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III. CONTRIBUTED PAPERS

1100 (time italicized and underlined) indicates a student presentation

* indicates the speaker from among several authors listed

63 (bolded number) indicates abstract number**Monday, 16 June 2008****Western Society of Crop Science**

Gerry Clark Art Center

Monday

8:15 AM – 2:35 PM

Session 1**Cropping Systems and Crop Production**

Moderator: Jack Cecil (University of Wyoming)

0815 *Introductory Comments***0820** **119** *Irrigation and Nitrogen Effects on Teff in the Southern High Plains*, **LEONARD M. LAURIAULT** (Plant and Environmental Sciences Department, New Mexico State University, Tatum, NM)**0840** **120** *Five Years of Research with Skip Row Rainfed Corn to Improve Drought Tolerance in the High Plains*, **ROBERT KLEIN¹**, **DREY LYON²**, **DAVID BALTENSPERGER³**, **ALEXANDER PAVLISTA²**, **CHARLES SHAPIRO⁴**, **STEVEN KNEZEVIC⁴**, **STEPEH MASON⁵**, **ROGER ELMORE⁶**, **ALAN SCHLEGEL**, **MERLE VIGIL** and **JEFFERY GOLUS¹** (¹University of Nebraska, North Platte, NE; ²University of Nebraska-Lincoln, Scottsbluff, NE; ³Texas A&M Univ., College Station, TX; ⁴University of Nebraska-Lincoln, Concord, NE; ⁵University of Nebraska-Lincoln, Lincoln, NE; ⁶Iowa State University, Ames, IA; ⁷Kansas State University, Tribune, KS; ⁸USDA-ARS, Central Great Plains Research Station, Akron, CO)**0900** **121** *Canolage: Increasing the Value of Winter Canola*, **CLARK B. NEELY** (Dept. of Plant, Soil, and Entomological Sciences, University of Idaho, Moscow, ID)**0920** **122** *Comparison of Harvesting Methods of Winter Canola in the Pacific Northwest*, **DON WYSOCKI** and **NICK SIROVATKA** (Crop and Soil Science, Oregon State University, Pendleton, OR 97801)**Session 2****Breeding Field Crops**

Moderator: Shree Singh (University of Idaho)

0940 **123** *Development of Breeding Populations for Genomics Research in Cotton*, **JINFA ZHANG¹**, **RICHARD PERCY²** and **SANJAY BAJAJ¹** (¹Department of Plant & Environmental Sciences, New Mexico State University,Las Cruces, NM; ²Crop Germplasm Research Unit, USDA-ARS, College Station, TX)**1000** **BREAK****1020** **124** *Response of the Model Legume Medicago truncatula to Aluminum-toxicity*, **SUSAN MIVASAKA** and **CHERYN CLAYTON** (University of Hawaii, University of Hawaii, Hilo, HI)**1040** **125** *Pea and Lentil Response to Environments and the Satellite Breeding Program at Montana State University*, **CHENGCI CHEN¹**, **KARNES NEILL¹** and **KEVIN MCPHEE²** (¹Central Ag Research Center, Montana State University, Moccasin, MT; ²USDA-ARS-NPA-SPNRU, Washington State University, Pullman, WA)**1100** **126** *Efficacy of Screening Methods for Identification of Physiological White Mold Resistance in Dry Bean*, **HENRY TERAN** and **SHREE SINGH** (Plant, Soil and Entomological Sciences Department, University of Idaho, Kimberly, ID)**1120** **127** *Improving Wheat Straw for Use as a Feedstock for Ethanol Production*, ***MACKENZIE T. ELLISON**, **J. L. HANSEN**, **A. KARASEV** and **ROBERT ZEMETRA** (Department of Plant Soil and Entomological Sciences, University of Idaho, Moscow, ID)**1140** **128** *Effects of Phaseolus vulgaris L. on the Development of Experimentally Induced Breast Cancer*, **MARK BRICK¹**, **HENRY J. THOMPSON²** and **MATTHEW THOMPSON²** (¹Dept. of Soil & Crop Sciences, Colorado State University, Fort Collins, CO; ²Department of Horticulture and Landscape Architecture, Cancer Prevention Laboratory, Colorado State University, Ft. Collins, CO)**1200** **LUNCH****Session 3****Fertility and Crop Physiology**

Moderator: Leonard Lauriault (New Mexico State University)

1315 **129** *Physiological Responses of Potato (Solanum tuberosum L.) Genotypes to NaCl Salinity: Effects of Supplementary Calcium and NaCl Salt Pre-treatment*, ***MASOOMEH ETEHADNIA**, **DOUG WATERER** and **KAREN K. TANINO** (Department of Plant Sciences, College of Agriculture-University of Saskatchewan, Saskatoon, Canada)**1335** **130** *Winter Wheat Nitrogen Fertilizer Rate and Application:*

