



PD Research Conference/Workshop

Agricultural Research Service (ARS), USDA
Tribal Colleges Research Program, SERD/CSREES, USDA
1890s Capacity Building Research, SERD/CSREES, USDA



August 4-6, 2008
ARS, Beltsville, Maryland
Waterfront, CSREES, Washington DC



PD Research Conference/Workshop
Agricultural Research Service (ARS), USDA
Tribal Colleges Research Grants Program, SERD/CSREES, USDA
1890s Capacity Building Research, SERD/CSREES, USDA

Table of contents

PD Research Conference/Workshop Program.....	2
Abstracts for Oral Presentations.....	8
Abstracts for Posters	18
Participant Directory	32
PD Conference/Workshop Evaluation.....	41

PD Research Conference/Workshop
Agricultural Research Service (ARS), USDA
Tribal Colleges Research Grants Program, SERD/CSREES, USDA
1890s Capacity Building Research, SERD/CSREES, USDA

August 4-6, 2008
ARS, Beltsville, Maryland
Waterfront, CSREES, Washington DC

Building Research Capacity and Partnerships in the 21st century

Workshop Goals:

- **Introduce, inform and increase knowledge of workshop participants in federal and non-federal agencies' funding opportunities**
- **Introduce and increase knowledge of participants in the Agricultural Research Services research mission**
- **Build and strengthen partnerships among the workshop participants, ARS, other federal agencies, and non-federal organizations on programs of interest**
- **Share project updates/results for and garner feedback from colleagues, partners, potential collaborators for project enhancement**
- **Enhance understanding of workshop participants in the grants.gov grant submission requirement, awards management and reporting requirements**

DAY ONE

Greenbelt Marriott in the Morning

Agricultural Research Service, Beltsville in the Afternoon

7:00am - 8:00am Registration and Continental Breakfast

8:00am - 8:35am **WELCOME**
Frank Boteler, CSREES

Jennifer Woodward-Greene
Agricultural Research Service Overview

Saleia/Ali/ARS Rep
Logistics

8:35am – 9:55am **Session I**
Frank Flora
*Overview of the ARS Activities and Accomplishments in
Phytonutrients and Functional Food Research*

Rob Griesbach
Overview of ARS Technology Transfer

Umesh K. Reddy
Molecular Genetic Studies in Cucurbits

Elizabeth Rutledge
*Genetic Evaluation of the Invasive Aquatic Plant, Flowering Rush,
to Mitigate Environmental and Cultural Impacts on the Flathead
Indian Reservation, Montana*

9:55am – 10:25am Break

10:25am -11:30am **Session II**
Rao Mentreddy
Antidiabetic Properties of Serviceberry

Sheikh M. Basha and Hemanth K.N. Vasanthaiah,
*Characterization of Molecular and Cellular Components Induced in
Response to Pierce's Disease Infestation in Vitis Species*

Jane A. S. Barber
*Remote Sensing for Identification of Larval Mosquito Habitat and
Precision Pesticide Application*

11:30 am - 12:30 pm Lunch Discussion: Caird Rexroad, ARS Q & A
Tracey Troutman, ARS Careers

12:45 pm - 1:45 pm **Bus to Visitor's Center**

1:45pm - 3:25pm **Session III**
Jennifer Woodward-Greene
Moderator

Alfredo B. Lorenzo
*Landscape Valuation of the Effect of Canopy Roads on Property
Values in Tallahassee-Leon County, Florida*

Lou Gasbarre
Bovine Function Genomics

David Shelton and Hank Miller
*Enhancing Tribal Economic Cultural and Environmental Benefits
with Conservation Plantings*

Huang Hong
Bioinformatics and Genomics Education Delivery: An Integrated Approach

James E. Cilek
Evaluation of Biological Activity of Novel Octenol Analogs as Potential Attractants to Adult Mosquitoes

3:25pm - 3:40pm **Break and Leave in Bus**

3:40pm - 4:40 pm **Visit at the National Agricultural Library Reading Room**, Peggy Blake (AGNIC), Gary McCone (Association of Director Tribal Colleges), Melanie Gardner (NAL Collaborations with USDA Grants)

4:40pm-6:00pm Return to Marriott Hotel, **POSTER SESSION**

6:00pm Adjourn

DAY TWO
Greenbelt Marriott

7:00am Registration and Continental Breakfast

8:00am -8:30am *Logistics & Introductions*
Saleia/Ali/ARS Rep

8:30am -10:00am Roundtable Discussion: ARS/CSREES

10:00am -10:30am Break

10:30am -11:50am **Session V**
Autar Mattoo
Genetic Improvement of Nutritional Quality in Vegetable Crops and Interface with Legume Cover Crop Production System

Michel Cavigelli
Sustainable Ag Systems

Douglas L. Crebs
Land Cover Map Accuracy of Muddy Creek Basin

Debra Anderson
Survey and Mapping of Aquatic Invasive Species in the Chippewa Flowage and Surrounding Tributaries on the Lac Courte Oreilles Reservation, Wisconsin

11:50pm-1:30pm	Lunch & Mingle
1:30pm-2:50pm	<p>Session VI Peter Kleiman and Arthur Allen <i>ARS Pasture Systems Watershed Management</i></p> <p>Mohamed Ahmedna <i>Fruits and Vegetables in Obesity Reduction via Interactive Teaching and Experimentation (FAVORITE)</i></p> <p>Sandria L. Godwin <i>Assessing the Potential for Cross Contamination in a Home Kitchen Through an In-Home Observation Study</i></p> <p>Nina L. Bennett <i>Building Capacity in Family Consumer Sciences Education & Diabetics Programs: A Model for Recruitment, Retention and increased graduation rates at an HBCU</i></p>
2:50pm-3:20pm	Break
3:20pm-4:40pm	<p>Session VII Phillip Smith <i>Overview of Native American Research Center on Health at NIH</i></p> <p>Patricia Millner <i>ARS Compost Research Collaborations</i></p> <p>Surrendra P. Singh <i>Integrating Agriculture, Bioscience and Biotechnology Concepts in School Curriculum: Preparing Students for Careers in Agriculture</i></p> <p>Sarwan Dhir <i>Expanding Plant Biotechnology Training and Research Opportunities for Undergraduates</i></p>
4:40pm-5:00pm	Break
5:00pm-6:00pm	Q & A and POSTER SESSION
6:00pm	Adjourn

DAY THREE

CSREES Waterfront Centre

800 9th St., SW, Washington, DC 20024. The Hotel will provide transportation to the Greenbelt Metro Station. **Take the Metro to the L'Enfant Metro Station (see direction below)**

8:00am-11:00am

Session VIII

Saleia/Ali

Logistics and Introductions

Frank Boteler

Overview of CSREES

Susan Ratcliffe

North Central Integrated Pest Management Center: Working to Connect People, Programs and Resources

Adib Jamshidi

Benefits and Challenges of Implementing a Tribal College Community Based Marine Research Program

11:00am -11:30am

Break

11:30am – 12:10pm

Session IX

Janine Gillis

grants.gov

Djime Adoum & Henry Doan

Logic Model: Grant writing and Reporting

12:10pm - 1:30pm

Lunch and **POSTER SESSION**

1:30pm - 2:30pm

Session X:

Carol Langguth

CSREES: Post-Award Management

Carolyn Deckers

CRIS Reporting System

Saleia Afele-Faamuli & Ali Mohamed

1994/1890 RFAs

2:30pm - 3:00pm

Break

3:00pm – 4:00pm

Q & A with CSREES NPLs, Conference Evaluation and Future Direction

4:00pm

Conference Adjourns

THANK YOU FOR YOUR PARTICIPATION. SEE YOU NEXT YEAR!

Directions to the Waterfront Centre from:

The L'Enfant Metro Station

- Take the L'Enfant Plaza Mall Concourse, 9th & D Sts Exit
- At the top of the escalator go through the glass doors straight ahead and into L'Enfant plaza
- Follow the hallway around to the right and to the end
- After you pass the Post Office go through the glass doors and up the stairs (either side) - if you get to CVS you have gone too far
- At the top of the stairs, with the L'Enfant Plaza Hotel behind you, follow the road to the left
- You will pass a series of parking meters and should continue to follow the road down the hill. Our building is straight in front of you at the bottom of the hill.

Driving from Green Marriott the Northeast

- Take 495 (I-95) South to Route 50 West, which becomes New York Avenue.
- Turn left from New York Avenue onto 7th Street, NW.
- Continue across the Mall, and turn right on Independence Avenue.
- Turn left (south) on 12th Street, and 11/30/2007li>
- Merge onto Maine Avenue, SW.
- Continue to the first traffic light at Main and 9th Street, SW.
- The Waterfront Centre is the first building on the left.

Oral Presentation

Autar K. MATTOO

USDA, ARS, BARC, ANRI, SASL

Genetic Improvement of Nutritional Quality in Vegetable Crops and interface with Legume Cover Production System

Abstract:

Tomato is our model plant for nutritional improvement. It is particularly so because its fruit are the principal dietary sources of important nutrients such as the antioxidant lycopene, vitamins A and C, and iron. However, the levels of these nutrients are much below those recommended for daily allowance. We have developed high lycopene tomatoes by genetic introduction of yeast SAM decarboxylase into tomato, which allows for higher accumulation of functional molecules such as spermidine and spermine. These biogenic amines have essential functions in living cells. To reveal these functions, we have analyzed the high polyamine transgenic tomatoes as a genetic resource using experimental analyses of gene products, transcripts and corresponding proteins. We have found that the presence of the polyamine molecules revives the metabolic memory in the fruit at late stages of ripening, gearing an anabolic machinery that regulates distinct biochemical pathways. This information is important to modulate fruit ripening and engineer higher amounts of nutrients in edible crops.

Hank Miller and Professor Dave Shelton

Nebraska Indian Community College and University of Nebraska

Enhancing Tribal Economic, Cultural and Environment Benefits with Conservation Plantings

Abstract:

This presentation deals with the manipulative growth and utilization of woody florals. To make this presentation is Dave Shelton and Hank Miller. Mr. Shelton is a Professor of Biological Systems engineering and an Extension Agricultural Systems Engineer for the University of Nebraska at Haskell Research Labs in Concord Nebraska. Mr. Miller is the Director of Natural Resources for Nebraska Indian Community College and serves the Omaha and Santee Nations.

