



**UTAH ACADEMY  
of  
Sciences, Arts, & Letters**

Since 1908

**Annual Conference  
and  
Centennial Celebration**

March 21, 2008

University of Utah  
A. Ray Olpin University Union  
Salt Lake City, Utah

UTAH ACADEMY OF SCIENCES, ARTS, & LETTERS  
Annual Conference  
March 21, 2008

TANNER LECTURE

*Where Art and Science Meet: A Sculpture Demonstration*

**Daniel J. Fairbanks**

9:00-10:00 a.m.

**Registration:** University Union, Corridor, Main Level

**Continental Breakfast:** University Union, Saltair Room, Main Level

10:00-11:00 a.m.

**Plenary Session:** University Union, Saltair Room, Main Level

**Welcome:** R. Steven Turley, Academy President

**Presidential Address:** R. Steven Turley

**Historical Presentation:** Spencer Blake, Academy President-Elect

**Distinguished Service Award Presentation:** Spencer Blake

**Academy Business:** R. Steven Turley

11:15-11:45 a.m.

**Dance Production:** *Dance for Walt Whitman*

Marriott Center for Dance

12:00-1:00 p.m.

**Lunch:** University Union, Saltair Room, Main Level

**John and Olga Gardner Prize Presentation:** Spencer Blake

1:00-1:45 p.m.

**Tanner Lecture:** Dr. Daniel J. Fairbanks

2:00-4:30 p.m.

**Poster Session:** Warnock Engineering Building, Gallery

2:00-5:30 p.m.

**Division Session Presentations:** Warnock Engineering Building

3:00-4:30 p.m.

**Refreshments:** Warnock Engineering Building, Gallery

5:30-6:00 p.m.

**UASAL Board Meeting:** Warnock Engineering Building, Eccles Boardroom

Dr. Daniel J. Fairbanks is Dean of Undergraduate Education at Brigham Young University and will soon join the Utah Valley State College as Associate Dean of Science and Health. He draws on an extraordinary breadth of academic expertise to enhance the quality of general education. His undergraduate degrees are in agronomy and Portuguese and his graduate degrees are in genetics with a Ph.D. minor in Latin-American studies. Dr. Fairbanks focus has been research on evolutionary genetics, the history of genetics, and the application of genetics to improve food production for impoverished subsistence farmers in Latin America.

Dr. Fairbanks is the author of the book *Relics of Eden: the Powerful Evidence of Evolution in Human DNA* and coauthor of the forthcoming book *Ending the Mendel-Fisher Controversy* in addition to textbooks and numerous journal articles. Carrying on a family tradition, he is an accomplished professional sculptor with statues on permanent exhibit in the United States and Mexico. He is a highly respected and popular teacher.

## **Distinguished Service Award**

Business

### **David J. Cherrington**

Dr. Cherrington is a professor of organizational leadership and strategy at Brigham Young University. He attended Utah State University and Brigham Young University, graduating in 1966. He also attended Indiana University where he received an MBA and Doctors degree in Business Administration in 1970.

He taught at the University of Illinois in Champaign for four years before transferring to BYU in 1973. He has also taught at the University of Wisconsin-Madison and BYU-Hawaii campus. He was a member of an inter-disciplinary research team studying the cause of fraud and white-collar crime from 1978 to 1980 and has been active since then studying problems of dishonesty. His research has included extensive data analysis from questionnaires qualitative research from interviews of convicts, and seminars with students and executives. In 1986 he testified before the Senate Judiciary Committee in Washington DC.

Dr. Cherrington is a member of the Society of Human Resource Management and the Academy of Management. He has served as President of the Personnel Association of Central Utah and as the National Director of Codification and Research for the Human Resource Certification Institute ( HRCI). He is certified as a Senior Professional in Human Resources and served from 1989 to 1995 as a member of the national HRCI board of directors.

Among the many publications David Cherrington has written are: *Rearing Responsible Children* and *The Work Ethic: Working Values and Values that Work*, as well as textbooks on management of human resources and organizational behavior. He is a coauthor of *Moral Leadership and Ethical Decision Making*, and of three reference books, two computerized training courses on ethics, and three independent study courses available on the Internet. In addition, he has authored or coauthored numerous articles in professional journals and magazines.

