Third Annual Andrews University Celebration of Research Thursday, November 10, 2011

Buller Hall, 3:00 – 7:30 pm



See what Andrews University faculty are doing this year!

"Research and creative scholarship permeate our academic life, inform our teaching and strengthen our emphasis on generous service."

Niels-Erik Andreasen, president

Welcome

Welcome to our **Third Annual Andrews University Celebration of Research**. During 2010, Andrews University faculty research resulted in,

- ➢ 14 books published,
- ➢ 70 book chapters published,
- ▶ 139 journal articles published,
- ➢ 53 book reviews published,
- ➢ 274 conference presentations,
- ➢ 61 performances, art and design exhibitions.

This year's program celebrates these accomplishments and features some of the important ongoing research and creative scholarship being done by Andrews University faculty. This celebration includes almost 100 posters and oral presentations highlighting some of the most important research and creative scholarship that our Andrews University faculty members have participated in over the past year.

In February, 2011, the *Siegfried H. Horn Excellence in Research and Creative Scholarship Award* was inaugurated in order to recognize the exceptional research accomplishments of our faculty members over the previous five years. One award will be given annually to a faculty member in each of four categories: *Sciences and Mathematics, Arts and Humanities, Professions, and Religion and Theology.* Congratulations to the 2011 award winners, **Shandelle Henson, Larry Burton, Karen Allen,** and **Richard Davidson**, who will be giving our plenary presentations starting at 6:00 pm.

Thank you for joining us as we celebrate these important accomplishments of the Andrews University faculty.

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Gary W. Burdick Associate Dean for Research

Schedule of Events

- 3:00 6:00 pm **Poster Presentations** (Buller Hallways) See pages 5 – 11 for program details Refreshments served in central atrium
- 5:00 6:00 pm **Oral Breakout Sessions** (BH150, 250, 251) See page 4 for program details
- 6:00 7:30 pm Plenary Presentations (Newbold Auditorium)
- Tribute to Siegfried H. Horn
- Presentations by recipients of the 2011 Siegfried H. Horn Award for Excellence in Research and Creative Scholarship:

Shandelle M. Henson, Professor of Mathematics, The Mathematics of Animal Behavior

Larry D. Burton, Professor of Teacher Education, Me and the 'N' Word: Keeping My Research Agenda Fresh – and Personal

Karen A. Allen, Professor of Nursing, Substance Abuse Systems of Care: Serving Young Children and their Families

Richard M. Davidson, J. N. Andrews Professor of Old Testament Interpretation, *Sexuality, Sabbath, Sanctuary, and Spirit: Stimulating Research in the Hebrew Scriptures*

Oral Presentations

Buller Hall 150 History, Old Testament and Religion John Markovic, session chair

- 5:00 Roy Gane, Didactic Logic in Leviticus
- 5:12 **Brian Strayer**, *The Legacy of John Norton Loughborough to Seventh-day Adventism*
- 5:24 Erhard Gallos, Katapausis and Sabbatismos in Hebrews 4
- 5:36 Randall Younker, Biblical Archaeology at the Louvre
- Buller Hall 250 Mathematics and Health Sciences Lionel Matthews, session chair
- 5:00 Lynelle Weldon, Analysis of Factors that Affect the Hatching Success of Gull Eggs
- 5:12 Gisele Kuhn, Pediatric Asthma Management in Schools
- 5:24 **Gisela Schmidt**, Enhancing Leadership Skills in Baccalaureate Junior Level Students
- 5:36 **Peter Pribis**, *Effects of walnuts consumption on cognitive performance in young adults*
- 5:48 **Heather Ferguson**, *Early Childhood Education Training in South Africa*
- Buller Hall 251 Business, Social Work and Communication Curtis VanderWaal, session chair
- 5:00 **Leroy Ruhupatty**, Using the Activity-Based Costing Approach to Measure the Cost of Quality in Higher Education: A Faculty Perspective
- 5:12 **Curtis VanderWaal**, Project Get Connected: An African American Church-Community Collaboration to Improve Mental Health Education, Support and Referrals
- 5:24 **Desrene Vernon**, A historical analysis of AWR's impact in the East-Central Africa Division of the SDA church: A case study of Tanzania
- 5:36 **K. Demsky** and M. Ponniah, *Communication Practices from the History of the Waldenses*
- 5:48 **M. Ponniah**, D. Steyn and D. Vernon, *Implications of Emergent Media for Communication Pedagogy*

Poster Presentations

Jordan Field School (Interdisciplinary)

- P-01 Oystein LaBianca, *The Jordan Field School: An Overview* of a Student-Faculty Research Collaborative
- P-02 Robert Bates, *Excavating the Reservoir at Tall Hesban:* Stories about Ancient Technology
- P-03 Robert Bates, Analyzing Vessels: An Undergraduate Research Project
- P-04 Martin Smith, *Hisban Cultural Education Center: A* Building Restoration Project to Promote Public Awareness
- P-05 Stan Beikmann, Research for and Development of an Interpretive Trail of Socio-Economic Plants at Tell Hesban
- P-06 Patrice Jones, Documentary Development in Praxis
- P-07 Dave Sherwin and Kristen Witzel, *Exploring Jordan* through Art and Ethnography