CONTRIBUTED ORAL PAPERS

A Conventional and No Till Comparison, **STEPHEN GUY and MARY LAUVER** (Dept. of Plant, Soil, and Entomological Sciences, University of Idaho, Moscow, ID)

1355 **131** *Impacts of Metsulfuron and Chlorsulfuron on Greasewood and Rabbitbrush communities*, ***JORDGE J. LAFANTASIE¹**, **STEPHEN F. ENLOE²**, **MARK A. FERRELL¹**, **ANDREW R. KNISS¹** and **STEVE D. AAGARD¹** (¹Plant Sciences, University of Wyoming, Laramie, WY; ²Agronomy & Soils, Auburn University, Auburn, AL)

1415 **132** *Genotypic Responses to Biological Nitrogen Fixation on Trigonelline Accumulation and Pod Yield in Peanuts*, **EMMANUEL KODJOE¹**, **NAVEEN PUPPALA²** and **YOUNGKOO CHO¹** (¹Department of Biology, Eastern New Mexico University, Portales, NM; ²New Mexico State University, ASC at Clovis, Clovis, NM)

Joint Session of the Chemistry and Biochemistry, and Health Sciences Sections

Kono Center for English Studies

Monday

9:00 AM – 11:45 AM

Program Organizers: Kenneth Cornell (Department of Chemistry and Biochemistry, Boise State University, Boise, ID) and H. K. Choi (Department of Biology, California State University Dominguez Hills, Carson, CA)

Session Chair: H. K. Choi

0900 *Introductory Comments*

0905 **133** *Novel Approaches to Treat Glioblastoma Multiforme*. ***ALOK BHUSHAN, WAJIHA TAHAR ALI, SHILPA PULI and JAMES C.K. LAI** (Department of Biomedical and Pharmaceutical Sciences, College of Pharmacy and ISU Biomedical Research Institute, Idaho State University, Pocatello, ID)

0925 **134** *Pharmacology of a Novel Positive Allosteric Modulator for Neuronal Nicotinic Receptors*, ***ANSHUL PANDYA¹**, **MEAGAN WELTZIN¹**, **BRIAN EDMONDS²**, **MARVIN SCHULTE¹** and **RICHARD GLENNON³** (¹Department of Chemistry and Biochemistry, University of Alaska Fairbanks, Fairbanks, AK; ²Department of Biology and Marine Biology, School of Arts and Science, University of Alaska Southeast, Juneau, AK; ³Department of Medicinal Chemistry, School of Pharmacy, Virginia Commonwealth University, Richmond, VA)

0945 **135** *Iridium Oxide Nanowire Monitors for Protein Detection*, **VINU L. VENKATRAMAN¹**, **RAVIKIRAN K REDDY¹**, **FENGYAN ZHANG²**, **VICTOR HSU²**, **BRUCE ULRICH²** and **SHALINI PRASAD¹** (¹Portland State University, Portland, OR; ²Sharp Labs of America Inc, Camas WA)

1005 **BREAK**

1025 **136** *Activation Induced Cell Death of Antigen Specific CD4 T Lymphocytes and Its Role in the Immune Evasion of Anaplasmosis*, ***SUSHAN HAN, JUNZO NORIMINE and WENDY BROWN** (Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, WA)

1045 **137** *Inflammation Decreases Lipid Processing by Macrophages during Egg Yolk Peritonitis in the Chicken* (*Gallus gallus domesticus*), ***INGRID CORNAX EDWARDS and KIRK C. KLASING** (Department of Animal Science, University of California, Davis, CA)

1105 **138** *Effect of Mucus Viscoelasticity and Surface Adhesivity on Mucus Displacement during Cough in Sickness and Health*, ***ANPALAKI J RAGAVAN¹**, **CAHIT A EVRENSEL^{1,2}** and **PETER KRUMPE^{1,3}** (¹Dept. of Biomedical Engineering, University of Nevada, Reno, NV; ²Department of Mechanical Engineering, University of Nevada, Reno, NV; ³School of Medicine, University of Nevada, Reno, NV)