David Cherrington is married to Marilyn Daines Cherrington and they are the parents of four children and thirteen grandchildren.

## **John and Olga Gardner Prize**

Humanities

### **Charles L. Metten**

In 1998, Dr. Metten became founding Dean of the College of Performing and Visual Arts at Southern Utah University in Cedar City, Utah. He retired from this position in 2004. He is a professional actor, often performing with the Utah Shakespearean Festival, Sundance Summer Theatre, and the Pioneer Theatre Company in Salt Lake City, Utah. His film credits include, *Movies of the Week*, *Touched by an Angel*, and *Promised Land*. He is also a director of many stage-productions in Utah, California, and Nevada. He holds a Ph.D. from the University of Iowa and M.A. and B.A. degrees from UCLA, with continued study at the American Conservatory Theatre in San Francisco and at the American Film Institute in Los Angeles, California.

Dr. Metten has taught at Santa Barbara High School and Junior College, the University of Nevada at Reno, and at Brigham Young University, Department of Theatre and Film for 35 years, and is now BYU Professor Emeritus. He is currently employed by the Utah Shakespearean Festival as Director of the New American Playwrights Project.

Charles Metten is married to Patricia Horigan Metten. They have five children, seventeen grandchildren, and four great-grandchildren.

**A special thanks is extended to the Gardner Family for their generosity and the many years of sponsoring the Gardner Prize.**

## DANCE PRODUCTION

### *Dance for Walt Whitman*

The Utah Academy of Sciences, Arts, and Letters presents *Dance For Walt Whitman*, one of the most significant Modern dance works of the 20<sup>th</sup> Century. This production profoundly reflects the American spirit, which the great poet, Walt Whitman captured in his poem, "Leaves of Grass." Whitman gave verbal form to what has since come to be seen as an American Narrative; egalitarianism, respect for nature and others, and a willingness to recognize everyone's right to exist.

In *Dance for Walt Whitman*, choreographer Helen Tamiris gave this narrative a visually moving form. Tamiris is well known for her commitment to social activism through the arts, and *Dance For Walt Whitman* is a wonderful example of the power of dance and art to affect social change. The dynamic score is by acclaimed composer, David Diamond.

Dance For Walt Whitman has strong ties to Utah's rich dance history. In 1947, the LDS Church commissioned Tamiris to choreograph the Promised Valley Mormon Musical in celebration of 100 years in the Valley. *Dance For Walt Whitman* was choreographed for Utah dancers in 1961 and has subsequently been set for two generations of Utah. The current dancers are all Utah Valley State College dance students and this is the first time the piece is being performed by an entire student cast.

The performance at the Utah Academy Centennial Conference will culminate the Tamiris/Whitman Project: Remembering, Reviving, Reclaiming an American Narrative. UASAL Arts Chairman, Nichole Ortega, had the inspiration to present *Dance For Walt Whitman* for the UASAL Centennial Celebration last summer. She approached Utah Valley State College colleagues, Angela Banchemo and Kim Strunk, who performed in previous reconstructions while dancing with Repertory Dance Theatre. With the endorsement of RDT Artistic Executive Director, the three applied for and received a grant from the National Endowment of the Arts, American Masterpieces College Component in support of the Tamiris/Whitman project.

The project began in November 2007 with auditions and included an intensive rehearsal period for reconstruction, seven performances, lecture demonstrations, panels, master classes and curriculum development. Students worked with Daniel Nagrin, an inspiring artist and legend in his own right, who was also married to Helen Tamiris. Students spent countless hours with Linda C. Smith, a renowned Utah Dance Artist and Director, who was an original cast member and has since been involved with several reconstructions of the original choreography.