Old Testament

P-08 Randall Younker, Jalul excavation

Art & Design

- P-09 Stefanie Elkins, Archaeological Artifact Illustration & Documentation Project
- P-10 Brian Manley, *Re-visiting Orientalism: cross-cultural* bridge building in the 21st century
- P-11/ Greg Constantine, Poetic License
- P-12

English

P-15 Scott Moncrieff, Eve Out of Eden: Moral Choice and Exile in Jane Eyre, George Eliot, and Rebecca

History & Political Science

- P-16 Kathryn Banks, In Industry to Stay: Recovering the History of Durham's African American Millworkers
- P-17/ John Markovic, Emerging/Emergent Christianity: A
- P-18 History of the Idea of Emerging Christianity

Business Administration

- P-19 School of Business, Summary of Individual Publications and research Presentations by Faculty in the School of Business
- P-20 Bruce Wrenn, Religious Marketing is Different

James White Library

- P-21 Lauren Matacio, Library Faculty Scholarly Activities
- P-22 Silas Oliveira, The Andrews University's Leadership Program Alignment with Ancient Chinese and Greek Philosophy
- P-23 Larry Onsager and Silas Oliveira, *Benefits and Challenges* of Open Access and Institutional Repository Implementation in SDA University Libraries
- P-24 Terry Robertson, *Library Catalog as an Institutional Repository*

Distance Education

- P-25 Glynis Bradfield, *The development and validation of the Growing Disciples Inventory (GDI) as a curriculumaligned self-assessment for Christian education*
- P-26 Janine Lim and Glynis Bradfield, A Quantitative Analysis of Variables That Predict Usage of Curriculum Videoconferencing

Leadership & Educational Administration

P-27 E. Baumgartner and S. Patterson, *Global Leadership* Development Needs in the Seventh-day Adventist Church

- P-28 Duane Covrig, The Role of Judgment and Community in the Integration of Leaders:- Why Groups Need Leaders and Leaders Need Groups and Both Need Processes
- P-29 Becky De Oliveira, Keeping it Real in the Real World
- P-30 Tamara Dindoffer, Barbara Reid and Shirley Freed, A Description of How Women Administrators in Christian Universities Make Meaning of their Lives
- P-31 Janet Ledesma, Narratives of longevity from the perspective of Seventh-day Adventist School Administrators
- P-32 Isadore Newman and Duane Covrig, Building Consistency between Title, Problem Statement, Purpose and Research Questions to Improve the Quality of Research Plans and Reports

Educational & Counseling Psychology

- P-33 R. N. Bailey and J. K. Montagano, *Confirmatory Factor Analysis of the Social Phobia and Anxiety Inventory for Children*
- P-34 R. N. Bailey and J. K. Montagano, *Gender Differences in Math, Test and Social Anxiety*
- P-35 R. N. Bailey and J. K. Montagano, *Math Anxiety and the Test Anxiety in 9-11 year olds—A look at Gender*
- P-36 J. K. Montagano and R. N. Bailey, *Confirmatory Factor Analysis of Children's Test Anxiety Scale*
- P-37 J. K. Montagano and R. N. Bailey, *Exploratory factor* analysis of the children's Test Anxiety Scale
- P-38 J. K. Montagano and R. N. Bailey, *Social Anxiety in 9-11* year olds
- P-39 Nancy Carbonell, Addressing Spirituality and Religion in a Counselor Education Program
- P-40 Carole Woolford-Hunt, *Endocrine Response to Perceived Difference*

P-41 Carole Woolford-Hunt, *Psycholoneuroendocrine Response* to Perceived Difference

Behavioral Sciences

- P-42 K. Bailey, R. Bailey, V. Magsimo and S. Wiedemann, Factors Underlying Free Will Beliefs of Students at a Religious University
- P-43 Alina Baltazar and Brianna Johnson, Parent-Child Relationships and Adolescent Substance Use
- P-44 Romulus Chelbegean, Gender Roles: *Between Culture and Religion Romanian-American Spouses' Perception of Gender Roles*
- P-45 H. Helm, K. Bailey, D. McBride and O. LaBianca, Promoting Undergraduate Student Development Through a Research Curriculum
- P-46 D. McBride and G. Hopkins, Service Engagement and Youth Risk Behaviors
- P-47 D. McBride, Mesfin Mulatu, Jamie Chriqui and Yvonne Terry-McElrath, *The Relationship between Drug Treatment Program Ownership, Medicaid Acceptance and Service Provision*
- P-48 Chris White and Harvey Burnet, *Post Traumatic Stress* Disorder and Resilience among 2010 Haiti Earthquake Victims

Social Work

- P-63 Laura Racovita, The Global Classroom
- P-64 David Sedlacek, Biblical Diagnosis: A Tool for Helping Professionals
- P-65 Curtis VanderWaal, The Role of African American Clergy in Reducing Mental Health & Substance Abuse Disparities and Increasing Treatment Linkages for Congregants

