



On the Bayou

AUGUST 2018

Editor-in-Chief
Dawn Reed

Associate Editors
Trinia Bax
Suhad Wojkowski

Committee Members
Mary Lovisa
Terri Von Hoven
Kelley Williams



Message from the Director

Dr. Deepak Bhatnagar

End of Fiscal Year 2018

As this fiscal year comes to a close, the Research Leaders and the SRRC Administrative staff are busy utilizing all FY18 allocated funds. I hope all of you have had an opportunity to let your supervisors know of any purchases you may need to make to accomplish your goals.

This is the time when credit card holders and acquisition staff gets super busy. Two things to remember: be patient with these individuals, and provide them with all the necessary information, all at one time, to ensure an efficient purchase. Hopefully these individuals will have a brief respite during October and November as they recover from this busy period and reconcile all purchases.

A number of infrastructure projects have been funded for SRRC with year-end funds, especially with the generous support of the SEA Office as well as HQ. These projects will make our facility safer, more viable for many years to come, and will help us achieve program objectives.

End of the fiscal year is also the time to prepare your narratives for the annual performance evaluation. Give this item special attention so that your documentation accurately reflects what you have accomplished this year.

As we end every fiscal year, we are also reminded that this is the start of hurricane season. Make sure that your labs are secure and you have a plan to evacuate at short notice. Securing the most significant research material, as well as experimental data and other critical documents onto a back-up hard drive are a must. Hopefully, this season will pass uneventfully as the last few.

The budget for the next fiscal year is still being debated in Congress. All indications so far are positive, and suggest that we may not get any cuts. Of course, nothing is certain until Congress passes the budget in both Houses, and the President signs it.

INSIDE

THIS ISSUE:

Events & Observances	2
Recognition	4
Safety Corner	7
Getting To Know Your Colleagues	9
Human Resource	11
SRRC Publications	13

Events and Observances

LGBTQA @ SRRC

Submitted by: Geromy Moore

To celebrate LGBTQA @ SRRC, Committee members decorated the bulletin board, putting up posters related to the LGBT community, as well as information for this year's event.



On July 13th, the Committee hosted a lunch catered by Who Dat Coffee and Café, a local LGBT-owned business. Invited speakers, Dietz and Dorian presented, "HIV in the South: The Effect of Stigma in Public Health Access". To help set the stage, Geromy Moore gave five test-of-knowledge questions, and then introduced our guest speakers. Both speakers took the floor and shared a lot of sobering information. After their lecture, we had a lively Q&A session. Participants learned quite a bit of new information, and were thoroughly entertained by the delivery styles of both Dietz and Dorian. Two delicious cakes were enjoyed by about 60 attendees. Following the event, our guest speakers were given a tour of the Center.



Cultural Diversity Day 2018

Submitted by: Elena Graves

Cultural Diversity Day recognizes and appreciates all cultures through food, music and clothing. It is a wonderful opportunity to learn about the culture of other countries and taste foods from a variety of countries as prepared by SRRC employees. Routinely, over two dozen countries are represented in dishes available for a small sampling.

This year the event will be held on Monday, August 27th beginning at noon in the Main Conference Room. Those who would like to volunteer to cook or provide other ethnic samplings that give an understanding of a country's culture may contact Jeannine Moraitis, ext. 525 or Elena Graves, ext. 512.



Events and Observances (cont.)

Seminar Announcement for SRRC Outstanding Paper of 2017

“Top 3 SRRC Papers of the Year Competition”
MCR, Thursday August 16, 10:00 am.

Submitted by: Matt Lebar, Awards Committee Chair

Out of the many great manuscripts received and reviewed, the Awards Committee selected the “Top 3” to deliver 10 minute Center-wide presentations, with 5 minutes of Q&A, per senior/corresponding author.

The Committee goal here is to: a) actively involve the Center, b) open our eyes to the great work coming out the SRRC, and c) to seek our own scientific community’s involvement – in the form of meaningful questions for our authors. This seminar likewise is used to help guide our final Committee vote to select the winner for the Outstanding Paper.

The guidelines state that presentations should:
 Clearly state the objective(s), the originality, what research was accomplished, the salient results, and what was the most significant and relevant impact. Indicate and demonstrate impact through “who is impacted” and/or “how that impact is perceived”.

The 3 presentations will be:

Christopher P. Mattison, Ruhi Rai, Robert E. Settlage, Doug J. Hinchliffe, Crista Madison, John M. Bland, Suzanne Brashear, Charles J. Graham, Matthew R. Tarver, Christopher Florane, and Peter J. Bechtel. *RNA-Seq Analysis of Developing Pecan (*Carya illinoensis*) Embryos Reveals Parallel Expression Patterns among Allergen and Lipid Metabolism Genes*. Journal of Agriculture and Food Chemistry, DOI: 10.1021/acs.jafc.6b04199

Jay Shockey, **Michael Dowd**, Brian Mack, Matthew Gilbert, Brian Scheffler, Linda Ballard, James Frelichowski, and Catherine Mason. *Naturally occurring high oleic acid cottonseed oil: identification and functional analysis of a mutant allele of *Gossypium barbadense* fatty acid desaturase-2*. Planta, DOI: 10.1007/s00425-016-2633-0

Gregory N. Thyssen, David D. Fang, Rickie B. Turley, Christopher B. Florane, Ping Li, Christopher P. Mattison, and Marina Naoumkina. *A Gly65Val substitution in an actin, GhACT_LI1, disrupts cell polarity and F-actin organization resulting in dwarf, lintless cotton plants*. The Plant Journal, DOI: 10.1111/tpj.13477

Events and Observances (cont.)

