Highlights of the 17th Biennial Research Symposium

April 7 - 10, 2013 Jacksonville, Florida



1890 Research: Sowing Seeds of Change for the Global Community

Association of 1890 Research Directors. Inc.

ASSOCIATION OF 1890 RESEARCH DIRECTORS' 2013 REASEARCH SYMPOSIUM



Greetings from the Chair

The Association of Research Directors, Inc. (ARD) is the official representative body of the agricultural research administrators of the eighteen 1890 Land Grant Universities. In its role in supporting and enhancing 1890 research in the food and agricultural sciences, the ARD has held conferences for the sharing of knowledge since 1976. The 17th Biennial Research Symposium, with support, participation and conscientious and excellent work of many from the 1890 universities, lived up to lofty expectations. The theme of the 2013 Symposium was "1890 Research: Sowing the Seeds of Change for the Global Community" and the goal of this endeavor was "To provide a forum for interactions, knowledge sharing, building networks for expanded partnerships and showcasing the talents and achievements of the 1890 community." As you will realize by reading this report, this conference showcased the research achievements of both students and faculty. We are overwhelmingly grateful to those of you who participated and provided financial support, those who made excellent poster and oral presentations in the food and agricultural sciences, and those who gave talks/remarks at the general sessions. The judges of the student presentations and the moderators for the oral presentations were outstanding and we owe them heartfelt thanks. We also congratulate those who were recognized for outstanding achievements, both through professional endeavors and those who were award winners in the paper presentation competitions.

The details of putting on such a massive endeavor were handled magnificently by the Symposium Steering Committee and associated subcommittees, the Technology and Communications Committee, and the Registration Committee and all of these individuals are gratefully acknowledged in this report. The Research Directors provided excellent leadership and involvement and are commended for their efforts in advancing excellent research, academic and outreach programs at respective 1890 institutions. As has been said consistently by Chairs of the ARD who have come before me, on behalf of the ARD, I am proud of the excellence demonstrated at the member institutions.

Please visit the ARD website to review the symposium-related documents at http://umes.edu/ard/Default.aspx?ID=44425. Although our next symposium would normally take place in 2015, we will have a postponement in order to join the 1890 community in celebrations of the 125th Anniversary of the signing of the Second Morrill Act, which established the 1890 land-grant universities.

Late U Salar Market

Sincerely,

Shirley Hymon-Parker, ARD Chair

ABOUT THE ARD:EXCERPTS FROM THE ARD STRATEGIC PLAN

Over the past century, the food, agricultural science and natural resource research programs, curricula, and cooperative extension programs at the 1890 Universities have evolved into complex and specialized programs of advanced science and technology. Today we espouse the philosophy of building opportunities for all citizens to take advantage of the rich diversity of society and to tackle the challenges and opportunities of a technologically advanced world, while contributing to the common good of all people.

The ARD is integrally involved in creating a society where all people have opportunities for wholesome living and learning through responsible pursuits of their goals and aspirations. To accomplish this, the food and agricultural research mission of the ARD is to: *Provide visionary and enlightened leadership to member institutions as they continuously address issues impacting their ability to accomplish the food and agricultural research challenges facing the state, nation and world-at-large.*

Primary attention is given to a broad-based research agenda and institutions' capabilities in targeted areas that address the needs of all people in society but in particular, those who are under-represented and economically disadvantaged. The ARD is committed to:

Innovative research programs that provide effective and efficient solutions to quality of life problems affecting individuals, families and communities

Development of society-ready graduates who are uniquely trained and in demand to tackle the diverse issues impacting the nation and the world

Enhancement of the socioeconomic condition of individuals, families and communities in targeted regions

Service as regional and national leaders in addressing the needs and challenges facing rural and urban communities as well as limited resource farmers.