Project co-PDs or Partner(s) and Cooperator(s):

Co PD: Dave Shelton from the University of Nebraska at Lincoln, and Hank Miller from NICC.

PI: Ellen Papparozzi, University of Nebraska, and Erin Blankenship, University of Nebraska.

Partners: Nebraska Indian community College, University of Nebraska, the Tribal Game and Parks for Santee and Macy.

Dan Burns and Adib Jamshidi

NW Indian College

Benefits and Challenges of Implementing a Tribal College Community-based Marine Research Program.

Abstract:

In order for mutually beneficial research partnerships to develop it is essential that each partner clearly understand the long term goals, shorter term objectives, perspectives, strengths, barriers and strategies of their collaborators. The intention of this presentation is to provide ARS and 1890 personnel with a glimpse into these factors that affect the development and implementation of Tribal College research programs.

Project co-PDs or Partner(s) and Cooperator(s) and organization(s): Lummi Nation
Dr. Jude Apple, Huxley College of the Environment, Western Washington University

Douglas L. Crebs

Stone Child College

Land Cover map Accuracy Assessment of Muddy Creek Basin

Abstract:

In 1998 the GAP Analysis lab at the University of Montana produced a land cover map of the entire state of Montana. How accurate are these landcover maps? This project was developed to measure the accuracy of the Land cover maps. Using GIS and GPS technology Stone Child College students determined the accuracy to be approximately 25%.

Arthur Allen & Peter Kleinman

University Maryland Eastern Shore & USDA /ARS

In Pursuit of Nutrient Management Solutions for the 21st Century: The Partnership of University of Maryland Eastern Shore and ARS's Pasture Systems and Watershed Management Research Unit

Abstract:

Please write a summary or abstract of your research project oral presentation or poster as you would like it to appear in the final program and TCRGP/1890/ARS Workshop Conference website (100 words or less), for example, emphasizing the what, why, when, how and results or impacts of your research.

The core of our collaborative partnership has spawned a broad array of research projects that range from the use of materials to minimize off-site transfers of nutrients, to testing of alternative manure and fertilizer management practices, to the improved management of drainage ditches. Our main goal is to develop and test agricultural management tools that will improve the health of the Chesapeake Bay and other pertinent water bodies. The

impact is to elucidate processes that affect nutrient transport from manured field to surface waters and to develop and test alternative management practices that minimize phosphorus, nitrogen, trace elements, and pharmaceuticals transfers to water resources.

Project co-PDs or Partner(s) and Cooperator(s) and organization: Peter Kleinman

Rob Griesbach

USDA, ARS, Office of Technology Transfer

Overview of ARS Technology Transfer

Abstract:

The purpose of the presentation is to explain the goals of the ARS transfer program and how those goals are achieved. Both successful and unsuccessful examples of technology transfer will be discussed, as well as why they were or were not successful will be discussed.

Rob was an ARS plant geneticist for 22 years before joining the ARS Office of Technology Transfer as the Technology Transfer Coordinator for the Beltsville Area.

Umesh K. Reddy

West Virginia State University

Molecular Genetic Studies in Cucurbits.

Abstract:

Cucurbit species include a variety of high value crops (e.g., melons, watermelon, cucumber, summer squashes, and winter squashes) that play important role both in local diets and as export crops in the United States. Our research aims to identify locations of genes/QTLs that confer common phenotypes for fruit quality and architecture. So far, we identified QTLs for various fruit yield and quality traits in melons. In addition, we developed mapping populations for watermelon and pumpkin that are currently in field evaluation that would be useful for locating genes or QTLs for various fruit related traits. We also developed tetraploids for various *Citrullus* spp to produce seedless watermelons and see how fruit related genes would get altered across the ploidy levels. We generated cDNA AFLP profiles for fruit specific tissues to compare synteny across the cucurbit spp. Most importantly, we have grafted cultivated watermelon on various other cucurbit species such as *Lagenaria siceraria*, which is a resistant species for several watermelon diseases. Progress on various experiments such as BAC library construction, marker development, QTL mapping, tetraploid generation, cross species grafting, EST sequencing and cDNA AFLPs of fruit specific tissues will be discussed.

Project co-PDs or Partner(s) and Cooperator(s): Reddy, U. K.; Nimmakayala, P. (West Virginia State University), Zhang, H. B. (Texas A&M University)

Rao Mentreddy

Crop Science at Alabama A&M University

Antidiabetic Properties of Serviceberry (*Amelanchier alnifolia*)**Abstract:**

In validation studies on antidiabetic properties of serviceberry (*Amelanchier alnifolia*), ethyl acetate and water fractions of leaves, twigs, and leaves with berries of serviceberry were tested for activation of 2-deoxyglucose uptake, dipeptidyl peptidase-4 (DPP-4) inhibitory activity, and alpha-glucosidase inhibition using L6GLUT4myc skeletal muscle cells. The inhibition of alpha-glucosidase activity by water fractions from leaves and twigs was similar to that of the positive control, acarbose. This activity increased by 2-7 fold, after chromatographic purification. Water fractions of these extracts also showed a dose-dependent suppression of dexamethasone-induced gluconeogenic gene expression in H4IIE rat hepatoma cells. Alpha-glucosidase inhibitory activity and the suppression of hepatic gluconeogenesis, may be potential mechanisms involved in anti-diabetic effect of serviceberry.

Project co-PDs or Partner(s) and Cooperator(s):

Dr. Rao Mentreddy; Alabama A&M University

Dr. A. Rimando; USDA/ARS Natural Products Utilization Research Unit

Dr. Suresh Mathews; Auburn University

Sheikh M. Basha and Hemanth KN. Vasanthaiah

Florida A & M University

Characterization of Molecular and Cellular Components Induced in Response to Pierce's Disease Infestation in Vitis Species**Abstract:**

Pierce's Disease (PD) has hampered bunch grape cultivation in southeastern United States. Comparison of gene expression between PD-susceptible bunch and PD-tolerant Florida hybrid bunch genotypes upon challenging with *Xylella fastidiosa* yielded several unique transcripts in PD-tolerant genotypes. These uniquely expressed transcripts were isolated, sequenced and identified as chalcone synthase, chitinase, adenosine kinase, enolase, stilbene synthase and PR genes. Similarly, xylem sap study of these genotypes revealed expression of several novel proteins (pI between 4.5 to 4.7 and Mr of 31 kDa) in PD-tolerant grape genotypes. These data suggest that expression of these gene/s and proteins may play a role in PD tolerance.

Project co-PDs or Partner(s) and Cooperator(s)

1. Hifza Mahzar: Research Associate, Center for Viticulture, FAMU

2. Wayne B. Hunter: Research Entomologist, USDA-ARS, Collaborator for Bioinformatics

3. Barbara Smith: Pathologist, USDA, Collaborator for pathological experimentation

Jane A.S. Barber

Florida A&M University

Remote Sensing for Identification of Larval Mosquito Habitat and Precision Pesticide Application

Abstract:

Remote sensing has been extensively utilized by precision pesticide applications in agriculture. Precision pesticide application is the maximization of on target and minimization of off target application of chemicals. The precise targeting of compounds to vital areas via data provided by remote sensing, has led to great economical and environmental enhancement of the industry. In mosquito control however blanket sprays of larvicides still occur. Larvicides are considered superior to adulticides in part because applications can be focused. When areas are large and inaccessible and or when staff is limited sufficient ground surveillance cannot be conducted. Therefore blanket sprays must be applied which is wasteful. This presentation shall discuss the conclusions from research funded to ascertain the potential of remote sensing and precision larviciding for mosquito control.

Project co-PD: Dr Jack Petersen

James E. Cilek

Florida A & M University

Evaluation of Biological Activity of Novel Octenol Analogs as Potential Attractants to Adult Mosquitoes.

Abstract:

Globally, mosquito-transmitted pathogens continue to pose threats to human and animal health. From a human standpoint, one way to minimize human exposure to blood-seeking mosquitoes is to lure these flying pests into nontoxic traps. Currently, the attractant used in several traps is 1-octen-3-ol (octenol). This substance was originally identified from musk oxen for use against biting flies in Africa. Depending on species, octenol is only moderately attractive to mosquitoes. In order to discover a more attractive mosquito lure we synthesized a number of novel substances based on octenol and evaluated them for biological activity against mosquitoes in large walk-in cages.

Please list project co-PDs or Partner(s) and Cooperator(s).

C. O. Ikediobi, Department of Chemistry, Florida A & M University, Tallahassee, FL

U. Bernier, USDA Center for Medical, Agricultural, and Veterinary Entomology, Gainesville, FL.

Mohamed Ahmedna

North Carolina A&T State University

Fruits and Vegetables in Obesity Reduction via Interactive Teaching and Experimentation
(FAVORITE)

Abstract:

This project will develop a set of comprehensive experiential learning strategies for promoting the inclusion of fruits and vegetables (FV) in the daily diet of young children and their families as to enhance their dietary intake and help reduce the risk for obesity and related health problems. The specific objectives are to: (1) develop experiential learning activities that promote consumption of FV, (2) develop and test educational modules/courses to promote the consumption of FV among pre-school children and their families, and (3) strengthen the ties between research and experiential learning through integration of food/nutrition and child development programs.

Project co-PDs or Partner(s) and Cooperator(s):

Mohamed Ahmedna, Jianmei Yu, Ken Gruber, Valarie McMillan, and Patricia Lynch

Sarwan Dhir

Fort Valley State University

Expanding Plant Biotechnology Training and Research Opportunities for Undergraduates

Abstract:

To increase the number of undergraduates participation in the plant genomics, we have developed Plant Sciences-Biotechnology major program. Students are exposed through instruction and hands-on experience in advanced molecular biology techniques. Students are provided scholarships to retain in the program. During academic year students conduct a semester-long research project and in summer conduct internship for 10 weeks at collaborative major institutions. In the past 7 years, more than 180 students have participated in such programs. In addition, students interact with invited speakers which improve their written/oral communication and leadership skills and prepare them for award winning presentations at scientific meetings. The program has been well received by students, and several of them have already joined MS/PhD program in Plant Molecular Biology and others are in pipeline to attend graduate school.

