Research Session A – Technology Applications

Chair: Ryan Anderson, Virginia Tech

Discussant: David Doerfert, Texas Tech University

Facilitators: Shane Robinson, University of Missouri & Jonathan Velez, The Ohio State University

<u>Impacts of an Audience Response System on Student Achievement in High School</u> <u>Agriscience Courses</u> – John W. Conoley, East Carolina University; D. Barry Croom, Gary E. Moore & James L. Flowers, North Carolina State University

<u>Preservice-Teachers' Knowledge and Teaching Comfort Levels for Applied Agricultural</u> <u>Science and Technology Area Objectives</u> – Shannon H. Degenhart, Texas A&M University; Tim Pannkuk, San Houston State University; Judith White, Jenna Smith & Gary J. Wingenbach, Texas A&M University

Differences in Agricultural Science Teachers' Knowledge and Attitudes of Biotechnology: A Case Study – Diana Mowen, T. Grady Roberts, Gary J. Wingenbach & Julie F. Harlin, Texas A&M University

Barriers, Roles, and Information Source Preferences of Agricultural Science Teachers for Teaching Biotechnology: A Case Study - Diana L. Mowen, T. Grady Roberts, Gary J. Wingenbach & Julie F. Harlin, Texas A&M University

Research Session B – Curriculum Integration

Chair: Dennis Duncan, University of Georgia

Discussant: Kirby Barrick, University of Florida

Facilitators: Brian Haines, Purdue University & Julie Murphy, University of Kentucky

Mathematics Enhancement in Horticulture Curriculum: An Exploratory Examination of Teacher Concerns During Initial Implementation – Daniel J. Jansen, Larry G. Enochs & Gregory W. Thompson, Oregon State University

Advanced Life Sciences: Student Perceptions of a College Preparatory Curriculum <u>Taught Through Agricultural Education</u> – Alexandria I. Huerta & Mark A. Balschweid, Purdue University

<u>Does Curriculum Integration Intervention to Improve the Mathematics Achievement of</u> <u>Students Diminish Their Acquisition of Technical Competence? An Experimental Study</u> <u>in Agricultural Mechanics</u>–Brian Parr, Murray State University; M. Craig Edwards & James G. Leising, Oklahoma State University

<u>Selected Effects of a Curriculum Integration Intervention on the Mathematics</u> <u>Performance of Secondary Students Enrolled in an Agricultural Power and Technology</u> <u>Course: An Experimental Study</u> - Brian Parr, Murray State University ; M. Craig Edwards & James G. Leising, Oklahoma State University

Research Session C – Critical Thinking and Problem Solving

Chair: Levon Esters, Iowa State University

Discussant: Glenn Shinn, Texas A&M University

Facilitators: Christine Bowles, University of Kentucky & Kayla Marshall, Mississippi State University

<u>Influence of Overtly Teaching for Critical Thinking on Critical Thinking Skills of</u> <u>Undergraduates in a College of Agriculture</u> – Curt Friedel, Tracy Irani, Rick Rudd, Maria Gallo, & Erin Eckhardt, University of Florida

<u>Type, Number, and Cognitive Level of Academic Challenges Provided by Professors</u> – John C. Ewing, Amber Carnes, & M. Susie Whittington, The Ohio State University

An Examination of the Outcomes of a Problem-Based Learning Course in Natural Resources and Environmental Sciences on College Students' Levels of Reflective Thinking – Anna L. Ball, Mike Martin & Anton Endress, University of Illinois

<u>Problem-Based Learning in Secondary Agriculture Classrooms: Effect of Critical</u> <u>Thinking and Content Knowledge</u> – Scott Burris, Texas Tech University and Bryan L. Garton, University of Missouri

Research Session D – Preservice Teacher Education

Chair: Susan Camp, State University of New York (Oswego)

Discussant: James Flowers, North Carolina State University

Facilitators: Adam Sconyers, Mississippi State University & Steve Harbstreit, Kansas State University

<u>Predicting Preservice Agriculture Teachers Intentions to Teach</u> – Steven J. Rocca, California State University, Fresno & Shannon G. Washburn, University of Florida

<u>Preservice Agriculture Teachers Perceptions of Career Barriers and Support</u> - Steven J. Rocca, California State University, Fresno & Shannon G. Washburn, University of Florida

Similarity, Satisfaction, and Personality Type as Factors in Matching Student Teachers with Cooperating Teachers – Tracy Kitchel, University of Kentucky & Robert M. Torres, University of Missouri