Today the 1890 campuses are bristling with diverse, quality research programs that are problem-driven and interdisciplinary in nature. The basic and applied research programs involve individual and joint collaboration of member institutions at the local, state, national, and international levels and are increasingly multi-institutional, multi-state and stakeholder driven. Designed to support medium and small-sized farms and businesses focused on maintaining the natural resources, as well as targeted rural and urban communities, the 1890 Universities' primary areas of research concentration include:

- Improved nutrition and health of urban and rural populations with emphasis on obesity prevention
- Economically competitive and sustainable small-scale agricultural systems
- Crop diversity and alternative crops and marketing strategies for farmers
- Food safety and improved nutritional quality
- Bio-based energy production
- Value-added plant and animal products
- Natural resource management and sustainability















There were 608 abstracts submitted for presentations made at the 17th Biennial Research Symposium. The tables below give the presentation breakdowns by categories and by presenters.

Oral and Poster Papers Presented by Category

	Under- graduate Students	Graduate Students	Scientists	Total Papers Presented
Food Safety, Nutrition and Health	21 oral 38 posters	26 oral 28 poster	19 oral 32 poster	164
Renewable Energy, Natural Resources, and Environment	13 oral 16 poster	27 oral 30 poster	35 oral 27 poster	148
Plant Health and Production and Plant Products	8 oral 24 poster	19 oral 26 poster	27 oral 19 poster	123
Animal Health and Production and Animal Products	14 oral 26 poster	17 oral 16 poster	14 oral 19 poster	106
Family, Youth, Community and Economic Development	11 oral 7 poster	12 oral 4 poster	27 oral 6 poster	67
Total # of Presentations				608

Speakers at the Opening and General Sessions



Dr. Sonny Ramaswamy



Dr. Gita Ramaswamy



Drs. Don McLellan and Gilbert Rochon



Mr. Mike Sweat and Dr. Rodner Wright

The 17th Biennial Research Symposium was the largest yet with 927 Registrants, 401 of these were Graduate and Undergraduate Students.









Hwards and Recognitions

The ARD is committed to recognizing and rewarding excellence. At every symposium, outstanding oral and poster presentations have been recognized. The paper presentation competition is among students only. At the 2013 symposium, emphasis was placed on collaborative research programs and an exemplary ARD Multistate research project was acknowledged. Every year, the Experiment Station Committee on Organization and Policy (ESCOP) and the USDA/NIFA Administrator present the Excellence in Multistate Research Award at the annual APLU conference. The purpose of this award is to annually recognize those who are conducting exemplary multistate activities and in doing so, enhance the visibility of the multistate program. All five regions of the land grant universities - the North East, the North Central, the Southern Region, the Western Region and the ARD/1890 Region submit their nominated project which was deemed by a review panel to exhibit sustained, meritorious, and exceptional multistate activities. Of those, one is chosen as the national award winner but the others are still recognized with pride, because they are the **regional award winners**. Many of the projects have participants from more than a single region, and many have representation from all five regions, making them national in scope. Winners of the 2013 ARD Regional Award for Excellence in Multi-State Research are seen below. The winning project is entitled "Sustainable Small Ruminant Production in the Southwestern U.S."

Winners of the 2013 ARD Regional Award for Excellence in Multi-State Research



Members of the ARD's Food Safety Consortium Were Recognized

In 2011, five multistate 1890 university teams organized to write proposals that would compete for funding by the Association of 1890 Research Directors, Inc. Of the proposals submitted, the highest ranking proposal, as scored by external reviewers, was the Food Safety Consortium proposal. The proposal was funded for \$100,000 for two years and the participants are from twelve (12) 1890 campuses. The funding for ARD consortia is expected to be used to leverage more external funding and to help facilitate sustainable partner-ships throughout the 1890 community as is guided by this mission statement:

"The 1890 Universities will effectively engage in discovery, education, dissemination and application in an environment of partnership and trust in order to build strengths, share resources, and to utilize opportunities that are available if the unique attributes of the institutions are combined."

The ARD Vision is that:

"The 1890 consortium will facilitate the collaboration of 1890 University partners on programs of mutual interest that will maximize their capabilities and assist them in increasing and enhancing outputs and impacts."