Frank Flora

USDA, ARS

An Overview of ARS Activities and Accomplishments in Phytonutrients and Functional Foods Research

Abstract:

The scope of ARS research in phytonutrients and functional foods spans activities from farm to table. Selected accomplishments and current projects will be discussed.

Nina Lyon Bennett

University of Maryland Eastern Shore

Building Capacity in Family Consumer Sciences Education & Dietetics Programs: A Model for Recruitment, Retention, & Increased Graduation Rates at an HBCU

Abstract:

The research project, “Building Capacity in Family Consumer Sciences Education & Dietetics Programs: A Model for Recruitment, Retention, & Increased Graduation Rates at an HBCU,” addresses the need to attract students from underrepresented groups into the food and agricultural sciences. Recruitment efforts are specifically directed at junior and senior high school level college bound students, and transfer students from underserved minority communities. This project is intended to reform mainstream instructional practices and addresses future needs within the food and agricultural sciences system by pipelining students into these degree programs by establishing intra-school collaborations and community outreach.

Project co-PDs or Partner(s) and Cooperator(s) and organization(s): Ms. Malinda Cecil, RD – Co-PD; Dr. Edith Thomas, National Program Leader, Nutrition & Health, USDA; and Dr. Caroline Crocoll, National Program Leader, Family Science and Human Development, USDA.

Sandria L. Godwin

Tennessee State University

Assessing the Potential for Cross Contamination in a Home Kitchen through an In-Home Observation Study

Abstract:

This project was designed to assess to what extent food preparation practices in the home might contribute to microbial cross contamination. Samples were collected from multiple locations in 150 kitchens. Microbial analysis (APC and EC) was conducted. 100 subjects were observed during preparation of a meat loaf using “dyed” meat. UV assessments were completed after preparation to assess cross contamination potential. Sponges had the highest APC and EC levels, with 72% and 53% having >log 7 CPU. Post-cooking evaluation showed dye in highest amounts in the sink, on faucet handles, the countertop, and knife handles. Of the 87 persons who washed their hands before handling the meat, only 76% washed for 20 sec or more and 80% used soap. Two-thirds mixed the meat loaf with their hands, 11 of whom did not wash their hands.

Project co-PDs or Partner(s) and Cooperator(s): Fur-chi Chen, co-PD, Tennessee State University, Agnes Kilonzo-Nthenge, co-PD, Tennessee State University

Surendra P.Singh
Tennessee State University

Integrating Agriculture, Bioscience and Biotechnology Concepts in School Curriculum:
Preparing Students for Careers in Agriculture

Abstract:

Agriculture education is in a period of transition. The project aims to develop awareness and understanding among students and teachers of the scientific, technical, and business foundation of modern agriculture including biotechnology. Another focus is to integrate and incorporate agricultural concepts, scientific and technical developments in agriculture into the school curriculum already being taught, thereby providing necessary information about careers in agriculture while training teachers and counselors about these new opportunities. The project uses resources/Knowledge of collaborators to develop synergy for enhancing experiential learning and recruitment efforts at Tennessee State University. A Program of information for teachers with a theme of BEST of Agriculture was developed and distributed also training in biotechnology and bioproducts was provided to thirty teachers.

Project co-PDs or Partner(s) and Cooperator(s): Sammy Comer, TSU, A.N.Aziz., TSU; AgroTech Communications, Memphis (Peter Nelson) Memphis Academy of Science and Engineering, Memphis,(Michael Masters and Tommie Henderson); Tennessee Farm Bureau -Tennessee Foundation for Agriculture in the classroom (Charles Curtis) USDA/CSREES, Memphis Bioworks Foundation USDA/CSREES/PAS.

Patricia D. Millner

USDA-ARS-BARC Food Safety and Sustainable Agricultural Systems Labs

Compost and Fresh Produce Food Safety Research and Collaborations

Abstract:

This project involves three separate elements. One is an evaluation of field practices relative to Good Agricultural Practices-type metrics to minimize potential for human pathogen contamination of leafy greens and fresh produce in Mid-Atlantic production systems. We have successfully conducted this type of evaluation on the western counties in Md, WV, and PA for two summers. The model used for that study is modified to adjust to Delmarva Peninsula for this study. This requires us to collect and analyze fresh produce, soil, irrigation water, and manure/compost samples at Delmarva production fields and conduct on-farm GAPs-type assessments using FDA and CA Leafy Green Metrics guidelines. We will compare results of GAPs scores and microbial pathogen detection. Another aspect focuses on determining the extent of disinfection (of salmonellae and E. coli) and antibiotic degradation that occurs in poultry litter using traditional stacking, and a modification designated as 'minimally-managed'. Ammonia capture during stacking/composting will be tested by means of specific pile amendments and ammonia release at time of land application will be measured. Compost characterization and use in

high tunnels will be evaluated for fertilizer value on leafy greens. Survival and persistence of *E. coli* O157:H7 non-pathogenic strains inoculated onto leafy greens in high tunnels at Princess Anne and Beltsville, Md. will be compared.

Project co-PDs or Partner(s) and Cooperator(s): Dr. Pat Millner, Dr. Fawzy Hashem

Susan T. Ratcliffe

North Central IPM Center at the University of Illinois

North Central Integrated Pest Management Center: working to Connect People, Programs, and Resources

Abstract:

The North Central IPM Center (NCIPMC) provides leadership and cooperates with our partners in promoting and improving the economic, environmental and human health benefits of IPM adoption. As articulated in our NCIPMC Strategic Plan, developed by the Stakeholder Panel, we have identified strategies and core activities to achieve these goals. Our Center actively responds, together with our stakeholders, to the goals of the National Roadmap for IPM to ensure coordination of efforts and resources to enhance IPM development and adoption for production agriculture, natural resources and recreational environments, and residential and public areas.

Project co-PDs or Partner(s) and Cooperator(s) and organization(s):

NCIPMC Center: Larry Olsen, Lynnae Jess (Michigan State University) and Scott Martin (University of Illinois). 1994 and 1862 Land Grant Institutions Working Together to Address IPM Issues on Tribal Lands: Virgil DuPuis, George Godfrey, John Phillips and Carol Pilcher

Elizabeth A. Rutledge

Salish Kootenai College

Genetic Evaluation of the Invasive Aquatic Plant, Flowering Rush, to Mitigate Environmental and Cultural Impacts on the Flathead Indian Reservation, Montana

Abstract:

Three major riparian habitats of the Flathead Reservation affected by the invasive aquatic plant Flowering rush (*Butomus umbellatus*) are, the Flathead Lake, Flathead River, and Pablo Reservoir. Characteristics of flowering rush are; invade shallow waters; suppress native plant species with its tendency to form dense monotypic stands; and, negatively affect riparian ecosystems. The primary habitats of flowering rush are wetlands, rivers, and lakes. The type of dispersal on the Flathead Reservation is by larger mobile lateral rhizome fragments. Populations can be diploid or triploid, having different dispersal characteristics. Genetic tests using real-time PCR will be designed to determine ploidy.

Alfredo B. Lorenzo
Florida A&M University

Landscape Valuation of the Effect of Canopy Roads on Property Values in Tallahassee-Leon County, Florida

Abstract:

The effect of proximity to canopy roads on housing market values is estimated using hedonic pricing technique on a unique data set of single family homes in Tallahassee, Florida. The value of proximity to canopy roads is found to vary with respect to size of the view and “greenness” of the view to canopy roads. The greatest impact on housing values was found with proximity with small and “greener” view of canopy roads, with property values as much as 10 percent higher for homes within 100 feet of canopy roads.

Hong Huang
Florida A&M University

Bioinformatics and Genomics Education Delivery: An integrated Approach

Abstract:

An integrated approach for bioinformatics and genomics teaching was proposed for minority students and faculty. It applied state-of-art and interdisciplinary instructional techniques to provide practical oriented training that make us ready for the 21st Century challenge in agriculture and food science. The program will consist of four major components: 1) Curriculum consists of modules from intensive lecturing, summer internship and research project. 2) Curriculum Enhancement- The development of hybrid classes bridged with conventional agriculture education. 3) A Cognitive Bioinformatics Training Model- assigning self learning projects 4) Faculty Development- The future will require employees with necessary interdisciplinary skills.

Debra Anderson
Lac Courte Oreilles Ojibwa Community College

Survey and Mapping of Aquatic Invasive Species in the Chippewa Flowage and Surrounding Tributaries on the Lac Courte Oreilles Reservation, WI.

Abstract:

In the Chippewa Flowage on the Lac Courte Oreilles Reservation, Wisconsin; aquatic invasive plant species (AIPS) threaten the re-establishment of rice beds, spawning, nesting and feeding habitat for a wide range of aquatic organisms. A collaboration between Lac Courte Oreilles (LCO) Ojibwa Community College, UW-Madison and LCO Conservation Department extends the surveying and mapping efforts of AIPS from the Chippewa Flowage into the West and East Fork Rivers and its connecting waterways, identifies and describes the various points of entry for AIPS into the Chippewa Flowage and disseminates this knowledge so that it can inform management and decision-making efforts.

Poster Presentation

Peter A. Gillitzer

University of Minnesota-twin cities

Antimicrobial and Antioxidant properties of native and naturalized plant in the upper Mississippi river basin

Abstract:

The White Earth Tribe of Ojibwa, the University of Minnesota and Aveda Corporation have partnered to identify antimicrobial and antioxidant properties in native and naturalized, perennial plant species in the Upper Mississippi River Basin. Value-added products, potentially derived from new perennial cropping systems, could be used as natural preservatives, additives to health and beauty products or substitutes for use against drug-resistant microbes. Approximately 1000 extracts from above ground plant components of 518 species have been tested against four microorganisms using a modified Kirby-Bauer antibiotic procedure. Antioxidant properties of 150 species were assessed using the residual DPPH free radical concentration method. 244 extracts were found to inhibit at least one microorganism. Fourteen species were resistant against all four microorganism, five of which were also found to contain antioxidants.