1125 **139** *Effects of Volcanic Sulfur Dioxide (SO₂) Emissions on Pulmonary Function in Adults*, ***REID HOSHIDE¹**, **ELIZABETH TAM¹**, **JOHN GROVE²**, **BARBARA BROOKS³**, **EDWARD FERNANDEZ¹**, **JENNIFER ORR¹**, **A. JEFF SUTTON⁴**, **TAMAR ELIAS⁴**, **ANDREW GRANDINETTI²**, and **PETER HOLCK²** (Departments of ¹Medicine and ²Public Health Sciences, John A. Burns School of Medicine, University of Hawaii, Honolulu, HI; ³Hawaii State Department of Health; ⁴US Geological Survey, Hawaii National Park, Volcano, HI; ¹BSB 222C, Honolulu, HI)

Joint Session of the Education and the History and Philosophy of Science Sections

Room 23

Monday

10:00 AM – 12:05 PM

Program Organizers: William B.N. Berry (Department of Earth and Planetary Sciences, University of California, Berkeley, CA) and Donald J. McGraw (Chula Vista, CA).

Session Chair: William B.N. Berry

1000 *Inductory Comments*

1005 **140** *Exploring Undergraduate Student Conceptions of Environmental Processes*, ***BRIANA K MCCARTHY and KIMBERLY TANNER** (Department of Biology, Science Education Partnership and Assessment Lab, San Francisco State University, San Francisco, CA)

1025 **141** *When Mythic and Theoretic Experiences Becomes Shareable: A Case Study of Scholarship and Learning in the Realm of Post-theoretic Emergences*, ***BHAVNA HARI-**

HARAN¹, COLLEEN SAXEN² and SYED SHARIQ¹
 (¹Kozmetsky Global Collaboratory, Stanford University, Stanford, CA; ²School of Public Health, Wright State University, Dayton, OH)

- 1045 142** *Marine Science Graduate Students as Educators*, **ERIN BLACKWOOD** (Romberg Tiburon Center, San Francisco State University, Tiburon, CA)
- 1105 143** *Introducing the Principles of Electromechanical Energy Conversion with a Low-Cost Experiment for Lower-Division Students*, **THOMAS F. SCHUBERT, JR., FRANK G. JACOBITZ, and ERNEST M. KIM** (Department of Engineering, University of San Diego, San Diego, CA)
- 1125 144** *A New Approach to Understanding Technological Knowledge and Innovation*, **J. SCOTT HAUGER** (Desert Research Institute, Reno, NV)
- 1145 145** *Scourge of the Osage from the Hand that Held the Quill: The Astonishing Nineteenth-Century Survival and Success of the Osage Nation while Plagued by Indian Removal*, **ATHENA STEPHANOPOULOS** (Departments of History and Biology, Wichita State University, Wichita, KS)

Wednesday, 18 June 2008

Joint Session of the Agriculture and Horticulture, Anthropology and Archaeology, and Ecology, Organismal Biology and Environmental Science Sections

Room 42
 Wednesday
 8:00 AM – 11:45 AM

Program Organizers: Michael D. MacNeil (USDA Agricultural Research Service, Fort Keogh Livestock and Range Research Laboratory, Miles City, MT), Walter Carl Hartwig (Touro University College of Osteopathic Medicine, Mare Island, CA), Stephen Frost (Department of Anthropology, University of Oregon, Eugene, OR), Michael Parker (Department of Biology, Southern Oregon University, Ashland, OR), and Richard Van Buskirk (Department of Environmental Studies, Pacific University, Forest Grove, OR).

Session Chair: Michael D. MacNeil

0800 *Introductory Comments*

0805 146 *Understanding Island Poverty and Mainland Richness: Seasonal Avifaunas in Western Mexico*, **HARTMUT S. WALTER** (Department of Geography, University of California, Los Angeles, CA)

0825 147 *Can Northern Anchovies (Engraulis mordax) Serve as Paratenic Hosts for the Parasitic Protozoan, Toxoplasma gondii? *GLOETA N. MASSIE and MICHAEL W. BLACK* (Department of Biological Sciences, California Polytechnic State University, San Luis Obispo, CA)

0845 148 *Down and Dirty: Examining Mercury Levels in Predatory Pelagic Fish and Their Lower Trophic Level Prey as a Function of Depth in Pelagic Ecosystems Surrounding Hawaii*, **C. ANELA CHOY** (Department of Oceanography, University of Hawaii, Honolulu, HI)

0905 149 *Farmland Impact on Seed Dispersal by Flying Foxes in Tropical Dry Forests*, **MATTHEW SCOTT LUSKIN** (Department of Geography, University of California, Los Angeles, CA)

0925 150 *China's Wildman, the Yeren*. **D. JEFFREY MELDRUM** (Department of Biological Sciences, Idaho State University, Pocatello, ID)