Representatives of the ARD Food Safety Consortium



Dr. Channaptna S. Prakash—Winner of the 2013 Morrison-Evans Outstanding Scientist Award

Dr. Channaptna S. Prakash of Tuskegee University was the recipient of the 2013 Morrison-Evans Outstanding Scientist Award which is the oldest and highest honor given to an 1890 scientist by the ARD and comes with a cash sum of \$1000. The recipient's research interests include studies on transgenic plants, gene expression, tissue culture and plant genomics. Among many of his impressive accomplishments, Dr. Prakash and his colleagues have deposited thousands of nucleotide data in the GenBank, developed hundreds of SSR markers, and constructed a very detailed and informative peanut genetic map. He is also pursuing genomic and DNA markers studies on *Miscanthus* and similar work also on date palm trees. He is well published and is an editor-in-chief of the *Journal of GM Crops and Food* and co-edited a Special Issue on Biosafety Regulation. He is renown internationally as an expert on societal understanding of agricultural biotechnology. Dr. Prakash also teaches courses in plant biotechnology, genetics, plant biology and in international agriculture. He received his B.S. and M.S. in agriculture from the University of Agricultural Sciences, Bangalore, India and a PhD in forestry genetics from the Australian National University in Canberra and was a post-doc at the University of Kentucky.



Dr. Erika Knight Styles—Winner of the 2013 B.D. Mayberry Young Scientist Award

The 2013 B. D. Mayberry Young Scientist Award and \$500 were presented to Dr. Erika Knight Styles from Fort Valley State University. Dr. Styles focuses on developing and understanding structural elements and consumer preferences for organic fruits and vegetables and nontraditional agricultural products. Her scholarship has begun in earnest, but what is so impressive is that this young scientist is making a broad and sustaining impact as well, by mentoring students. Many of these students, guided by the recipients' scholarship and passion to help them be successful, have won competitions for their outstanding presentations at national conferences. Dr. Styles received her B.S. in Ag. Economics from Fort Valley State University and her M.S. and Ph.D. degrees from the University of Florida in Food and Resource Economics.



7



First, Second and Third Place Award Recipients for Oral and Poster Paper Competitions

Oral Presentations – Graduate Student Competition Animal Health and Production and Animal Products

 1^{st} place - Production Comparison of All-Male and Mixed-Sex Freshwater Prawns *Macrobrachium Rosenbergii* in Ponds. **Z. Kupchinsky**, Kentucky State University

2nd - Inclusion of Oat in a Sow's Diet May Help Prevent Post Weaning Diarrhea in Piglets. **T. Daniels**, North Carolina Agricultural and Technical State University

3rd - Analysis of the Impact of Production Style on Porcine Airway Morphology and Proteome Dynamics. **C. J. McClendon**, North Carolina Agricultural and Technical State University

Oral Presentations – Undergraduate Student Competition Animal Health and Production and Animal Products

1st place tie - Development of a Two-Step Multiplex Real-Time PCR for the Rapid Detection of *Vibrio anguillarum* from Sea Water. **M. E. Hickey**, Delaware State University

 1^{st} place tie - Housing and Feeding Effects on the Carcass Yield and Quality Traits in Kids Under Mixed-Species Grazing System. L. **Profit**, Southern University and A&M College

3rd place - STAT-3 mRNA Expression in the Goat (*Capra hircus*) Testis. **S. Thomas**, Tuskegee University

Oral Presentations – Graduate Student Competition Family, Youth, Community and Economic Development

1st place - Putting Theory into Practice: Aquaculture as a STEM Tool in the Classroom. **C. R. Janiak**, Delaware State University

2nd place - The Cost Effectiveness of Biological Control: The Case of Invasive Mole Crickets and Florida's Commercial Pastureland. **G. Mhina**, Florida A&M University

3rd place - Marketing of Small Scale Aquaculture Products in Kentucky. **R. Bryant**, Kentucky State University

Oral Presentations – Undergraduate Student Competition Family, Youth, Community and Economic Development

1st place - An Empirical Investigation of Factors Influencing University Students Body Mass Indices. **D. J. Ross,** Southern University and A&M College

2nd place - Do State Sponsored Labels Make Any Difference? The Case of "Georgia-Grown" Label. C. **Allen,** Fort Valley State University