Joseph W. Love

University of Maryland Eastern Shore

Meeting the Standards of Higher Education in Fisheries Management at the University of Maryland Eastern Shore, an 1890 land-grant institution

Abstract:

We enhanced education at an 1890 land grant institution, University of Maryland Eastern Shore, by training students in fish taxonomy and biology, and building a reference collection of fish species. Because agriculture affects water quality, training students in aquatic science is essential for promoting safe and profitable agriculture. For three years, 32 students collected and curated 238 fish species, helped develop a reference fish guide for Maryland (*Running Waters*), and designed a website for the reference collection (www.umes.edu/lmrcsc). This grant has also supported graduate student education on white perch (*Morone americana*), outreach, and collaboration with other 1890 land grant institutions.

Project co-PDs or Partner(s) and Cooperator(s): University of Maryland Eastern Shore: Arthur Allen, Eric May, and Joshua J. Newhard; Steve Lochmann, University of Arkansas Pine Bluff

Jurgen G. Schwarz

University of Maryland Eastern Shore

Comparison of Automated BAX Polymerase Chain Reaction and Standard Culture Method for Detection of *Listeria monocytogenes* in Blue Crab Meat and Crab Processing Plants.

Abstract:

Microbial testing, especially for *Listeria monocytogenes*, is important to ensure safety and quality of Maryland crab meat products. The aim of this study was to compare the automated BAX polymerase chain reaction (BAX PCR) and traditional Standard Culture Method (SCM) for this analysis. Raw crabs, finished products and environmental sponge samples were collected monthly from processing plants in Maryland. A total of 960 samples were examined, 43 were positive by BAX PCR and 30 by SCM, which was not significantly different. The results and outreach activities of this study will lead reduced human health risk from the consumption of crab meat.

Please list project co-PDs or Partner(s) and Cooperator(s)

PI: Salina Parveen; Food Science and Technology Program; UMES

Co-PI: Thomas E. Rippen; Seafood Specialist, Sea Grant Extension

Co-PI: Jurgen G. Schwarz, Director Food Science and Technology Program, UMES

Co-PI: Michael Jahncke; Director Virginia Seafood Ag. Research Extension Center

Collaborator: Mark Tamplin, Director, Food Safety Centre, Tasmanian Institute of Agricultural Research/School of Agricultural Science, University of Tasmania, Tasmania

Collaborator: Martin Wiedmann, Cornell University

S. Steve Zeng

Langston University

Impact of Sub-clinical Mastitis on Quality and Production of Goat Milk and Cheese

Abstract:

The dairy goat industry in the U.S. is becoming a legitimate economic segment for small producers and processors. Extensive information regarding prevalence of subclinical mastitis in dairy cows and its economic impact on quality and production of milk and cheese has been published. However, such information is presently lacking in dairy goats. This project is designed to investigate status, mechanism and prevention of subclinical mastitis in dairy goats and its effect on composition, somatic cell count, yield, quality of goat milk, and on cheese yield and quality. This project will lead to a better understanding of the effects of specific mastitis causing organisms on milk composition and changes occurring to the protein fraction, which influence quality and technological properties of milk and cheese. The successful completion of this project will result in knowledge necessary to enhance market potential and profitability of goat milk and cheese, thus increasing the net income of goat farmers. The results of this project should help establish effective preventative and control measures of mastitis not only in dairy goats but also in dairy cows and sheep worldwide, and develop a simple method to track deterioration in milk quality, hence, to predict losses in cheese yield and quality. This project will make a direct economic impact on goat producers and enhance the consumer's acceptance of goat products.

Project co-PDs or Partner(s) and Cooperator(s): Dr. Leon Spicer, Oklahoma State University; Drs. Max Paape and Douglas Bannerman, ARS of USDA.

Robert B. Dadson

University of Maryland Eastern Shore

Susceptibility of corn earworm (*Helicoverpa zea* Boddie) moths from Bt and non-Bt corn genotypes to cypermethrin

Abstract

The production of *Bt* corn has become increasingly popular in Maryland. Corn earworm is a major pest of corn and soybean in the region. A study was conducted to find out the effect of various dosage levels of cypermethrin to corn earworm (*Helicoverpa zea* Boddie) moths from *Bt* and non-*Bt* corn genotypes. Four genotypes of corn including Syngenta NK Bt 11, Syngenta NK non-*Bt* isoline, Monsanto YieldGard Mon 810 and Monsanto non-*Bt* isoline were grown in replicated field trials. Prepupae of corn earworm were collected from four genotypes of corn during the grain formation stages and adults moths upon hatching were treated with various dosage levels of cypermethrin. Results showed that Syngenta NK *Bt* 11 and Monsanto Yieldgard Mon 810 gave higher mortality of moths especially at lower dosage levels than their non-*Bt* isolines. It is concluded that moths from *Bt* corn genotypes become more susceptible to cypermethrin and ultimately could be controlled with lower dosage levels of insecticides on soybean.

Project co-PDs or Partner(s) and Cooperator(s):

Dr. Iqbal Javaid, UMES

Dr. Fawzy Hashem, UMES

Dr. Galen Dively

Scott M. Hanson

Turtle Mountain Community College

West Nile Virus Surveillance in Northern North Dakota

Abstract:

Students at Turtle Mountain Community College collected mosquito larvae and adults during the summers of 2007 and 2008 on the Turtle Mountain Chippewa Reservation in North Dakota. The data for 2008 are incomplete at this time, so the report concentrates on the 2007 data. They found 27 different species of mosquitoes in 2007. They found West Nile virus in 2 samples of *Culex tarsalis* in 2007.

Project co-PDs or Partner(s) and Cooperator(s): Dr. Richard Lampman, Illinois Natural History Survey, Champaign, IL

Suping Zhou

Tennessee State University

Microarray and proteomics analysis of Al-regulated genes in tomato roots.

Abstract:

Aluminum toxicity is one major limiting factor for plant growth on acid soil. The major objective of the project was to identify the genes and pathways that are affected in tomato roots after long-term exposure (10d) to Al toxicity by an integrated microarray (using Tom 1 cDNA microarray) and proteomics (DIGE-MALDI-TOF-TOF) analysis. We have found that all the isoforms of oxalate oxidase genes were suppressed, but SAM genes were induced by Al treatment. Opposite to the reported results, genes like GST, and Wal7 (aluminum-induced protein, *Triticum aestivum*, GI: 451193) were suppressed in tomato. Several genes that are proposed to be important in Al tolerance in other species, but shown different regulation pattern in tomato, have been selected to make RNAi construct for further functional studies.

Project co-PDs or Partner(s) and Cooperator(s): Dr. Roger Sauve, Tennessee State University

Padma Nimmakayala

West Virginia State University

Progress in sweet potato genomic and breeding research

Abstract:

Sweetpotato is one of the important fundamental foods in American diet. Moreover, its cultural association and importance in family reunions such as "Thanksgiving" makes it more significant. Our focus is to build extensive genomic infrastructure for this important crop and identify germplasm that have root quality and resistance alleles. Current project is a multi-institutional consortium to address all the problems faced by conventional breeder to improve sweetpotato. Microsatellite-enriched libraries are prepared for sweetpotato (*Ipomoea batatas* L) using a highly modified and simplified protocol based on the biotinylated-oligonucleotide capture methods. So far 400 sequences with repeat motives are isolated and appropriate primers are designed for amplification of these microsatellite loci. These SSR primers are used to screen 8 representative samples including other *Ipomoea* Species. Further, a Bacterial Artificial Chromosome (BAC) library has been constructed in collaboration with Dr.Zhang laboratory at Texas A&M University. We have arrayed the transformation-competent BIBAC library in 183 microplates (384-well). Therefore, the library contains 70,272 clones and has an average insert size of about 160 kb. At Alabama A&M University, Dr. Mentreddy is evaluating the segregating populations. About 110 lines of the segregating population are evaluated. This population is derived from a cross between Excel - a cultivar with multiple pest resistance - to SC1149-19, a sweetpotato genotype susceptible to the same pests. At University of Arkansas at Pine Bluff, Dr.Muthusamy has standardized the protocol for transformation of sweet potato with nutraceutical genes. Sweetpotato cultivar Jewel was used in this study.

Project co-PDs or Partner(s) and Cooperator(s): Reddy, U. K. (West Virginia State University), Zhang, H. B. (Texas A&M University), Rao, M. S (Alabama A&M University), Manoharan Muthusamy (University of Arkansas, Pine bluff)

Ipek Goktepe

North Carolina A&T State University

Phage cocktail for Control of *Escherichia coli* O157:H7 on fresh greens

Abstract:

This study investigated the effect of bacteriophage treatment on the survival of *E. coli* O157:H7 (EHEC) on green leafy lettuce. *E. coli* O157:H7 cultures were inoculated directly on lettuce leaves. Contaminated lettuce leaves were air dried for bacterial attachment, followed by inoculation of EHEC-specific phage cocktail. Lettuce samples were incubated for 24 hrs at 4 and 37°C. EHEC counts were performed on SMAC Agar. Phage treatment resulted in a 2 log growth reduction compared to the phage-free controls kept at 4 and 37°C. These results show that EHEC-specific phage cocktail used in this study has the potential to control *E. coli* O157:H7 in fresh produce.

Project co-PDs or Partner(s) and Cooperator(s) and organization(s): Alexander Sulakvelidze, Ph.D. Intralytix Inc. Baltimore, MD, Manan Sharma, Ph.D. USDA-ARS-ANRI Beltsville, MD, Anthony Yeboah, Ph.D. North Carolina A&T State University, Greensboro, NC

Fisseha Tegegne

Tennessee State University

Developing Pigeonpea (*Cajanus cajan* L. Millsp) As a Viable Cash Crop on Small Farms Through Research and Outreach

Abstract:

This project will introduce pigeonpea (*Cajanus cajan* L. Millsp) to small farmers using field trials. The objectives of the project are to: 1) evaluate a wide range of pigeonpea breeding lines for adaptation and agronomic traits desirable for production as food and forage crop, 2) assess acceptance of the crop by small producers and fill knowledge gap about it, 3) conduct economic analysis of pigeonpea production and identify markets and marketing strategies, 4) disseminated information about adaptability, production practices, marketing and nutritional aspects using field days and other methods, and 5) strengthen collaboration among teaching, research and extension faculty and build research capacity.