## Utah Academy 2008 Spring Excursion

The Summer Excursion for 2008 is planned at locations around the Great Salt Lake. The current proposal includes a visit to the Golden Spike National Monument, a rocket test at ATK, and the earth art site known as the Spiral Jetty. Watch for details on the Academy Website at [www.utahacademy.org](http://www.utahacademy.org)

**The Utah Academy wishes to express their appreciation to the University of Utah for hosting the 2008 Annual Conference and extends a special thanks to the faculty and staff at UofU for their assistance with local campus arrangements.**

**DIVISION SESSIONS - ROOM ASSIGNMENTS**  
Warnock Engineering Building

**POSTER SESSION**

Gallery

**ARTS**

Room 2460

**BIOLOGICAL SCIENCES**

Room 2250

**BUSINESS**

Session I, Room 1450  
Session II, Room 1460

**EDUCATION**

Room 2470

**ENGINEERING**

Room 2230

**HPER**

Room 2470

**LETTERS**

Philosophy, Room 1248  
Literature, Room 1230

**PHYSICAL SCIENCES**

Chemistry, Room 110  
Physics I, Room 102  
Physics II, Room 112

**SOCIAL SCIENCES**

Session I, Room 114  
Session II, Room 120  
Session III, Room 122

**REFRESHMENTS**

Gallery

**POSTER SESSION**

Poster Chair, R. Steven Turley, Brigham Young University

**2:00-4:30 p.m.**

Gallery

**Water Wise Utah**

Lisa Cohne, Utah Education Network

**The Search for Multifunctional Materials**

Paul Slusser, University of Utah

**Learning with Mnemonics: A Case Report in a Therapeutic Modalities Course**

David Berry, Weber State University

**Mastisol Reaction on the Dorsum of the Foot Following the Removal of an Exostosis of a Female Colligate Volleyball Player: A Case Report**

Nathan Smith and Robbie Jensen, Weber State University

**The Effect of Perspective on Misconceptions in Psychology: A Test of Conceptual Change Theory**

Elly Alvarado, Jack Kettering, Lauren Rankin, Melissa Ward, and Eric Amsel, Weber State University

**Difficulties Experienced by Remarried Couples in Stepfamilies**

Katie Reck and Brian Higginbotham, Utah State University

**“Kingdom of Heaven”: A Sociopolitical Comparison and Forecast of Muslim and Latter-day Saint Approaches**

Logan B. Reid, Utah State University  
Marc Dotson, Southern Utah University

**Development of Signatures for the Detection and Differentiation of *Brucella* Species**

K. E. Oberg, Weber State University  
J. M. Barnes and D. T. Newby, Idaho National Laboratory

## ARTS

Division Chair: Nichole Ortega, Utah Valley State College

Session Leader: Nichole Ortega

Warnock Engineering Bldg. Room 2460

- 2:00 Panel Discussion:  
The Tamaris/Whitman Project: Remembering, Reviving,  
Reclaiming an American Narrative**  
Kim Strunk, Nichole Ortega, Angie Banchemo-Kelleher, Larry  
Harper, and Marden Pond; Utah Valley State College
- 2:30 Lift Him Up: The Place of Washington Phillips in the  
History of American Popular Music**  
Charles Cuthbertson, Southern Utah University
- 2:45 Dance as a Tool of State: A Prediction for the Chinese  
Olympics**  
Meredith Ashton, Utah Valley State College
- 3:00 Dance Made Me a Genius: Reflections on Participating in  
High School Dance**  
Nichole Ortega and Barton Poulson, Utah Valley State College

## BIOLOGICAL SCIENCES

Division Chair: Erin O'Brien, Dixie State College

Session Leader: Erin O'Brien

Warnock Engineering Bldg. Room 2250

- 2:00 The Boys from the Brooklyn Museum Venture to Zion**  
Peter Kraus, University of Utah
- 2:15 Bacterial Predation by Bacteriophage Isolated from the  
Great Salt Lake**  
Natalie Savage, Matthew J. Domek, Michele D. Zwolinski, and  
Craig J. Oberg; Weber State University
- 2:30 Phosphate and Phosphonate Use by Microorganisms Isolated  
from Hypersaline Environments of the Great Salt Lake,  
Utah**  
Jay P. Nichols, Chase L. Sessions, Michele D. Zwolinski, and  
Craig J. Oberg; Weber State University
- 2:45 Factors Affecting *Enterococcus* in the Great Salt Lake:  
Influence of Water Depth, Season, and Other Parameters**  
Scott Kagie, Alan Noland, Eric Nelson, Adam Hutchinson,  
William Lorowitz, and Karen Nakaoka; Weber State University
- 3:00 Coliform Screening of Aguaje Fruit Vendors in Iquitos,  
Peru: A Potential Source of Disease Transmission**  
B. Oberg, S. Tringali, J. Watis, B. Wynn; Touro University  
C. J. Oberg, Weber State University
- 3:15 Comparison of Liquid and Solid Growth Media for  
Probiotic Enumeration**  
Christine O'Neil, Badreddin Edris, and William Lorowitz;  
Weber State University  
Elizabeth Saxton, Pro Pac Labs, Ogden
- 3:30 Biodiversity and Conservation of Orchids along the  
Ecological Tourism Route of Phumiang Klongtron National  
Park, Nampad, Uttaradit, Thailand**  
Ratchanee Petchang, Uttaradit Rajabhat University