3rd place - Consumers' Perception and Willingness to Buy Goat Meat. **M. Cosby**, Fort Valley State University

Oral Presentations – Graduate Student Competition Food Safety, Nutrition and Health

1st place - Physiological Implications of Alerted Thyroid Function and High Fat Diets in Rats. **V. Welch-White,** Tuskegee University

2nd place tie - Determination of the Potential of Cocoa and Coffee on Tumor Formation and Effects on Selected Antioxidant Enzymes. **L. Dalrymple**, Alabama A&M University

2nd place tie - Isolation and Screening of Lactic Acid Bacteria (LAB) from Kimchi and Chicken Intestine and Feces for Use as Probiotics. **J. Young**, Delaware State University

Oral Presentations – Undergraduate Student Competition Food Safety, Nutrition and Health

1st place - Storage Practices and Microbiological Contamination of Home Refrigerated Foods. **A. Frederick**, Tennessee State University

2nd place - Molecular Structure and Physicochemical Properties of Starches in Virginia-Grown Corn, Potato, and Mungbean. **C. Grizzard**, Virginia State University

3rd place - Sex, Stress, and Inflammation in a Murine Model of Ulcerative Colitis. **D. Hampton**, Tuskegee University

Oral Presentations – Graduate Student Competition Plant Health and Production and Plant Products

1st place - Proteomic Analysis of Tomato Roots Under Aluminum Stress. **S. Sangireddy**, Tennessee State University

2nd place tie - Nitrogen Use Efficiency (NUE) Through Sensor-based Algorithms and On-the-go Application. **C. Hartman**, University of Maryland Eastern Shore

2nd place tie - Comparison of Hay and Polyethylene Mulch Effects on Soil Properties and Organic Produce Yield and Quality. **J. Nelson**, Kentucky State University

Oral Presentations – Undergraduate Student Competition Plant Health and Production and Plant Products

1st place - Screening of Viruses Infecting Sweetpotato in Arkansas. **J. Montgomery**, University of Arkansas at Pine Bluff

2nd place - High Frequency Plant Regeneration from Axillary Shoot in *Moringa oleifera*. **A. Norris**, Fort Valley State University

3rdplace - Germplasm Screening for High Acetogenin Activity in Pawpaw Twig and Fruit Tissues. **L. Kronmaah,** Kentucky State University

Oral Presentations – Graduate Student Competition Renewable Energy, Natural Resources, and Environment

1st place - Comparison of Carbon Dioxide Flux within Three Different Urban Wetland Types in the Blackwater Conservation Area. **C. Chappell**, Southern University and A&M College

2nd place - Design and Evaluation of a Spectrally Optimized Algal Photobioreactor for Carbon and Nitrogen Capture from Fossil Fuel Efflux. **X. Henry**, University of Maryland Eastern Shore

3rd place - Genome Structure and Protein Expression for Cellulosic Activities of a New Bacterial Strain. **H. Li**, Tennessee State University

Oral Presentations – Undergraduate Student Competition Renewable Energy, Natural Resources, and Environment

1st place - Genetic Diversity in Six Pawpaw Patches from Franklin County, Kentucky as Revealed by SSR Markers. **D. Davidson**, Kentucky State University

2nd place - Plant Regeneration and Genetic Transformation in *Arundo donax* Using Particle Bombardment. **M. Melvin**, Fort Valley State University

Poster Presentations – Graduate Student Competition Animal Health and Production and Animal Products

1st place - Insecticide Resistance Management in the Ectoparasitic Mite, *Varroa destructor*, of Honey Bee, *Apis mellifera*, Populations and Susceptibility of this Invasive Alien Pest to Fungal Pathogens.

