Fuller, George Steele (Mentor: MAJ Ryan Taylor)
1110 - 1125	UAV Control System - Cadets: Jennifer Sing (team leader), Jae-Min Kim, William Smith (Mentor: COL Joe Blandino)

SESSION 15: MECHANICAL ENGINEERING SENIOR DESIGN PROJECTS: 434 NEB

Moderator: COL Timothy Hodges

1050 - 1105	Computational Fluid Dynamics - Cadet: Michael Everett (team leader) (Mentor: MAJ Ryan Taylor)
1110 - 1125	Flapping Wing Research - Cadet: John Alerding IV (team leader) (Mentor: COL Joe Blandino)

SESSION 16: SCIENCE: 215 MBH

Moderator: COL Jim Turner

1300-1315	Development of a Hydrangea with Yellow Sepals - Cadet: Corinne Lariviere (Mentor: COL Henry Schreiber)
1320-1335	Broullion Scattering in Optical Fiber - Cadet: William Potter (Mentor: COL John Thompson)

***Building Names Abbreviations: MH=Mallory Hall, MBH = Maury-Brooke Hall, NEB = Nichols Engineering Building, SSH = Scott Shipp Hall**

POSTER SESSION

Turman Room, Preston Library

Cadet Narration: Thursday, 19 April, 2012: **1230-1330**

- The Relationship Between Student Perception of a Teacher's Overall Effectiveness and That Teacher's Level of Transformational Leadership - Cadet: Richard Luck (Mentor: COL Tom Meriwether)
- The Effects of Estrogen Deprivation on the Vascular Development of Embryonic Zebrafish (Danio rerio) - Cadet: Frederick Dawson (Mentor: COL Jim Turner)
- The Effects of Nitric Oxide on the Sensory-Motor Functions in the Developing Zebrafish (Danio rerio) - Cadet: Ben Sykes (Mentor: COL Jim Turner)
- 2012 Mathematical Contest in Modeling Analysis of the Carrying Capacity of Water Vessels on the 'Big River' - Cadets: Anderson Caldwell, Jacob MacIntyre, Narathip Khanjansuk (MAJ Randall Cone)

- 2012 Mathematical Contest in Modeling: Efficiency in Tourist Travel along the Big Long River - Cadets: Felix Kitur, Cheng-Wu Kuo, Chung-Yen Yang (Mentor: MAJ Randall Cone)
- 2012 Mathematical Contest in Modeling: Scheduling optimization Solution Using Static Scheduling - Cadets: Alex Hufnagel, Taeseung Kwon, Chun Liu (Mentor: MAJ Randall Cone)
- Exploration into Liquid Crystal Flavones - Cadet: Abraham Jordan (Mentor: COL Daren Timmons)
- Multi-Metallic Flavonolate Complexes for Luminescent Applications - Cadet: Kacey Hall (Mentor: COL Daren Timmons)
- Extending the Flavone Core for Better Liquid Crystals - Cadet: Ashley Gernhardt (Mentor: COL Daren Timmons)
- Chemical Basis for Survival of Witch Hazel Blooms in Freezing Temperatures - Cadet: Blaine Groat (Mentor: COL Henry Schreiber)