Chemistry & Biochemistry

- P-49 David Nowack, H5N1 Haemagglutinin (Bird Flu HA) as a probe to detect changes in sialic acid structure of glycoproteins for the early detection of pancreatic cancer in humans
- P-50 Dan Hamstra, Jyllian N. Kemsley, Desmond H. Murray and David W. Randall, *Integrating Webinar and Blogging into Chemistry Seminar*
- P-51 Luis K. Garibay and David W. Randall, *Looking for a greener alternative to Potassium Dichromate in quantitative chemistry experiments*
- P-52 David W. Randall, Jamie Stull, Troy Stitch, George Christou and R. David Britt, *Magnetic Resonance* Spectroscopic studies of Mn complexes as models for photosynthetic oxygen generation

Biology

- P-53 Gordon Atkins, *The roles of inhibitory neurotransmitters in the prothoracic ganglion on the selectivity of phonotaxis in female crickets (Acheta domesticus)*
- P-54 Gordon Atkins, Variability in the selectivity of phonotaxis and neuronal correlates in female cricket Acheta domesticus
- P-55 John Stout, Neurons and hormones involved in controlling a female cricket's response to a male
- P-56 Jim Hayward, Behavior of Galapagos Marine Iguanas and Flightless Cormorants

Mathematics

- P-57 Shandelle Henson, A Mathematical Model of Harbor Seal Haul-out Dynamics
- P-58 Joon Kang, Coexistence State of species of animals residing in the same environment
- P-59 Yun Myung Oh, Lagrangian submanifold and Riemannian submersion

Physics

- P-60 Gary W. Burdick, John B. Gruber, Kelly L. Nash and Dhiarj K. Sardar, *Comparative Crystal-Field Analysis of Lanthanide Ions in Garnet Systems*
- P-61 Tiffany Summerscales, Gravitational Waves and LIGO

Engineering & Computer Science

- P-62 Boon-Chai Ng, Evaluating the mechanical properties of Dielectric Electro Active Polymer (DEAP)
- P-62a Hyun Kwon,
- P-62b Hyun Kwon,

Medical Laboratory Sciences

P-66 Rozaleth Role, Karen Reiner, Desmond Murray and Bill Chobotar, Antimicrobial Activity of Boronic Stilbenes

Speech Language Pathology & Audiology

P-67 Darah Regal, Brynja Davis and Joni Graves, A Case Review: The Efficacy of the Differential Processing Training Program on Auditory Processing and Language Processing

Nursing

- P-68 Karen Allen, Linda White-Young and H. Westley Clark, Outcomes for Children Exposed to Parental Substance Abuse and Receiving Treatment services with Mom
- P-69 Henrietta Hanna, *The Influence of Self-efficacy and* Spirituality on Self-care Behaviors and Glycemic Control in Older African Americans with Type 2 Diabetes
- P-70 Gisele Kuhn, Pediatric Asthma Management in Schools
- P-71 Gisela Schmidt, Enhancing Leadership Skills in Baccalaureate Junior Level Students

Physical Therapy

P-72 K. Bergland, *Identifying Variables Associated with Chronic* Pain: A Case Report

- P-73 K. Coleman, A. L. Millar, B. Dertz and L. Scott, Correlation Between Electromyography Values and Incontinence Quality of Life Questionnaire Scores in Urinary Incontinent Adults
- P-74 G. Almeter, A. L. Millar, M. Hamilton, M. Flores, A. Simmons, T. Brown, S. Roberts, A. Imhoff and S. Kalappurayil, *Hip Muscle Endurance in Individuals with and without Patellofemoral Pain*
- P-75 G. Almeter, D. Ellison, M. Flores, M. Furr, M. Hamilton, A.L. Millar, *Patellofemoral Pain Syndrome and Its Relationship to Back Curvature, Hip Strength, and Hip Flexibility*
- P-76 J. Carlos, J. Banks, S. Mayers and J. Wollemberg, *The* Effect of Organized Group Learning Compared to Traditional Group Learning in the Gross Anatomy Laboratory For Physical Therapy Students
- P-77 W. Perry, J Carlos, C. Abbott, M. Mountz, E. Moravetz and R. Sowers, *Change in Critical Thinking Throughout Duration of a Doctorate Level PT Program and Correlative NPTE Performance*
- P-78 E. Oakley, B. Babb, A. Linstromberg, R. Spady, M. Bairage, L. Thomas and K. Roberts, *The Effects of Low-Level Laser Therapy on Delayed Onset Muscle Soreness*
- P-79 E. Oakley and M. J. P. Carreras, *The Long Term Effect of* Short Wave Diathermy Versus Moist Hot Pack on Hamstring Extensibility
- P-80 L. Olson and A. L. Millar, *Comparing 3 Training Methods* to Increase Deep Cervical Flexor Endurance
- P-81 L. Olson, D. Village and A. L. Millar, Using a Modified Climbing Harness to Create a Permissive Environment for Balance Training in Elderly Individualist at Risk for Falls: A Case Study
- P-82 D. Village, A. L. Millar, T. King, G. McKenzie, J. Lee and C. Lopez, *Frequency of Physical Therapists Taking Blood Pressure and Heart Rate in an Outpatient Setting*



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