C. Eddington, Florida A&M University

2nd place - Effects of Feeding a Pelletized Diet Containing Pumpkin Seeds on Nematode Fecal Egg Counts (FEC), and Blood Hematocrit (PCV) in Lambs. **J. Rodriguez**, University of Maryland Eastern Shore

3rd place - The Effect of Divergent Selecting Parent Population Boer Does for High and Low Parasite Resistance on Subsequent Parasite Resistance, Survival Rate, Reproductive Efficiency, and Kid Performance: 1-Year Summary. L. S. Wilbers, Lincoln University

Poster Presentations – Undergraduate Student Competition Animal Health and Production and Animal Products

1st place - Growth and Back Fat Thickness of Berkshire (*Sus scrofa*) Reared Outdoors. **K. Esparza-Harris**, North Carolina Agricultural and Technical State University

2nd place - Performance by Crossbred Wether Lambs Grazing Oat and Turnip Pastures in Late Spring through Early Summer Using Either Continuous or Rotational Grazing Schemes. **J. K. Hanlin**, Lincoln University

3rd place - Fatty Acids Composition in Intact or Castrated Boer, Kiko and Boer x Kiko Meat Goats (*Capra hircus*) Under Intensive Management System. **S. Baltimore**, Tuskegee University

Poster Presentations – Graduate Student Competition Family, Youth, Community and Economic Development

1st place - Factors Influencing Graduation Rates in two Mississippi School Districts. **C. Mawusi**, Alcorn State University

2nd place - Obesity Intervention in Low-Income Children from High Risk Families. **S. Long-Lambi**, Alabama A&M University

3rd place - Nutrition Education and Fitness Camp: Can it Prevent Obesity? T. Kelley, Alabama A&M Uni-

Poster Presentations – Undergraduate Student Competition Family, Youth, Community and Economic Development

1st place - Sustainable Vegetable Gardening Using IPM Practices. **K. Barr**, Florida A&M University

Poster Presentations – Graduate Student Competition Food Safety, Nutrition and Health

1st place - Chlorine Inactivation of Non-Resistant and Antibiotic Resistant Strains of *Salmonella typhimurium* Isolated from Pre-Chill and Post-Chill Poultry Carcasses. **R. Tasmin**, University of Maryland, Eastern Shore

2nd place - Chemopreventive Potential of Lentils, Green and Yellow Split-Peas (Sprouted and Nonsprouted) on Azoxymethane-Induced Aberrant Crypt Foci in Fisher 344 Male Rats. **K. Busambwa**, Alabama A&M University

3rd place- Chemopreventive Effects of Cocoa and Coffee on Selected Hepatic Detoxification Enzymes in Fisher 344 Male Rats. **L. Dalrymple**, Alabama A&M University

Poster Presentations – Undergraduate Student Competition Food Safety, Nutrition and Health

1st place - The Correlation Between a Soccer Coaches' Perception of Players' Strength and Endurance Using Standardized Measures. **R. Dale**, South Carolina State University

2nd place - Regulation of Allergenic Protein by Nadplus Dehydrogenase. **D. Johnson**, Prairie View A&M University

3rd place - Consumer Evaluation and Shear Force of Retail Domestic Grain-Finished, Imported NewZealand Grass-Finished, and Missouri-Produced Grass-Finished Lamb Racks. **K. L. Basinger**, Lincoln University

Poster Presentations – Graduate Student Competition Plant Health and Production and Plant Products

1st place - Increasing Fresh Virginia-Grown Edamame Supply through Season Extension Techniques. **S. Nolen**, Virginia State University

2nd place - Symbiotic Performance of Genetically Diverse Cowpea Genotypes on the Delmarva Peninsula. **N. M. Burton**, University of Maryland Eastern Shore

3rd place - Effect of Organic and Inorganic Fertilizer on the Production, Elemental Composition and Quality of Roselle Hibiscus Calyces. **M. Breithaupt**, Southern University and A&M College

Poster Presentations – Undergraduate Student Competition Plant Health and Production and Plant Products

1st place - Growth and Yield of Native Warm-Season Grasses as Affected by Root-Loss at Transplanting and Cutting Height. **D. Johnson**, Virginia State University

Tie for 2nd place - Role of MicroRNA Regulation for Sex Expression of Melon. L. Dingess, West Virginia State University

Tie for 2nd place - Comparison of the Structural Changes in US and Mississippi Agricultural Production and Productivity. **R. Yates**, Alcorn State University