Project co-PDs or Partner(s) and Cooperator(s):

Dr. Enefiok Ekanem – Co-PI, Tennessee State University

Dr. Surendra Singh – Co-PI, Tennessee State University

Dr. Fitzroy Bullock – Co-PI, Tennessee State University

Dr. Desh Duseja – Co-PI, Tennessee State University

Dr. Kelly Sanford – Co-PI, Tennessee State University
Mr. Finis Stribling – Collaborator, Tennessee State University
Mr. Christopher Robbins – Collaborator, Tennessee State University
Dr. Srinivasa Rao Mentreddy – Co-PI, Alabama A&M University
Dr. Harbans Bhardwaj – Co-PI, Virginia State University
Dr. Srinivas Rao, Agricultural Research Service
Mr. Willie Pittman, Natural Resource Conservation Service

Fur-Chi Chen

Tennessee State University

Development of a Biosensor for Rapid Detection of Campylobacter

Abstract:

The incidences of food borne illness have prompted great public health concerns. There is an urgent need to explore new detection methods to facilitate implementation of preventive measurements. The purpose of this project is to develop a biosensor for rapid detection of Campylobacter, the leading cause of bacterial diarrheal illness in US. A surface plasmon resonance sensor platform coupled with antibodies to the flagella antigen of Campylobacter was developed. Experiments were conducted to improve the sensitivity of the biosensor. A detection limit of 2×10^4 CFU/ml of Campylobacter was achieved. This biosensor would provide advanced detection techniques to food industry and regulatory agencies.

Project co-PDs or Partner(s) and Cooperator(s): Samuel N. Nahashon, Tennessee State University, Suping Zhou, Tennessee State University, Roger C. Bridgman, Auburn University

Ghasem Shahbazi

North Carolina Agricultural & Technical State University

Production and Purification of Lactic Acid from Cheese Whey

Abstract:

Bifidobacteria longum was used to convert lactose to lactic acid in a batch and semi-continuous free cell fermentation process. The process utilizes a low-cost whey-based growth media instead of expensive commercial growth media. Furthermore, we have successfully developed membrane system for separation of lactic acid from fermentation broth. The system consists of an ultrafiltration and a nanofiltration membrane. The purified lactic acid was then concentrated to more than 99% purity with reverse osmosis and vacuum evaporation. The newly developed membrane separation does not generate any waste stream, while the current chemical separation generates a waste which is expensive to clean.

Project co-PDs or Partner(s) and Cooperator(s): Dr. J. Lou, Professor, Chemical Engineering, North Carolina Agricultural & Technical State University

Godfrey Gayle
NCA&T State University

Building a Geospatial Database for Planning and Development from the Ground Up

Abstract:

The primary goal of this project was to provide an ArcGIS database of the A&T farm to be used as an aid in planning future land use as well as a geospatial reference. Data points were collected to obtain the building footprints and to delineate boundaries of crops, pastures, forests, hydrology, roads, structures, research plots, and of the entire farm. The project gives a comprehensive view of the farm in its current use and can be easily manipulated for future GIS classes, demonstrations, training, and research and development plans. GPS uses in agriculture were demonstrated to students and farmers

Project co-PDs or Partner(s) and Cooperator(s): O. Yeboah, NCA&T, P. Fersner, NCA&T, G. Tang, NCA&T

Alfredo B. Lorenzo
Florida A&M University

Sprawl on Physical Activity and the Well-being of Residents in Florida

Abstract:

A sprawl index at county level was developed using U.S. Census and Florida land-use land cover data. The relationship of sprawl to different chronic diseases and conditions is analyzed using the index and the BRFSS (Behavioral Risks Factor Surveillance System). Sprawl is found to encourage physical inactivity which can lead to increased risk of chronic diseases and conditions such as obesity, heart diseases, respiratory health and mental health. The greatest impact is found to vary with respect to gender, ethnicity, age, level of education and household income.

Muthusamy Manoharan
University of Arkansas at Pine Bluff

Metabolic engineering of isoflavone in rice

Abstract:

Isoflavones play an important role in human health as a dietary component. Consumption of isoflavones is associated with health benefits such as decreased risk of heart disease, reduced menopausal symptoms and reduced risk of some hormone-related cancers. Rice plants were transformed with genes such as isoflavone synthase, chalcone synthase and CRC transcription factors through particle bombardment. Molecular analysis confirmed the transgenic nature of the regenerated plants. Currently, engineered rice plants are being evaluated for the expression levels of isoflavone. Rice does not produce isoflavones and the metabolic engineering of isoflavone in rice may enhance its nutritional value.

Project co-PDs or Partner(s) and Cooperator(s):

1. Dr. Oliver Yu, Danforth Plant Science Research Center, St. Louis
2. Dr. Yulin Jia, USDA-ARS Rice Research Center, Stuttgart, AR.
3. Dr. James O. Garner University of Arkansas at Pine Bluff

James O. Garner

University of Arkansas at Pine Bluff

In vitro propagation of elite pecan (*Carya illinoensis* [(Wangenh) K. Koch]) cultivars.

Abstract:

The pecan, *Carya illinoensis* [(Wangenh) K. Koch] is a member of the family Juglandaceae and is an economically important nut crop. It is a hardwood tree that produces an edible nut with high commercial value. Propagation of pecan is done primarily by budding or grafting of improved cultivars onto seedling rootstocks. However, these methods suffer disadvantages such as considerable time and expense and poor transplanting survival of the plants. Tissue culture techniques offer great potential for regenerating true type pecan plants in vitro. Axillary buds of the varieties, Desirable, Stuart, Sumner, Cape Fear, and Forkert were isolated and cultured on shoot induction medium (WPM with 3 mg/L BAP and 0.1 IBA) for for 4-6 weeks. At least 3-6 Multiple shoots were efficiently induced in the shoot induction medium. Axillary shoots were transferred to root induction medium for rooting. After rooting, the pecan plants were subcultured to hormone free WPM medium for further elongation. Fully developed pecan plants were transferred first to peat pellets and then to greenhouse. It is now possible to produce true-type pecan plants through micropropagation.

Project co-PDs or Partner(s) and Cooperator(s).

1. Muthusamy Manoharan University of Arkansas at Pine Bluff
2. Frank Matta Mississippi State University
3. Girish Panicker Alcorn State University
4. Richard Hereema New Mexico State University

Lurline E. Marsh

University of Maryland Eastern Shore (UMES)

Pathogen Testing Metrics for GAPS in Delmarva Leafy Greens/Fresh Produce and Poultry Litter Compost

Abstract:

Pre-harvest contamination sources investigated in recent fresh produce illness outbreaks include soil, irrigation water, manure, wildlife vectors, harvesting equipment, soil amendments, and worker practices. Market pressures are mounting for other regions to adopt a recently developed California field practice audit system for fresh produce. The reliability and interpretation of microbial metrics for soil, water, and soil amendments for this pre-harvest audit system needs to be evaluated for use in the Delmarva region where poultry rather than dairy/cattle operations share the agricultural landscape with fresh produce growers. This project focuses on two issues: 1) comparative evaluation of field practice audit criteria/metrics as applied to produce and environmental samples from the

Delmarva region and 2) evaluation of pathogen reduction efficacy in ‘minimally-managed’ poultry litter composting.

Project Co-PDs or Partner(s) and Cooperator(s) and organization(s) they represent:

Dr. Lurline Marsh (PD), UMES.
Dr. Fawzy M. Hashem (Co-PD), UMES.
Dr. Pat Millner (Co-PD), USDA/ARS, Beltsville, MD.
Dr. Salina Parveen (Collaborator), UMES
Dr. Jeannine Harter-Dennis (Collaborator), UMES

Fawzy M. Hashem

University of Maryland Eastern Shore

Development and Implementation of a Multimicrobial and Multifunctional Inoculant for Enhancing Soybean Productivity and Environmental Quality

Abstract:

There is a rapid increase in public demand for organic farming especially for growing vegetable crops such as vegetable soybean. In soil ecosystem, there are beneficial indigenous microorganisms with beneficial role in nutrient cycling and management that can efficiently fulfill the organic farming demand. Therefore, we are proposing to develop and implement an innovative multipurpose and multimicrobial inoculant for soybean that will contain elite diverse beneficial microorganisms instead of applying N, P and micronutrients chemical fertilizers. The candidate microorganism are: 1) elite *Bradyrhizobium japonicum* that effectively nodulate and fix nitrogen with soybeans, 2) specific rhizobiophages as a biological control approach to control undesirable indigenous rhizobia, 3) PPFM bacteria to improve plant growth under drought stress, and 4) mycorrhizae to increase the availability of moisture and micronutrients and enhance the growth of soybean roots

Project co-PDs or Partner(s) and Cooperator(s).

Dr. Fawzy M. Hashem (PD), UMES.
Dr. Robert B. Dadson (Co-PD), UMES.
Dr. Lurline Marsh (Co PD), UMES.
Dr. Peter van Berkum (Co PD), USDA/ARS, Beltsville, MD
Dr. Thomas E. Devine (Collaborator), USDA/ARS, Beltsville, MD.
Dr. Pat Millner (Collaborator USDA/ARS, Beltsville, MD.
Dr. Arthur Allen (Collaborator), UMES.,
Dr. Bessie Green (Collaborator), UMES.
Dr. Shaaban Kotob (Collaborator), ARCTECH, Inc

Dr. Laura Carson
Prairie View A&M University

Potential Applications for Biodegradable Polymer, Chitosan and its Derivatives

Abstract:

A growing interest in developing biodegradable polymer material began over twenty years ago when plastics were blamed for contaminating the environment and posing a threat to animal and marine life. Many studies have focused on agriculturally based and petroleum-derived products like cellulose, starch, chitin, chitosan, and poly(lactic acid) (PLA). polycaprolactone and polyvinyl alcohol (PVA). Recent studies have been designed to modify existing polymer systems either by chemical modification or by blending. Increasing interest has been gained in chemical modifications especially in the area of grafting copolymerization. The grafted materials appear to have a potential for biomedical, industrial and agricultural applications. In the present study, chitosan is degraded to reduce its molecular weight and thus increase its solubility before grafting experiments were performed. The degraded derivatives were either further chemically modified for potential use as plastic coverings for food, as bone replacement materials or used in cell culture experiments.