0945 BREAK

Session Chair: D. Jeffrey Meldrum

1005 151 *Mitochondrial Markers: A Valuable Tool for the Molecular Taxonomy of Fruit Flies (Diptera: Tephritidae)*, ***SAMIA FKI^{1,2}, DAVID S. HAYMER², MOHAMED RABEH HAJLAOU³ and MOHAMED MAKNI¹** (¹Faculté des Sciences Mathématiques, Physiques et Naturelles

CONTRIBUTED ORAL PAPERS

de Tunis Campus Universitaire - 1060 Tunis; ²University of Hawaii at Manoa, Cell and Molecular Biology, Honolulu HI; ³Institut National Agronomique de Tunisie, Rue Hédi Karray 2049 Ariana, Tunis, Tunisie)

1025 **152** *Variation at the DNA Level Within and Between Populations and Species of the Bactrocera dorsalis Species Complex*, ***CHRISTIE K. M. NAEOLE** and **DAVID S. HAYMER** (Department of Cell and Molecular Biology, University of Hawai'i at Manoa, Honolulu, HI)

1045 **153** *Preliminary Evidence for Epistasis between Map-Based QTL Markers Associated with Powdery Mildew Resistance in Hop (*Humulus lupulus* L.)*, ***JOHN A. HENNING**¹, **M. SHAUN TOWNSEND**² and **DAVID H. GENT**¹ (¹USDA-ARS-FSCU, Corvallis, OR; ²Department of Crop & Soil Sciences, Oregon State University, Corvallis, OR)

1105 **154** *Quantitative Trait Loci Affecting Fatty Acid Composition of Beef*. **N.O.M. TSHIPULISO**¹, **L.J. ALEXANDER**², **T.W. GEARY**², **W.M. SNELLING**³, **D.C. RULE**⁴, **J.E. KOLTES**⁵ and **B.E. MOTE**⁵ and ***M.D. MacNEIL**² (¹Agricultural Research Council, Irene, South Africa; ²USDA Agricultural Research Service, Miles City, Montana; ³USDA Agricultural Research Service, Clay Center, Nebraska; ⁴Department of Animal Science, University of Wyoming, Laramie; ⁵Department of Animal Science, Iowa State University, Ames, IA)

1125 **155** *Seven Habits of Effective Transgenic Product Development*, **PAUL D. OLSON** (Pioneer Hi-Bred International, Waimea, Kauai, HI)

Joint Sessions of the Atmospheric and Oceanographic Sciences, the Earth Sciences, and the Industrial Sciences and Technology Sections

Room 41
Wednesday
10:40 AM – 12:00 PM

Program Organizers: Anne A. Sturz (College of Arts and Sciences, Dean's Office, University of San Diego, San Diego, CA), J. Thomas Dutro, Jr. (U.S. Geological Survey, ret., National Museum of Natural History, Washington, D.C.), Henry Oman (Seattle, WA), and Frank Jacobitz (Department of Engineering, University of San Diego, San Diego, CA).

Session Chair: Anne Sturz

1035 *Introductory Comments*

1040 **156** *Enhanced Natural Convection Using Liquid Metals and Alloys during Conjugate Heat Transfer*, ***M. McGARRY**, **C. BONILLA** and **I. METZGER** (University of San Diego, Department of Engineering, San Diego, CA)

1100 **157** *Turbulence in a Velocity Spiral*, **FRANK G. JACOBITZ** (Mechanical Engineering Program, University of San

Diego, San Diego, CA)

1120 **158** *Snow Depth and Lake Ice Thickness Estimations Using GPS*, **MARK JACOBSON** (Montana State University – Billings, Department of Mathematics, Billings, MT)

1140 **159** *Reports on Current Technological Developments for Post-Petroleum Survival*, **HENRY OMAN** (Consulting Engineer, Seattle, WA)

Thursday, 19 June 2008

**Social, Economic and Political
Sciences Section**

Kono Center for English Studies

Thursday

1:15 PM – 2:00 PM

Program Organizer: Carl A. Maida (UCLA Schools of Dentistry and Medicine, University of California, Los Angeles, CA).

Session Chair: Carl A. Maida

1315 *Introductory Comments*

1320 160 *Competent Court Interpreting in Diverse, Low-Case-load Court Systems: Dilemmas and Proposed Solutions*, **MARCELLA ALOHALANI BOIDO**, (Hawaii Certified Court Interpreter and Retinopathy of Prematurity Subproject, Research in Minorities in Institutions Project, University of Hawaii at Hilo, Hilo, HI)

1340 161 *Redefining Security: Nuclear Weapons at the 1986 Constitutional Commission of the Philippines*, **VINCENT K. POLLARD** (Asian Studies Program, University of Hawai'i at Manoa, Honolulu, HI)