I<u>s Personality Type Influential of the Extent Cooperating Teachers Provide Psychosocial</u> <u>Assistance to Student Teachers</u> - Tracy Kitchel, University of Kentucky & Robert M. Torres, University of Missouri

Research Session E – Higher Education Issues

Chair: Jerry Peters, Purdue Universitry

Discussant: Robert Martin, Iowa State University

Facilitators: Marshall Swafford, Virginia Tech & Clark Harris, Kansas State University

<u>Teacher Induction Programs in Agricultural Education – Description of the Role of</u> <u>AAAE Higher Education Teacher Preparation Programs</u> – Edward A. Franklin & Quint Molina, University of Arizona

<u>Research Capacity in Agricultural Education</u> – Brian E. Myers & Edward W. Osborne, University of Florida

<u>Changing the Way Things Are Done, Will Distance Education Lead Higher Education</u> <u>Into Adopting Business World Practices</u> – Paula M. Teig & W. Wade Miller, Iowa State University

<u>The Role of Critiqued Reflection in Improving the Perceived Leadership Competencies</u> of <u>Undergraduates During a Ten Week Professional Internship</u> – Nicole P. Stedman, Tracy A. Rutherford, & T. Grady Roberts, Texas A&M University

Research Session F – Elementary and Middle School Programs

Chair: Greg Thompson, Oregon State University

Discussant: Barbara Kirby, North Carolina State University

Facilitators: Karen Fritz, Texas Tech University & Beth Wilson, North Carolina State University

Interactive Agricultural Experiences of 4 th Grade Students in the Arid Southwest: An Examination of the Impact of Hands-on Learning Experiences as a Component of Agriculture in the Classroom Curriculum – Rodney B. Glassman, Jack Elliot, & James Knight, University of Arizona

<u>Middle School Students' Attitudes Toward Pursuing Careers in Science, Technology,</u> <u>Engineering, and Math</u> – Shannon H. Degenhart, Gary J. Wingenbach, Kim E. Dooley, James r. Lindner, Diana L. Mowen & Larry Johnson, Texas A&M University

Analysis and Evaluation of the Animal Biosecurity Education Program for Youth – Andrea Gregory-Kreps, Purdue University

Analysis and Evaluation of the Animal Biosecurity Education Program for Youth: A Look at Attitudes - Andrea Gregory-Kreps, Purdue University

Research Session G – Special Needs

Chair: Matt Spindler, State University of New York (Oswego)

Discussant: Randol Waters, University of Tennessee

Facilitators: Moriah Jennings, Texas Tech University & John Cannon, Virginia Tech

<u>Strategies Employed by North Carolina Agriculture Teachers in Serving Students with</u> <u>Mild to Moderate Learning Abilities</u> – Jennifer Richardson, North Mecklenburg (NC) HS & Shannon G. Washburn, University of Florida

<u>Student Teachers' Confidence in Teaching Special Needs Students in Agricultural</u> <u>Education Classrooms and Laboratories</u> – John Kessell, Western Kentucky University; Gary J. Wingenbach, Texas A&M University; Hansel Burley, David Lawver, Steven Fraze & Chad Davis, Texas Tech University

<u>Relationships Between Special Education Confidence, Knowledge, and Selected</u> <u>Demographics</u> - John Kessell, Western Kentucky University; Gary J. Wingenbach, Texas A&M University; Hansel Burley, David Lawver, Steven Fraze & Chad Davis, Texas Tech University <u>Student Teachers' Knowledge of the Individuals with Disabilities Education Act</u> - John Kessell, Western Kentucky University; Gary J. Wingenbach, Texas A&M University; Hansel Burley, David Lawver, Steven Fraze & Chad Davis, Texas Tech University

Research Session H – Field Experiences

Chair: Brian Warnick, Utah State University

Discussant: Gary Briers, Texas A&M University

Facilitators: Lacy Quebe, Texas Tech University & Amy Rae Mounce, University of Missouri

<u>A Model for Implementing Early Field Experiences in Teacher Education</u> – Michael S. Retallick & Greg Miller, Iowa State University

<u>Documents Used in Early Field Experiences in Agricultural Education</u> - Michael S. Retallick & Greg Miller, Iowa State University

<u>An Assessment of Teaching Interns' Level of Proficiency on State Standards Prior to and</u> <u>at the Completion of the Teaching Internship</u> – Jacqueline L. Campbell, Northwest Missouri Technical School; Bryan L. Garton & J. Shane Robinson, University of Missouri