Project co-PDs or Partner(s) and Cooperator(s) Dr. E. Gloria C. Regisford-co-PI; Department of Biology, Prairie View A&M University, Dr. Jeff Arnold, Research Leader, USDA-ARS, Temple, TX

Voranuch Suvanich
University of Maryland Eastern Shore

Sensory Attributes Driving Acceptance and Purchase Intent of Watermelon Juice Containing No Added Sugar

Abstracts:

Lycopene is a potent antioxidant associated with reduced incidences of cardiovascular diseases and cancers. Lycopene in watermelon is about 60% higher than in tomato. Due to limited shelf-life and chilling sensitivity, processing watermelon into juice is not only a means of preservation but a means to add value to this fresh produce. We evaluated sensory attributes driving acceptance and purchase intent of pasteurized watermelon juice containing no added sugar. Juice was extracted from red seedless watermelons (cv. #4032), pasteurized (HTST) at 76.7°C for 30 and/or 45 seconds, and stored at 4°C. All juices had no added sugar and were prepared 1 day before consumer tests. Freshly extracted juice was used as a control. Consumers (n=150) evaluated acceptability of appearance, colloidal-particles, color, odor, taste, mouthfeel, and overall-liking using a 9- point hedonic scale. Overall acceptance and purchase intent were evaluated using a binomial scale. Data were analyzed ($\alpha=0.05$) using ANOVA, MANOVA, discriminant (DDA) and logistic (LRA) regression analysis, and McNemar test. Juice pasteurized for 30 seconds was more acceptable than that pasteurized for 45 seconds. DDA indicated that appearance (canonical correlation=0.796), colloidal-particles (0.878), color (0.722) and odor (-0.547) were

attributes contributing to overall differences among products. LRA showed that overall-liking, taste, and odor determined acceptance and purchase intent. For overall acceptance, the odds ratio of overall-liking was 2.915, indicating that, for every one-point increase in a mean overall-liking score, the chance that the product being accepted is 1.915 times higher than being unaccepted. For purchase intent, odds ratio estimates of taste and odor dropped, respectively, from 2.15 to 1.41 and from 1.50 to 1.05, indicating that consumers would sacrifice taste and odor for health benefits. Accordingly, positive purchase intent was increased by 14%. This study revealed that taste and odor along with product health benefits influenced acceptance and purchase intent of watermelon juice.

Voranuch Suvanich

University of Maryland Eastern Shore

Volatile Flavor Profiles of Watermelon Agricultural Wines

Abstract:

Watermelon agricultural wines were made from overripe and ripe Maryland Eastern Shore local grown seedless watermelon #4032. Wine samples were made from watermelon juice contained pulps and no pulp fermented with eight different commercial yeasts. Averaged weight, yield, pH, °Brix, and alcohol percentages were collected.

Agricultural wine samples were sensory preference ranked by untrained panelists, who are wine drinkers recruited from Maryland Eastern Shore area. Volatile flavor compounds were analyzed from the agricultural wine samples. Volatile analysis by headspace-SPME-GC-MS revealed that all wine samples had similar volatile profiles. Major volatile compounds in wine samples were 2-methyl-1-propanol, 2-/3-methyl-1-butanol and 2-phenylethanol produced by yeast metabolism, ethyl esters compounds, and lipoxygenase derived compounds contributed by watermelon juice. The wine made from Redstar®-Pasteur Champagne; Vierka flüssige® Champagne; Redstar®-Montrachet; and Lalvin®-EC118 yeasts were most preferred. There was no lycopene found in the wine. The outcome generated potential use of overripe watermelon to process agricultural wine. In addition, value-added products containing lycopene and wine yeast products could be developed from major byproducts from watermelon wine processing.

Project co-PDs or Partner(s) and Cooperator(s):

Dr. Keith R Cadwallader: Department of Food Science and Human Nutrition, University of Illinois at Urbana-Champaign, Urbana, IL 61801

Dr. Witoon Prinyawiwatkul: Department of Food Science, Louisiana State University Agricultural Center, Baton Rouge, LA 70803

Yvonneda (Henry Thompson), Chief Dull Knife College and
B. Joan Goodman, Southwestern Indian Polytechnic Institute
George Haynes, Montana State University
John Phillips

Native American consumer perspectives: An exploratory study of the relationship of tribally-defined assets and consumer sentiment.

Abstract:

The research seeks to identify factors associated with tribally-defined assets that influence consumer sentiment for agricultural products. Secondly, identifies tribal factors and community strategies that inform economic development. The study used qualitative research methods developed with a community assets framework. Research was conducted on the Northern Cheyenne reservation in Montana and with selected communities in New Mexico. Undergraduate students conducted the research. Research findings have application to agricultural product and service development and marketing where cross-cultural perspectives are involved. Research informs extension education programs in the family and consumer sciences, particularly in regards to Native American asset-building and consumer behavior.

Arthur L. Allen

University of Maryland Eastern Shore

Exposing High School to Geospatial Information Technologies & Water Quality Management

Abstract:

Employers are looking for dedicated scholars with geospatial information technology (GIT) (Remote Sensing, Geographic Information Systems and Global Positioning Systems) skills and experiences. The mission of this internship program was to provide high school students, especially minorities, with a basic knowledge and GIT and associated water quality research. Participating scholars (44- high school) gained technical, analytical, academic, and scientific skills that will help prepare them for successful collegiate participation, and/or promising careers in the subject matter area of their choice.

Project co-PDs or Partner(s) and Cooperator(s)

Arthur L. Allen, Peter Kleinman (USDA/ARS), Fawzy Hashem, and Tracie Earl (all others from UMES)

Terrence W. Thomas

North Carolina A&T State University

Investigating Community Action in Addressing Poverty in the Black Belt Region of Southeastern U.S.: Collaboration and Programs

Abstract:

The agency of community-based organizations (CBOs) is a crucial component in a holistic strategy for addressing poverty in the Black Belt Region (BBR) of the south eastern United States. This presentation focuses on describing CBOs' programs, perspectives on challenges and collaborative action in addressing poverty in the BBR. Information

generated by this study is indispensable in Cooperative Extension programming, in identifying viable partners for university and community engagement activities, and for building the stock of social, political and intellectual capital needed to sustain community action in addressing poverty. Data were gathered from listening sessions and a telephone survey of community action agencies.

Project co-PDs or Partner(s) and Cooperator(s): Benjamin Gray Jr.

Edmund R. Buckner

University of Arkansas-Pine Bluff

Using Distance Learning Technology to Implement a Graduate Agricultural Regulatory Affairs Program

Abstract:

The goal of this graduate degree-level teaching project is to enhance distance learning capacity for the Graduate Agricultural Regulatory Affairs Program (GARA) at the University of Arkansas at Pine Bluff. This project will reduce instructional duplication and related costs by offering GARA courses at both the main campus and the Little Rock/North Little Rock campus utilizing distance learning classrooms to mainstream instructional practices and address future regional needs. There is high demand for Master's level graduates in agricultural regulatory affairs. The anticipated impact of this project is that increased numbers of current and new USDA employees will be trained in agricultural regulatory affairs.

Project co-PDs or Partner(s) and Cooperator(s) and organization(s): James Garner and Tracy Dunbar, University of Arkansas at Pine Bluff.

Berhanu Tameru

Tuskegee University

Dynamic Epidemiologic Modeling to Assess the Risk of Introduction of AI into the USA and Its Use in Training Graduates for the 21st Century

Abstract:

Presently, the US food animal industry and public health are being stalked by a potentially devastating emerging/reemerging animal disease from across Southeast Asia, and parts of Eastern Europe in the form of highly pathogenic avian influenza (HPAI) strain H5N1. This proposal addresses training of minorities at the MS and PhD levels as well as conducting research in the use of spatial dynamic and stochastic epidemiologic modeling (SDSEM) coupled with GIS to assess the risk of introduction of HPAI into the USA and its use in training graduates for the 21st century. Three graduate students are being supported with this grant and two have started doing research on HPAI.

Project co-PDs or Partner(s) and Cooperator(s) and organization(s) they represent:

Name	(Project co-PDs or Partner(s) and Cooperator(s)) Title and Affiliation	Location
Berhanu Tameru	(co-PD) Associate Prof./Director CCEBRA, Tuskegee University	Tuskegee, AL
David Nganwa	(co-PD) Associate Prof., Tuskegee University	Tuskegee, AL
Samuel Nahashon	(co-PD) Associate Dean- Research Associate Professor, Tennessee State University	Nashville, TN
Omar A. Oyarzabal	(Partner) Assistant Professor, Department of Poultry Science, Auburn University	Auburn, AL
David E. Swayne	(Partner)Laboratory Director - Southeast Poultry Research Laboratory, USDA/ARS	Athens, Georgia
Francis F. Busta	(Cooperator)Director - The National Center for Food Protection and Defense, A Homeland Security Center of Excellence, University of Minnesota	Minneapolis , MN
Neville P. Clarke	(Cooperator) Director, National Center for Foreign Animal and Zoonotic Disease Defense, A Homeland Security Center of Excellence, Texas A&M University	College Station, TX
Tilahun Yilma	(Cooperator) Director - International Laboratory of Molecular Biology for Tropical Disease Agents, School of Veterinary Medicine UC Davis	Davis, CA
Shaun Kennedy	(Cooperator) Associate Director- The National Center for Food Protection and Defense, A Homeland Security Center of Excellence, University of Minnesota	Minneapolis , MN

Teklu Andebrhan

Virginia State University

Modification of Lipase Gene Expression in *Vernonia galamensis* as a Mean to Improve Oil Quality and Quantity

Abstract:

Vernonia seeds have 43 percent oil of which 80 percent is Vernolic acid. This oil has many industrial applications. Vernonia is constrained by high lipase activity in the seeds that affects the oil quality and adds cost of heating to the oil extraction process. The goal is to identify the lipase gene and determining its regulation in order to modify its expression. The successful conclusion should enhance commercialization of vernonia as potential oil industrial feed stocks and serve as alternate cash crop.