Tie for 2nd place - Yield Trials for t and Specialty Peppers for Small Farm Production. **J. A. Thaxton**, West Virginia State University

Poster Presentations – Graduate Student Competition Renewable Energy, Natural Resources, and Environment

1st place - Testing the Effects of Carbohydrate Perturbations on the Stability of Thermophilic Anaerobic Digestion. **N. Montenegro**, West Virginia State University

 2^{nd} place - Montoring of Resistance Allele Frequencies in the Glassy-Wing Sharpshooter, *Homalodisca vitripenni*, the Destructive Pest of Grape. **G. Chelliah**, Florida A&M University

3rd place - Natuculture: the Benefits of Practicing Conservation Agriculture in Urban Landscapes. **M. Williams**, North Carolina A&T State University

Poster Presentations – Undergraduate Student Competition Renewable Energy, Natural Resources, and Environment

Tie for 1st place - Continuing the Search for a Renewable/Biodegradable Hydroponic Substrate. **B. J. Wooten**, West Virginia State University

Tie for 1st place - Water Dispersible Carbon Nanotubes Silica Hybrids. **G. Beharie**, Prairie View A&M University

3rd place - Determining Urea Persistence in a Coastal Plain Soil: An Incubation Study. **I. Bottone**, University of Maryland Eastern Shore



Inapshots of Representative Events

















Opening Session Program

Shirley Hymon-Parker, Presiding

Chair of the Association of 1890 Research Directors, Inc.

The Occasion Shirley Hymon-Parker

Associate Dean for Research North Carolina A&T State University

Introductions Robert Taylor

Dean and Research Director **Saundra Wheeler,** Graduate Student
Florida A&M University

Greetings Michael Sweat

Duvall County Extension Director Jacksonville, Florida

Rodner B. Wright

Interim Provost and V.P. for Academic Affairs Florida A&M University

Introductions Conrad Bonsi

Associate Research Director **Shanice Jones**, Senior Tuskegee University

Remarks Donald McLellan

Director of Outreach, Diversity & Equal Opportunities for USDA-ARS
United States Department of Agriculture

Gilbert Rochon

President, Tuskegee University Chair of the Council of 1890 Universities

Closing Remarks Orlando F. McMeans

Vice President for Research and Public Service Co-Chair of the Symposium Steering Committee West Virginia State University

Student Awards Quncheon

Program

Frieda Eivazi, Presiding Interim Dean and Director Lincoln University

The Occasion

Barry L. Bequette

Dean and Director

Alcorn State University

Invocation Vernon Jones
Associate Dean and Director
Langston University

Qunch

Special Award Presentation

Henry Fadamiro

Associate Director

Southern Region IPM Center

Auburn University

Presentation of ARD Awards

Robert Barney Int. Asst. V.P. for Research and Public Service West Virginia State University Chair of the Presentations Committee

> Wondi Mersie Research Director Virginia State University

Louis Whitesides Associate Research Director South Carolina State University

Carter Catlin Associate Research Director Tennessee State University

Closing Remarks

James Garner

Dean and Director

University of Arkansas Pine Bluff

General Session

Walter A. Hill, Presiding

Vice Provost, Dean and Director - Tuskegee University

Introduction of Speaker

Alton Johnson

Dean and Director Prairie View A&M University

"Identifying Your Role in Addressing the Global Challenges in the Food and Agricultural Sciences for the 21st Century"

Dr. Sonny Ramaswamy

Administrator, USDA National Institutes of Food and Agriculture

Introduction of Speaker

Teferi Tsegaye

Dean and Director Kentucky State University

"Responsible Conduct of Research: Educational Initiative"

Dr. Gita N. Ramaswamy

Senior Advisor for Scientific Integrity and Program Assessment Office of the USDA Chief Scientist

Congresses Workshops

Concurrent Workshops Workshops Begin at 1:30 PM

City Terrace 4 – "Successful Integration of Extension and Research to Meet the Needs of Clientele" – Moderator L. Washington Lyons, Association of Extension Administrators