## BUSINESS

Division Chair: Dara Hoffa, Westminster College

### SESSION I

Session Leader: Dara Hoffa

Warnock Engineering Bldg. Room 1450

- 2:00 A Look at the Utah Labor Market: A Review and Application of “Impact of Demographic Change on U.S. Labor Markets,” by Jane Sneddon Little and Robert K. Triest**  
Jonathan H. Westover, Brigham Young University
- 2:15 What are the Top MBA Programs with HR, HRD, and OB Emphases?**  
Kristen DeTienne and Lurana Teshima, Brigham Young University  
Jeremy Lau, Deutsche Securities
- 2:30 The Use of Accounts in Psychological Contract Repair**  
Kristen DeTienne, Jeffery Thompson, and Raechel Lizon, Brigham Young University
- 2:45 Meet the Millenials: Baby on Board Goes to College**  
Nancy Panos Schmitt and Georgia Kenyon White, Westminster College
- 3:00 The Corporate Role in Economic Development**  
Paul Godfrey and Ben Lewis, Brigham Young University
- 3:15 The Development and Implementation of a Graduate Certificate in an Undergraduate Program**  
G. Edward Harris, Zhuolin Yu, Eric Swedin, and Matthew Harris; Weber State University

## BUSINESS (cont)

### SESSION II

Session Leader: Gaylen Bunker

Warnock Engineering Bldg. Room 1460

- 2:00 Estimation of Time-Series Models with ARCH Errors**  
Ulya Tsolmon and Urelmaa Tsolmon, Brigham Young University
- 2:15 Understanding Open Market Operations**  
Ian Fillmore, Brigham Young University
- 2:30 The Changing Structure of Utah’s Economy, 1908-2008**  
L. Dwight Israelsen, Utah State University
- 2:45 Migration Turnover Rates in Mountain States Counties, 1990-2000**  
William J. Israelsen and L. Dwight Israelsen, Utah State University  
Ryan D. Israelsen, University of Michigan
- 3:00 Can Techniques from Quantum Propagation be Used to Predict the Behavior of Financial Markets?**  
Bailey Hsu and Jean-Francois Van Huele, Brigham Young University

## EDUCATION

Division Chair: Lorin Squires, Utah State University-Uintah Basin

Session Leader: Lorin Squires

Warnock Engineering Bldg. Room 2470

- 2:00 The Effect of Math Tutoring on Academic Success in University-Level Mathematics and Statistics Courses**  
Sarah Ann Drollette, Utah State University
- 2:15 Pedagogical Transfer and the Accounting Classroom: Everything I Learned about Teaching Accounting I Learned from My Piano Teacher**  
David Malone, Weber State University
- 2:30 “Art is the Best Thing in the Whole Wide World!”: A Pilot Ethnography of Student Identity Information and Negotiation in an Arts Partners Program**  
Sara Mathis, University of Utah

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## HPER

Division Chair: Shaunna McGhie, Utah Valley State College

Session Leader: Shaunna McGhie

Warnock Engineering Bldg. Room 2470

- 2:45 Prevention and Risk Factors Involved in Ankle Sprains**  
Stephen Wren, Weber State University
- 3:00 Utah’s Pioneer Women in Health Care**  
Judith Pratt, Weber State University