PD Research Conference/Workshop
Agricultural Research Service, USDA
Tribal Colleges Research Grants Program, SERD/CSREES, USDA
1890 Capacity Building Research Program, SERD/CSREES, USDA

August 4-6, 2008
ARS, Beltsville, Maryland
Waterfront, CSREES, Washington DC

Building Research Capacity and Partnerships in the 21st Century

Attendee Directory

- 1. Saleia Afele-Faamuli**
National Program Leader
USDA, CSREES
3103 Waterfront Center
Washington, DC 20024
Phone: (202) 720-0384
Fax: (202) 720-4924
Email:
sfaamuli@csrees.usda.gov
- 2. Mohamed Ahmedna**
Associate Professor
North Carolina A&T State
University
161 Carver Hall
Greensboro, NC 27411
Phone: (336) 334-7963
Fax: (336) 334-7239
Email: ahmedna@ncat.edu
- 3. Arthur Allen**
Associate Research Director
University of Maryland Eastern
Shore
Backbone Road
Princess Anne, MD 21853
Phone: (410) 621-2876
Fax: (410) 621-3566
Email: alallen@umes.edu
- 4. Teklu Andebrhan**
Adjunct Professor
Virginia State University
P. O. Box 9064
Petersburg, VA 23806
Phone: (804) 524-6912
Fax: (804) 524-5732
Email: tandbrhan@vsu.edu
- 5. Debra Anderson**
Life Science and Water
Resources Faculty
Lac Courte Oreilles Ojibwa
Community College
13466 W. Trepania Rd.
Hayward, WI 54843
Phone: (715) 634-4790 ext. 125
Fax: (715) 634-5049
Email: danders3@lco.edu
- 6. Jane Barber**
Associate Professor
Florida A&M University
4000 Frankford Avenue
Panama City, FL 32405
Phone: (850) 872-4184 ext 25
Fax: (850) 872-4733
Email: jasbarber@knology.net
- 7. Sheikh Basha**
Professor
Florida A&M University
- 8. Nina Bennett**
Associate Professor
University of Maryland Eastern

Center for Viticulture and Small
Fruit Research, 6505 Mahan Dr.
Tallahassee, FL 32317
Phone: (850) 412-5189
Fax: (850) 561-2617
Email:
mehboob.sheikh@famuedu

Shore, Department of Human
Ecology
Henson Center; Suite 2101
Princess Anne, MD 21853
Phone: (410) 651-6063
Fax: (410) 651-6285
Email: nlbenett@umes.edu

- 9. Dan Burns**
Science Director
North West Indian College
2522 Kwina Road
Bellingham, WA 98226
Phone: (360) 319-2010
Fax:
Email: dburns@nwic.edu
- 10. Laura Carson**
Research Scientist
Prairie View A&M University
PO Box 519, MS 2008
Prairie View, TX 77446
Phone: (936) 261-5010
Fax: (936) 261-9975
Email: lecarson@pvamu.edu
- 11. Fur-Chi Chen**
Research Associate Professor
Tennessee State University
3500 John Merritt Blvd.
Nashville, TN 37209
Phone: (615) 963-5410
Fax: (615) 963-1557
Email: fchen1@tnstate.edu
- 12. James Cilek**
Professor
Florida A&M University
4000 Frankford Avenue
Panama City, FL 32405
Phone: (850) 872-4184 ext 27
Fax: (850) 872-4733
Email: cilek_J@popmail.firn.edu
- 13. Douglas Crebs**
Natural Resource Faculty,
CSREES Equity PI
Stone Child College
Box 1082 RR1
Box Elder, MT 59521
Phone: (406) 395-4875
Fax: (406) 395-4836
Email:
douglas_crebs@hotmail.com
- 14. Douglas Crebs**
Natural Resource Faculty, CSREES
Equity PI
Stone Child College
Box 1082 RR1 Box
Elder, MT 59521
Phone: (406) 395-4875
Fax: (406) 395-4836
Email:
douglas_crebs@hotmail.com
- 15. Robert Dadson**
Professor
University of Maryland Eastern
Shore
30921 Martin Ct.
Princess Anne, MD 21853
Phone: (410) 651-6629
Fax: (410) 651-7656
Email: rbdadson@umes.edu
- 16. Sarwan Dhir**
Associate Professor, Director
Center for Biotechnology and NSF
REU-Site, HBCU-UP & S-STEM
Programs
Fort Valley State University
1005 State University Dr. #113
Alva Tabor Building
Fort Valley, GA 30130

Phone: (478) 825-6887
Fax: (478) 827-3062
Email: dhirs0@fvsu.edu

- 17. Frank Flora**
Senior National Program Leader
USDA, ARS
5601 Sunnyside Ave.
Beltsville, MD 20705
Phone: (301) 504-6245
Fax: (301) 504-5467
Email:
Frank.Flor@ars.usda.gov
- 18. James Garner**
Professor
University of Arkansas at Pine
Bluff
Department of Agriculture; 1200
University Dr.
Pine Bluff, AR 71601
Phone: (870) 575-8535
Fax: (870) 575-4629
Email: garnerj@uapb.edu
- 19. Godfrey Gayle**
Professor
North Carolina A&T State
University
1601 E. Market St.
Greensboro, NC 27411
Phone: (336) 334-7787
Fax: (336) 334-7270
Email: gayle@ncat.edu
- 20. Peter Gillitzer**
Research Coordinator
University of Minnesota-Twin
Cities
411 Borlaug Hall 1991 Upper
Buford Circle
Saint Paul, MN 55108
Phone: (651) 246-7959
Fax:
Email: gill0352@umn.edu
- 21. Sandria Godwin**
Professor
Tennessee State University
3500 John A. Merritt Blvd. Box
9598
Nashville, TN 37209
Phone: (615) 963-5619
Fax: (615) 963-5033
Email: sgodwin@tnstate.edu
- 22. Ipek Goktepe**
Associate Professor
North Carolina A&T State
University
1601 E. Market St.
161 Carver Hall
Greensboro, NC 27410
Phone: (336) 334-7963
Fax: (336) 334-7239
Email: igoktepe@ncat.edu
- 23. Rob Griesbach**
Technology Transfer
Coordinator
USDA, ARS, Office of
Technology Transfer
10300 Baltimore Avenue;
USDA-ARS BARC-W.; BLDG-
003 RM-208
Beltsville, MD 20705
- 24. Scott Hanson**
Professor of Science
Turtle Mountain Community
College
P. O. Box 340
Belcourt, ND 58316
Phone: (701) 477-7880
Fax: (701) 477-7807
Email: hansonb@yahoo.com

Phone: (301) 504-6421
Fax: (301) 504-6001
Email:
robert.griesbach@ars.usda.gov

- 25. Fawzy Hashem**
Research Associate Professor
University of Maryland Eastern
Shore
1-Backbone Road
Princess Anne, MD 21853
Phone: (410) 651-6632
Fax: (410) 651-07656
Email: fmhashem@umes.edu
- 26. Hong Huang**
Bioinformatics Specialist
Florida A&M University
6505 Mahan Dr., Center for
Viticulture
Tallahassee, FL 32308
Phone: (850) 561-7465
Fax: (850) 561-2617
Email: Hong.Huang@famuedu.edu
- 27. Peter Kleinman**
Soil Scientist/Lead Scientist
USDA/ARS
3702 Curtin Road
University Park, PA 16802
Phone: (814) 865-3184
Fax:
Email:
peter.kleinman@ars.usda.gov
- 28. Alfredo Lorenzo**
Associate Professor
Florida A&M University
302-C Perry-Paige (South)
Tallahassee, FL 32307
Phone: (850) 412-5649
Fax: (850) 561-2794
Email: alfredo.lorenzo@famuedu.edu
- 29. Joseph Love**
Visiting Lecturer
University of Maryland Eastern
Shore
Department of Natural Science;
1 Backbone Road
Princess Anne, MD 21853
Phone: (410) 603-8344
Fax:
Email: jlove@umes.edu
- 30. Muthusamy Manoharan**
Associate Professor
University of Arkansas at Pine
Bluff
Department of Agriculture, 1200
University Dr.
Pine Bluff, AR 71601
Phone: (870) 575-8543
Fax: (870) 575-4629
Email: manoharanm@uapb.edu
- 31. Autar Mattoo**
Research Plant Physiologist
USDA, ARS, BARC, ANRI,
SASL
Bldg. 001 Rm 119; 10300
Baltimore Ave
Beltsville, MD 20705
Phone: (301) 504 6622
Fax: (301) 504-6491
Email:
- 32. Srinivasa Rao Mentreddy**
Professor and Program
Coordinator, PSMG, NRES
Alabama A&M University
4900 Meridian Street; P.O. Box
1208
Normal, AL 35762
Phone: (256) 372-5429
Fax:
Email: rmentreddy@gmail.com

autar.mattoo@ars.usda.gov

- 33. Hank Miller**
Director of Natural Resources
Nebraska Indian Community
College
425 Fraiser Av.
Niobrara, NE 68760
Phone: (402) 857-2434
Fax: (402) 857-2543
Email: hmiller@thenicc.edu
- 34. Patricia Millner**
Research Microbiologist
USDA-ARS-BARC Food Safety
and Sustainable Agricultural
Systems Labs
10300 Baltimore Ave.; Bldg. 001
Rm 140
Beltsville, MD 20705
Phone: (301) 504-5631
Fax: (301) 504-8370
Email: Pat.Millner@ars.usda.gov
- 35. Ali Mohamed**
National Program Leader
USDA, CSREES
3101 Waterfront Center
Washington, DC 20024
Phone: (202) 720-5229
Fax: (202) 720-3398
Email:
amohamed@csrees.usda.gov
- 36. Padma Nimmakayala**
Research Assistant Professor
West Virginia State University
103 Hamblin Hall
Institute, WV 25112
Phone: (304) 766-3258
Fax: (304) 766-4199
Email: Padma@wvstateu.edu
- 37. Kelly Nipp**
Chair of Science and Technology
Leech Lake Tribal College
PO Box 180
Cass Lake, MN 56633
Phone: (218) 335-4200
Fax:
Email: kelly.nipp@lltc.edu
- 38. Susan Ratcliffe**
Director
North Central IPM Center at the
University of Illinois
1102 S. Goodwin Avenue
Urbana, IL 61801
Phone: (217) 333-9656
Fax: (217) 333-5245
Email:
- 39. M.R. Reddy**
Professor
North Carolina A&T State
University
Department of Natural
Resources
1601 East Market Street
Greensboro, NC 27411
Phone: (336) 334-7779
Fax: (336) 334-7844
Email: muchha@ncat.edu
- 40. Umesh Reddy**
Associate Professor
West Virginia State University
141 Hamblin Hall
Institute, WV 25112
Phone: (304) 766-3066
Fax: (304) 766-4199
Email: uredy@wvstateu.edu