Panel Members: Gina E. Eubanks, Southern University Ag Center; Ghebreiyesus Yemane, Southern University Ag Center; M. Ray McKinnie, North Carolina A&T State University; Ralph Nobles, North Carolina A&T State University; and Franklin Jackson, Virginia State University

City Terrace 5 – "**SARE Funding Opportunities**" - Moderator – Candace Pollock, University of Georgia

Presenter: James Hill, Southern SARE Minority Outreach Specialist, Fort Valley State University

City Terrace 6 – "Workshop on Partnering to Implement STEAM Programs" Moderator - Orlando McMeans, West Virginia State University

City Terrace 7 - "Keys to Increasing Collaboration and Effective Team Building" Moderator - Shirley Hymon-Parker, North Carolina A&T State University

Presenter: David Bauer of David G. Bauer Associates, Inc.

City Terrace 8 – "Partnering to Develop Multistate Programs on Obesity Prevention" Moderator – Louis Whitesides, South Carolina State University

City Terrace 9: "Emotional Intelligence (EQ)- Managing Behavior & Making Personal Decisions for Positive Results" Moderator – Carolyn B. Brooks, Association of 1890 Research Directors, Inc.

Presenter: Arlen Leholm, Executive Director, North Central Regional Association, University of Wisconsin

City Terrace 10 – "Forging Effective Cooperative Partnerships: The ARD Multistate Food Safety Consortium" Moderator – Moses Kairo, University of Maryland Eastern Shore

Presenters: Robert Holland, Institute of Food Safety and Nutrition, NIFA Salam Ibrahim, North Carolina A&T State University Jennifer Adsit, Virginia State University

Fawsey Hashem, University of Maryland Eastern Shore Makuba Lihono, University of Arkansas Pine Bluff

City Terrace 11 – "Workshop to Develop Biofuels/Bioproducts Collaborations" Moderators - Mike Bomford and Teferi Tsegaye, Kentucky State University

City Terrace 12 – "Workshop of the 'Integrating Farming Systems' Consortium Team" Moderator - Govind Kannan, Fort Valley State University

Presenters: Vince C. Chapman, USDA/APHIS "Animal Traceability Regulation" Bharat Singh, Fort Valley State University – "Integrated Agricultural Systems"

Student Workshops- "Preparing for Your Future"

River Terrace 1—Graduate School Presentations Moderator Larry Hartsfield, USDA Office of Advocacy and Outreach

Presenters: Jesse Thompson—University of Illinois, Urbana-Champaign

Lisa Guion Jones—North Carolina State University

Ruth McDonald and Carla Peterson—Iowa State University

Frederick Evans—South Carolina State University

Evelyn Cooper—University of Maryland

Randy Grayson—Virginia Polytechnic Institute and State University

River Terrace 1—USDA Careers Moderator— Horace Hodge, USDA Office of Advocacy and Outreach

Presenter: Tracey Troutman, USDA/ARS

River Terrace 1 – **Resume Development** Moderator – Karla Martin, USDA Office of Advocacy and Outreach

Presenter: LaWanda Thomas, USDA/APHIS

River Terrace 1 – Mock Interviews Moderator – Larry Hartsfield, USDA Office of Advocacy and Outreach

Presenter: Kenneth E. Johnson, USDA/APHIS

Awards Banquet Program

Adell Brown, Presiding

Vice Chancellor for Research Southern University Agricultural Research and Extension Center

The Occasion Govind Kannan

Dean and Director Fort Valley State University

Recognition of Special Guests Chandra Reddy

Dean and Director Tennessee State University

Invocation Marvin Burns

Dean and Director Langston University

Dinner with Music by Shawn Lizzmore of Just Jamz Entertainment

Excellence in Multistate Research Award

Moses Kairo

Dean and Director University of Maryland Eastern Shore

Presentation of B.D. Mayberry Young Scientist Award

Lloyd Walker

Acting Dean and Director Alabama A&M University

Presentation of the Morrison-Evans Award

Carolyn B. Brooks

ARD Executive Director

Closing Remarks

Dyremple Marsh

Dean and Director
Delaware State University

Co—Chair of the Symposium Steering Committee

Shirley Hymon-Parker

ARD Chair

Members of the Association of 1890 Research Directors, Incorporated



Support, commitment, and financial assistance were substantially provided from the members of ARD as indispensible contributions to the success of the 2013 Biennial Research Symposium.