<u>Total Program Efficacy: A Comparison of Traditionally and Alternatively Certified</u> <u>Agriculture Teachers</u> – Dennis W. Duncan & John C. Ricketts, University of Georgia

Research Session I – Minority Issues

Chair: Donna Graham, University of Arkansas

Discussant: Marcus Comer, North Carolina A&T University

Facilitators: John Ewing, The Ohio State University & Paula Faulkner, Penn State University

<u>Recruitment and Retention Strategies Utilized by 1890 Land Grant Institutions in</u> <u>Relation to African American Students</u> – Antoine Alston & Johnnie Westbrook, North Carolina A&T University

Assessment of Minorities in Agriculture, Natural Resources, and Related Sciences Members' Leadership Skills and Professional Development – Marney Dorsey, Patreese Ingram, & Rama Radhakrishna, The Pennsylvania State University

<u>Issues Facing Urban Agriscience Teachers: A Delphi Study</u> – Wendy Warner & Shannon G. Washburn, University of Florida

<u>Social Barriers Perceived by Female Small-Scale Agricultural Producers</u> – Elizabeth Maeda, George Wardlow, & Jefferson Miller, University of Arkansas

Research Session J – Leadership

Chair: Barry Boyd, Texas A&M University

Discussant: Tracy Hoover, Penn State University

Facilitators: Reynold Gardner , Oregon State University & Curt Friedel, University of Florida

<u>Developing Leadership Skills in Agricultural Education: A Synthesis of Literature</u> – Kara S. Butters & Anna L. Ball, University of Illinois

<u>The Relationship Between Participation in Community Service Learning Projects and</u> <u>Life Skills Development in 4-H Leadership Activities</u> – Connie Phelps, University of Arkansas & Joe Kotrlik, Louisiana State University

Agricultural Education Students' Attitudes About and Barriers to Participation in Leadership Activities – James Connors, The Ohio State University & Benjamin Swan, Cal Poly – San Louis Obispo

<u>An Examination of Selected Life Skill Development for Louisiana 4-H Club Officers</u> – Mark G. Tassin, LSU AgCenter; Chadwick C. Higgins, LSU AgCenter; Joe W. Kotrlik, Louisiana State University & Janet E. Fox, LSU AgCenter

Research Session K – Career Choice

Chair: Rusty Miller, Virginia Tech

Discussant: Gary Jackson, Mississippi State University

Facilitators: Christopher Stripling, University of Georgia & Adam Sconyers, Mississippi State University

<u>Impacts and Benefits of a College Wide Learning and Work Experience Program</u> – Charles R. Steiner & Michael S. Retallick , Iowa State University

<u>Non-Technical Skills and Traits Needed to be Career Ready Graduates as Perceived by</u> <u>Agribusiness Employers and Recruiters</u> – Thomas Brand, Stacy Gartin, Harry Boone, & Deborah Boone, West Virginia University

<u>Tracking Agricultural Education Graduates' Career Choice, Job Satisfaction, and</u> <u>Employability Skills</u> – Bryan L. Garton & J. Shane Robinson, University of Missouri

<u>Career Choices and Career Experiences Among Women in Secondary Agricultural</u> <u>Education</u> – Kathleen D. Kelsey, Oklahoma State University

Research Session L – Beginning Agriculture Teachers

Chair: Travis Park, Cornell University

Discussant: Grady Roberts, Texas A&M University

Facilitators: Mike Martin, University of Illinois & Kayla Marshall , Mississippi State University

<u>Inservice Needs of Beginning Agriculture Teachers</u> – Shannon G. Washburn & James E. Dyer, University of Florida

<u>Relationships of Teachers and Program Variables to Beginning Agriculture Teachers'</u> <u>Sense of Efficacy</u> – Jennifer Wheeler & Neil A. Knobloch, University of Illinois

<u>Experiences of the First Year of Teaching Secondary Agricultural Education: A Report of a National Study</u> – Brian K. Warnick, Utah State University; Gregory S. Thompson, Oregon State University & Rudy S. Tarpley, Utah State University

<u>Perceptions of Beginning Teachers: A Comparison of Two Formal Mentoring</u> <u>Arrangements</u> – Bradley Greiman, University of Minnesota; Robert Torres, University of Missouri; Scott Burris, Texas Tech University; & Tracy Kitchel, University of Kentucky