- 41. Caird Rexroad**
Associate Administrator for
National Programs
USDA, Agricultural Research
Service
5601 Sunnyside Avenue, Rm. 4-
2150
Beltsville, MD 20705
Phone: (301) 504-5084
Fax: (301) 504-7302
Email:
caird.rexroad@ars.usda.gov
- 42. Elizabeth Rutledge**
Director Cellular and Molecular
Biology Lab
Salish Kootenai College
58138 Hwy 93
Pablo, MT 59855
Phone: (406) 275-4800 ext. 4054
Fax: (406) 275-4809
Email: elizabeth_rutledge@skc.edu
- 43. Jurgen Schwarz**
Dirctor, Associate Professor
University of Maryland Eastern
Shore
1104 Food Science and
Technology
Princess Anne, MD 21853
Phone: (410) 651-7963
Fax: (410) 651-8498
Email: jgschwarz@umes.edu
- 44. Ghasem Shahbazi**
Professor and Director of
Biological Engineering
North Carolina A&T State
University
1601 E. Market St.
Greensboro, NC 27411
Phone: (336) 334-7787
Fax: (336) 334-7270
Email: ash@ncat.edu
- 45. David Shelton**
Professor, Biological Systems
Engineering and Extension
Agricultural Engineer
University of Nebraska - Lincoln
Haskell Agricultural Laboratory
57905 866 Road
Concord, NE 68726
Phone: (402) 584-3849
Fax: (402) 584-3849
Email: dshelton2@unl.edu
- 46. Surendra Singh**
Professor, Agribusiness
Tennessee State University
Department of Agricultural Sciences,
3500 John Merritt Blvd.
Nashville, TN 37209
Phone: (615) 963-5829
Fax: (615) 963-5888
Email: ssingh@tnstate.edu

- 47. Voranuch Suvanich**
University of Maryland Eastern Shore
2113 Center for Food Science and Technology
Princess Anne, MD 21804
Phone: (410) 651-7736
Fax: (760) 462-2187
Email: vsuvanich@umes.edu
- 48. Berhanu Tameru**
Associate Professor, Director of Center for Computational Epidemiology Bioinformatics and Risk Analysis (CCEBRA).
Tuskegee University
107 Williams-Bowie
Tuskegee, AL 36088
Phone: (334) 724-4275
Fax: (334) 724-4277
Email: tameru@tuskegee.edu
- 49. Fisseha Tegegne**
Research Associate Professor
Tennessee State University
3500 John Merritt Blvd.
Nashville, TN 37209
Phone: (615) 963-5830
Fax: (615) 963-1557
Email: ftegegne@tnstate.edu
- 50. Terrence Thomas**
Associate Professor
North Carolina A&T State University
1601 East Market Street
Greensboro, NC 27411
Phone: (336) 334-7059
Fax: (336) 334-7658
Email: twthomas@ncat.edu
- 51. Yvonneda (Henry) Thompson**
Extension Director
Chief Dull Knife College
P.O. Box 98 #1 College Drive
Lame Deer, MT 59043
Phone: (406) 477-6215
Fax: (406) 477-6219
Email: henry@cdkc.edu
- 52. Hemanth Vasanthaiah**
Research Associate
Florida A&M University
Center for Viticulture and Small Fruit Research, 6505 Mahan Dr.
Tallahassee, FL 32317
Phone: (850) 412-5189
Fax: (850) 561-2617
Email:
hemanth.vasanthaiah@gmail.com
- 53. S. Steve Zeng**
Associate Professor
Langston University
P.O. Box 1730
Langston, OK 73050
Phone: (405) 466-6103
Fax: (405) 466-6180
Email: shoushanz@yahoo.com
- 54. Suping Zhou**
Tennessee State University
3500 John A Merritt Blvd
Nashville, TN 37209
Phone: (615) 963-2146
Fax: (615) 963-1557
Email: zsuping@tnstate.edu

- 55 Joan Goodman**
 Coordinator, Family Extension
 and Education Program
 Southwestern Indian Polytechnic
 Institute
 Albuquerque, NM 87184
 Phone: (505)346-7709
 Email: jgoodman@sipi.bia.edu
- 57 Phillip L. Smith**
 Director
 Planning, Evaluation and
 Research
 NARCH, Indian Health Service
 Suite TMP 450
 801 Thompson Ave.
 Rockville, MD 20852
 Phone: (301) 443-4700x1549
 Email: phillip.smith@ihs.gov
- 59 Victor G. Stanley**
 Research Scientist
 Prairie View A&M University
 P. O. Box 519, MS 2008
 Prairie View, TX 77446-0519
 Phone: (936)261-5034
 Email: vgstanley@pvamu.edu
- 61 Jennifer Woodward-Greene**
 Director
 National Visitor Center
 Agricultural Research Service,
 USDA
 Beltsville, MD 20705
 Phone: (303) 504-8220
 Email:
Jennifer.Greene@ars.usda.gov
- 63 Henry Doan**
 Planning and Accountability
 Leader
 Planning and Accountability
 Office
 CSREES, USDA
 800 9th St. SW
 Washington DC 20250-2250
- 56 Edmund R. Buckner**
 Interim Assistant Research Director
 School of Agriculture, Fisheries
 and Human Services
 M. S. 4913, 1200 North University
 Ave
 Pine Bluff, AR 71601
 Phone: (870)575 8542
 Email: bucknere@uapb.edu
- 58 Adela Mora-Gutierrez**
 Research Scientist
 Prairie View A&M University
 P. O. Box 519, MS 2008
 Prairie View, TX 77446-0519
 Phone: (936)261-5034
 Email: admora@pvamu.edu
- 60 Adib Jamshidi**
 Chemistry Faculty
 Northwest Indian College
 2522 Kwina Road,
 Bellingham, WA 98226
 Phone: (360)392-4303
 Email: ajamshedi@nwic.edu
- 62 Frank Boteler**
 Deputy Administrator, ECS
 Acting Deputy Administrator,
 SERD/NRE
 CSREES, USDA
 800 9th St. SW
 Washington DC 20250-2250
 Phone: (202)720-7947
 Email: fboteler@csrees.usda.gov
- 64 Djime Adoum**
 Planning and Accountability
 Leader
 Planning and Accountability Office
 CSREES, USDA
 800 9th St. SW
 Washington DC 20250-2250
 Phone: (202)720-4564

Phone: (202)720-4564
Email: hdoan@csrees.usda.gov

Email: dadoum@csrees.usda.gov

64 Janine Gillis
Information Technology Trainer
Information Systems and
Technology Management
CSREES, USDA
800 9th St. SW
Washington DC 20250-2250
Phone: ((202)401-0201
Email: jgillis@csrees.usda.gov

65 Carol Langguth
Branch Chief
Awards Management Branch
Office of Extramural Program
CSREES, USDA
800 9th St. SW
Washington DC 20250-2250
Phone: (202)401-4986
Email: clangguth@csrees.usda.gov

66 Carolyn Deckers
CRIS Reporting System
Information Systems &
Technology Management
CSREES, USDA
800 9th St. SW
Washington DC 20250-2250
Phone: (202) 690-0009
Email:
cdeckers@csrees.usda.gov

67 Peggy Blake, AGNIC
Gary McCone, Association of
Directors Tribal Colleges
Melanie Gardner, NAL
Collaborations with USDA Grants

Project Directors' Conference/Workshop Evaluation
 Agricultural Research Service, USDA
 Tribal Colleges Research Grants Program, SERD, CSREES, USDA
 1890 Capacity Building Research Program, SERD, CSREES, USDA
 August 4-6, 2008

Building Research Capacity and Partnerships in the 21st Century

Please check appropriate boxes:

Primary Position	Presenter	___	Institution:
PD	Poster	___	1994
CO-PD	Participant	___	1890
Other:			1862
			ARS
			Other:

For the workshop theme (1) and each of the following workshop goals (2-7) please rate the level which you think they were achieved:

1. The overall theme of the workshop was timely and helped us strategize for research program enhancement.

1	2	3	4	5
Not at all		Somewhat Achieved		Fully Achieved

2. Provide project updates/results for and garner feedback from colleagues, partners, potential collaborators and CSREES for project enhancement

1	2	3	4	5
Not at all		Somewhat Achieved		Fully Achieved

3. Build and strengthen partnerships among tribal, land grant and non-land grant institutions, ARS, CSREES, and other organizations or programs of interest

1	2	3	4	5
Not at all		Somewhat Achieved		Fully Achieved

4. Promote and increase participation of 1994/1890 institutions in Research

1	2	3	4	5
Not at all		Somewhat Achieved		Fully Achieved

5. Provide CSREES, other federal agencies, and interest groups increased knowledge of 1994/1890 institutions and programs

1	2	3	4	5
Not at all		Somewhat Achieved		Fully Achieved

6. Enhance understanding of and access to research and funding opportunities at federal agencies and other entities

1 **2** **3** **4** **5**
Not at all **Somewhat Achieved** **Fully Achieved**

7. Enhance understanding of CSREES funds, electronic grant submission, awards management and reporting requirements

1 **2** **3** **4** **5**
Not at all **Somewhat Achieved** **Fully Achieved**

Please rate the following by circling the appropriate number:

		N/A	Very Poor	Average	Very Good	Excellent
8.	The information offered in the workshop was relevant and critical to my institution.	0	1	2	3	4 5
9.	The oral presentations were clear and valuable with handouts and materials.	0	1	2	3	4 5
10.	The Poster Session was informative on research purpose, methods, results, research partnership and funding sources.	0	1	2	3	4 5
11.	The workshop allowed time for me to network with others.	0	1	2	3	4 5
12.	If this workshop were repeated, I would recommend it to my colleagues and students.	0	1	2	3	4 5
13.	I would be interested to participate in activities or programs to follow up on this workshop.	0	1	2	3	4 5
14.	Overall, the workshop was worthwhile.	0	1	2	3	4 5