## ENGINEERING

Division Chair: Patrick Tresco, University of Utah

Session Leader: Patrick Tresco

Warnock Engineering Bldg. Room 2230

- 2:00 Coupling Flexible Solar Cell with Parabolic Trough Solar Concentrator - Prototype Design and Performance**  
Jonathon Bergquist and Alexander Panin, Utah Valley State College
- 2:15 Solar Tracking Using Light Emitting Diodes**  
Dmitry Panin and Alexander Panin, Utah Valley State College
- 2:30 Optimal Bend of Flat Mirror for High Concentration Ratio Cylindrical Solar Concentrator**  
Alexander Panin, Utah Valley State College
- 2:45 Feasibility and Effects of Converting to Nuclear Energy to Reduce Greenhouse Gas Emissions in the United States**  
Thomas R. Price, University of Utah
- 3:00 Creation of Biomimetic, Nanoscale Chondroitin Sulfate Surface Coatings for Use with Si/SiO<sub>2</sub> Microelectrode Arrays**  
John L. Skousen and Fan-Wei Meng, University of Utah
- 3:15 Multi-Mode Multi-Directional Intra-Abdominal Pressure Sensor**  
Paul Johnson, University of Utah
- 3:30 Break for Refreshments**
- 3:45 Qualitative Evaluation of the Tissue Reaction Surrounding Implanted Electrode Arrays in the Peripheral Nervous System**  
M. B. Christensen, S. M. Pearce, and F. E. Vega; University of Utah
- 4:00 Magnetic Implants for the Correction of Ocular Misalignment**  
Jeremy Tidwell, University of Utah

## ENGINEERING (cont)

- 4:15 The Brain Tissue Response to Penetrating Silicon Microelectrode Arrays Implanted in Rat Cerebral Cortex is Unchanged by Conformal Coating with Parylene-C**  
Brent D. Winslow, University of Utah
- 4:30 Comparison of the Foreign Body Response and Tissue Diffusivity Induced by Multiple Cell Transplantation in the Brain**  
Dylan McCreedy, University of Utah
- 4:45 Anesthesia Optimization of Post-Surgery Wake Up Time with Adequate Analgesia**  
Carl Tams, University of Utah
- 5:00 Ameliorating Cortical Neuronal Loss in the Recording Zone of Implanted Planar Microelectrode Arrays by Reducing Inflammation at the Electrode-Brain Tissue Interface**  
Xiaoyu K. Chen, University of Utah

## LETTERS - PHILOSOPHY

**Division Chair: Pierre Lamarche, Utah Valley State College**

**Session Leader: Pierre Lamarche**

Warnock Engineering Bldg. Room 1248

- 2:00 From Expansionary Economics to Environmental Economics**  
David Richard Keller, Utah Valley State College
- 2:15 Value Incommensurability and the Challenges of Civic Engagement**  
Robert S. Fudge, Weber State University
- 2:30 Undergraduate Research/Reflection Papers and Published Criticism of a Postmodern Latin American Novel**  
Douglas C. Jensen, Utah Valley State College
- 2:45 “Malintzin de la maquilas”: Intertextuality, Identity, Exploitation , and “Malinchismo”**  
Rona Lee Maughan, Weber State University

## LETTERS - LITERATURE

Division Chair: Steve Peterson, Snow College

Session Leader: Steve Peterson

Warnock Engineering Bldg. Room 1230

- 2:00 Wounded by the Image: *Punctum* in William Carlos Williams and H.D.**  
Danielle Dubrasky, Southern Utah University
- 2:15 The Crystal Frontier: Culture and Literature beyond Immigration**  
Jorge Nisguritzer, Utah Valley State College
- 2:30 Mourning and Self-Exile**  
Gloria Thomas Gilmore-Hunt, Utah Valley State College
- 2:45 Rational Creatures and Mothers: The Maternal vs. the Feminist Identity in the Life and Works of Mary Wollstonecraft**  
Emily Whitby, Weber State University
- 3:00 Romancing the Engineer: The Marriage of Frontier and Technology in Serialized Fiction of the Early 20<sup>th</sup> Century American West**  
Dynette Reynolds, University of Utah
- 3:15 Mediating Contact with Technology and Flesh in E. M. Forster's "The Machine Stops"**  
Alf Seegert, University of Utah
- 3:30 Argosy History: The Importance of San Francisco as the Setting for Hitchcock's *Vertigo***  
Verlan Lewis, Brigham Young University