Gratefully Acknowledged

There were many who provided outstanding leadership and service to make the 2013 Biennial Research Symposium Successful; i.e. committee members, judges for student oral and poster paper presentations, moderators for the sessions, workshop presenters, and NIFA National Program Leaders (NPLs) who performed the difficult task of evaluating the nomination packages submitted by the campuses for the Morrison-Evans Outstanding Scientist Award and the B.D. Mayberry Young Scientist Award.

Steering Committee Members

Dyremple Marsh, Steering Committee Co-Chair, Delaware State University Orlando McMeans, Steering Committee Co-Chair, West Virginia State University

Robert Barney, West Virginia State University Conrad Bonsi, Tuskegee University Carolyn Brooks, Association of 1890 Research Directors Edmund Buckner, University of Arkansas at Pine Bluff Carter Catlin. Tennessee State University Frieda Eivazi, Lincoln University James Garner, University of Arkansas at Pine Bluff Beverly Green, Tuskegee University Larry Hartsfield, OSEC-USDA James Hill, Southern Region SARE Lisa Hopkins, Delaware State University Shirley Hymon-Parker, N.C. A&T State University Moses Kairo, University of Maryland Eastern Shore Vernon Jones, Langston University L. Washington Lyons, Assoc. of Extension Administrators Lurline Marsh, University of Maryland Eastern Shore Karla Martin, OSEC-USDA Wondi Mersie, Virginia State University Kirk Pomper, Kentucky State University Lisa Purnell, OSEC-USDA Robert Taylor, Florida A&M University Tommeron D. Timmons, Florida A&M University Louis Whitesides, South Carolina State University Lisa Williamson, West Virginia State University Terrence Wolfork, Fort Valley State University

Technology and Communications Committee

Terrence Wolfork -Chair, Fort Valley State University
Joseph Allen, Kentucky State University
ChaNae Bradley, Fort Valley State University
Michael Bratcher, North Carolina A&T State University
Karen Craig, Tuskegee University
Doug Eaves, Tuskegee University
Rodney James, South Carolina State University
Paul Johnson, Prairie View A&M University
Ayanna McPhail, Fort Valley State University
William Porter, Virginia State University
Jason Robinson, West Virginia State University
William Scott, Fort Valley State University
Yolanda Surrency, Fort Valley State University

Registration Committee

Beverly Green - Chair, Tuskegee University
Alice Dyson, Southern University/A&M College
Beulah El-Amin, South Carolina State University
Angela Harper, Florida A&M University
LaTonia Hooks, Fort Valley State University
Lisa Hopkins, Delaware State University
Konnie Pace, Tuskegee University
Genevieve Urey, N.C. A&T State University
Angelina Williams, N.C. A&T State University
Lisa Williamson, West Virginia State University

Symposium Website Webmaster—Torrey Brown University of Maryland Eastern Shore

Graphic Designers– Joshua Loftin and Benjamin Forbes, N.C. A&T State University

Some of the Exhibits

















The Hissociation of 1890 Research Directors Gratefully Hicknowledges the Sponsors and Exhibitors of the 2013 Research Symposium

Platinum SponsorThe National Institute of Food and Agriculture (NIFA)

Gold Sponsors

The Agricultural Research Service (ARS)
Southern Region Sustainable Agriculture Research & Education
(SARE)

Silver Sponsors
CHS Foundation
Natural Resource Conservation Service (NRCS)

Bronze Sponsor
The Animal & Health Inspection Service (APHIS)
Dupont Crop Protection

Exhibitors
National Crop Insurance Services
North Carolina State University
Tuskegee University
University of Illinois at Urbana-Champaign
Virginia Polytechnic Institute and State University

The 1890 Land-Grant Universities