## PHYSICAL SCIENCES

Division Chair: Jean-Francois Van Huele,  
Brigham Young University

### CHEMISTRY

Session Leader: Edward Walker

Warnock Engineering Bldg. Room 110

- 2:00 Application of X-ray Fluorescence Spectroscopy for Analysis of Calcium in Milk Products and Other Beverages**  
Bryce R. Radmall, Brady K. Mock, and Edward B. Walker;  
Weber State University
- 2:15 Feasibility Study of Application of Portable X-ray Fluorescence for Qualitative Identification of Mineral Chelates in Dietary Supplement Raw Materials**  
Brian F. Dillman, Kyle Ashby, and Edward B. Walker; Weber State University
- 2:30 Isolation of alpha-Mangostin from Mangosteen Fruit and Subsequent Glycosylation**  
Amornmart Jaratrungtawee, Don Davies, and Edward B. Walker; Weber State University
- 2:45 A Method for the Rapid Analysis of Copper Ore in Pre-smelter Head Flow Slurry**  
Neil J. Lawrence, Wade Okleberry, and Edward B. Walker;  
Weber State University
- 3:00 Adaptation of Traditional Colorimetric Whole Protein Assay to Partial Hydrolysates**  
Brandon J. Burnett and Edward B. Walker, Weber State University
- 3:15 X-ray Fluorescence Analysis of Iron in Whole Blood**  
Nathan D. Brown, Gary Nielsen, and Edward B. Walker; Weber State University

## PHYSICAL SCIENCES (cont)

### PHYSICS I

**Session Leader: David Allred**

Warnock Engineering Bldg. Room 102

- 2:00 Eliminating Adventitious Carbon Contamination on SiO<sub>2</sub>**  
Liz Strein, David Allred, and Steven Turley; Brigham Young University
- 2:15 EUV-Visible Wide Range Spectrometer**  
Nathan Gray, Alexander Shevelko, Larry Knight, and Scott Bergeson; Brigham Young University
- 2:30 Tapered Optical Fibers for Surface Plasmon Resonance Phase-Matching**  
Yinni Yu and D. Keith Roper, University of Utah
- 2:45 Schottky Diodes Using SWNT Networks**  
Bryan Hicks, Brigham Young University
- 3:00 Determining the Refractive Index of Scandium Oxide in the EUV Using Kramers-Kronig on Thin-Film SC<sub>2</sub>O<sub>3</sub> Transmission Data**  
Jacqueline Dee Jackson, University of Utah  
David D. Allred, Brigham Young University
- 3:15 Preparation and Characterization of Bilayer Reflectance Standards for the EUV**  
David D. Allred, Zach Strother, and Niki Brimhall; Brigham Young University
- 3:30 Design and Fabrication of a Strain-Based Nano-Compass**  
Jonathan E. Goodsell, Jonathon A. Brame, Stephanie A. Getty, and David Allred; Brigham Young University

## PHYSICAL SCIENCES (cont)

### PHYSICS II

**Session Leader: Manuel Berrondo**

Warnock Engineering Bldg. Room 112

- 2:00 Consensus and Frustration: Key Ingredients in Emergent Behavior**  
Manuel Berrondo and Wesley Krueger, Brigham Young University
- 2:15 Charged Particle Astronomy with the Pierre Auger Observatory**  
Patrick Younk, University of Utah
- 2:30 Directional Recoil Rates for WIMP Dark Matter Direct Detection**  
Moqbil S. Alenazi, University of Utah
- 2:45 Relativistic Chaos**  
J.J. Campbell, Miriam Newbauer, and David Neilsen; Brigham Young University
- 3:00 Preparing the Next Generation of Secondary Physical Science Teachers, the Brigham Young Approach**  
Duane Merrel, Brigham Young University
- 3:15 Discovery of a Natural Diamond-Based Photonic Crystal Structure in the Scales of *Lamprocyphus augustus***  
Jeremy W. Galusha, Lauren R. Richey, John S. Gardner, Jennifer N. Cha, and Michael H. Bartl; University of Utah and Brigham Young University
- 3:30 Single Photon X-ray Diffraction**  
Daniel James and Alexander Panin, Utah Valley State College

## **SOCIAL SCIENCES**

**Division Chair: Rob Reynolds, Weber State University**

### **SESSION I**

**Session Leader: Rob Reynolds**

Warnock Engineering Bldg. Room 114

- 2:00 A Reconstructed Social Psychology of Sixth (6<sup>th</sup>) Century Irish Christian Monastic Life**  
Thom Kearin, Weber State University
- 2:15 A Study of Factors of Religious Commitment in College Students: Religious Experiences as an Influence on Religious Commitment**  
Benjamin Patterson, Weber State University
- 2:30 Go out and Learn, Return and Serve: Reflection on the Oral Histories of Latter-day Saint Native Americans**  
Farina King, Brigham Young University
- 2:45 Abstract Numerical Thought without Language**  
Kerry E. Jordan, Utah State University
- 3:00 Place in the Social Construction of Identity: Israel and Jewishness**  
Rob Reynolds, Weber State University

## **SOCIAL SCIENCES (cont)**

### **SESSION II**

**Session Leader: Spencer H. Blake**

Warnock Engineering Bldg. Room 120

- 2:00 A Comparative Study of Selected Activities of the State Science Academies**  
Ruhul Kuddus, Utah Valley State College  
Sheikh "Safi" Safiullah, University of Utah
- 2:15 Strangers in Our Own Land: Making the Moral Case for Paiute Restoration**  
Linda Eaton and Susan Young, Weber State University
- 2:30 Reflections on the History of the Utah Academy**  
Spencer H. Blake, Salt Lake Community College
- 2:45 An Analysis of the Returns to Higher Education in Armenia**  
Christopher John Palmer, Brigham Young University
- 3:00 Water History in the Land of Palestine**  
Julia Squires Templin, Utah State University

## SOCIAL SCIENCES (cont)

### SESSION III

**Session Leader: Robert C. Wadman**

Warnock Engineering Bldg. Room 122

- 2:00 Police Theory: A Miscarriage of Justice**  
Robert C. Wadman, Weber State University
- 2:15 The Importance of Chemical Dependency Education in Social Work**  
Kerry Kennedy, Weber State University
- 2:30 Social Trends Surrounding Body Modification and Tattooing: Are Traditional Crime and Deviance Theories Still Appropriate for Analysis?**  
Logan B. Reid and Curtis Newbold, Utah State University
- 2:45 Crime in the Amish Community: Lancaster County, Pennsylvania**  
John Hill, Salt Lake Community College
- 3:00 Why Play Sports?**  
Luke Harris, Amber Hansen, and Alle Salazar; Weber State University
- 3:15 Alternatives to Utah's Compulsory Attendance Law Enforcement in Public Schools**  
Gilbert Bradshaw, Brigham Young University

## JOURNAL OF THE UTAH ACADEMY PUBLICATION POLICY

To authors of papers presented at the Annual Conference:

Presenters are encouraged to publish their paper in *The Journal of the Utah Academy*. *The Journal's* criteria are that a submission is (1) fresh, meaningful scholarly insight on its subject; (2) readable and well written; and (3) of general interest for an academic readership beyond the author's field.

If you wish your paper to be considered for publication in *The Journal*, please send one hard copy of your paper and abstract to Susan Jorgensen (see address below) and three copies to the chair of your division by May 1, 2008. All submitted papers will be considered for the Best Paper Award in each division. Include both your institutional and home addresses and phone numbers, email address and fax number. Papers will be peer reviewed. Please suggest possible appropriated referees, including names, telephone numbers and addresses.

At the time of acceptance for publication, manuscripts must be submitted as an attachment in Microsoft Word via email, also attach a PDF. Figures, diagrams and photographs must be saved as TIFF files and should be no larger than 5 x 7. Papers must conform to the style of the paper's discipline: MLA, APA, Chicago, CBE, or AIP. Papers should be between ten and twenty double-spaced pages.

*The Journal of the Utah Academy* is a refereed journal. Editorial responses will be forthcoming after the resumption of school the following fall when referees have returned their comments to the division chairs.

Detailed publication guidelines are available at the Utah Academy website: [www.utahacademy.org](http://www.utahacademy.org)

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