Awards Day

Save the Date: SRRC Awards Day will be Thursday, **September 13th**.
Details to follow.

Recognition

Sammies Innovation in Government Forum and People's Choice Celebration

Dr. Soheila Maleki had an opportunity to showcase some of the SRRC research successes during the Sammies Innovation in Government Forum and People's Choice Celebration, held on July 19 in Washington, DC. The event was part of the process of being a SAMMIES (Service to America Medals) Finalist where Dr. Maleki was introduced.

Dr. Jacobs-Young and **Dr. Gene Lester** are pictured below with Dr. Maleki at the event.



Events and Observances (cont.)

2018 Creature Crawl for a Cause

The New Orleans Federal Executive Board is hosting a 5K Run/Walk and Kids Run inside of the Audubon Zoo on Monday, October 8th, entitled *Creature Crawl for a Cause*.

The event will help kick-off this year's Combined Federal Campaign (CFC) charitable giving season, which supports over 300 local and national non-profit charities each year. The NO FEB invites the Federal community to join us for this inaugural event which promises to be a good time for all. (Please note that this is being held on a NON WORK DAY.)

Federal employees, their families, and race participants will also get admission to the zoo FREE of Charge. Participants are welcome to stroll through the zoo, take a train ride, and ride the carousel. The zoo will be closed to the public that day during our event.

While there is no cost to enter the zoo and attend the event, there is a fee to participate in the run/walk as reflected below. The Fee is being collected via the race website.

Registration Site: <https://runsignup.com/Race/LA/NewOrleans/CREATURECRAWLFORACAUSE>

Kids Run: \$10

The ½ mile kids run will begin at 8:00 a.m.

5K Run/Walk:

\$25 (until 8/31/18) \$30 (9/1 - 10/5/18) \$35 (Race day)
Staggered start-times will occur. Those serious runners who are in it to WIN it start at 8:30 a.m., followed by those who like to walk more than they like to run! This is a timed run. A t-shirt and finisher medal are guaranteed for the first 300 registered participants for the Kids Run and 5K Run/Walk.

If you decide to register, do let Trinia know.

Be amongst the first three hundred to register, and get a T-shirt and a medal.

We will also have a display for ARS/SRRC at the event.



Society of American Indian Government Employees

Submitted by: Kelley Williams

The USDA has a new Society of American Indian Government Employees, SAIGE-USDA Chapter as of July 2018. The SAIGE-USDA Chapter has been formally recognized as a professional group or association under USDA Regulation DR 4020-251-01 and has been designated to include department -wide membership under the authority of the Deputy Assistant Secretary for Administration, Office of Resource Management.

Formed in 2002, SAIGE is the first national non-profit organization representing American Indian and Alaska Native (AI/AN) Federal, Tribal, State, and local government employees. SAIGE provides a forum on the issues, challenges, and opportunities of AI/ANs in the government workforce (including Tribal governments) and works to foster a professional network among AI/AN government employees.

SAIGE-USDA Chapter has the unique distinction of being a multi-agency chapter, aligning itself under the OneUSDA initiative, one family working together as a team. Multiple USDA agencies working together with native communities as partners allows the Chapter to utilize OneUSDA expertise to solve challenges we all face such as food security, food sovereignty, water management and soil erosion to name a few. SAIGE-USDA Chapter is also a participant in NCAnet, a Network of Networks Supporting the National Climate Assessment. NCAnet is an arm of the U.S. Global Change Research Program, USGCRP. Participants help extend the reach of the USGCRP by collecting and sharing data on research that is relevant to the National Climate Assessment.

SAIGE-USDA membership is open to all USDA Federal or County Extension employees. The only requirement is to join SAIGE. This link will take you to the SAIGE membership page. There are a few membership options to choose from: <https://saige.org/member-resources/products-page/>

Please contact Kelley Williams (ext. 526), Chair for further information.

SAIGE website link is <https://saige.org/>



*Society of American Indian
Government Employees*

Submitted by: Shannon Beltz and Michael Dowd

We would like to remind everyone that reporting smells, anything that needs attention or any repair should be done through the Front Desk. This way the notification is documented and the corrective action recorded and reported by Pontchartrain Partners to SRRC Administration. Lightbulb replacement, doors and door handles not working properly, toilets continuously flushing, are all examples of issues that should be reported to the Front Desk (Veronica, ext. 461).

Showers & Eyewashes:

We are currently testing a new type of eyepiece in some of our labs in the Emergency Eye Wash stations. We are hoping that these will be an improvement over our current ones which readily capture sediment. This becomes a problem with clogging and uneven water flow. After a trial run with the new eyepieces, we will make the decision about expanding the use of those eyepieces. In the meantime ...

- ◆ Please continue to test your emergency eyewashes and showers WEEKLY ☺
- ◆ The Safety Office can provide you with a new Test Record card if you fill up your current one
- ◆ If your shower or eyewash is experiencing problems, please **report it to the Front Desk**

Chemical Storage cabinets (primarily under-hood cabinets):

The Safety Office has completed a survey of all built-in cabinets located under our fume hoods, that are primarily used for storing flammables and corrosives. We are making improvements and repairs to many of the cabinets which have considerable rust or improperly-working hardware.

- ◆ In the Chemical Wing labs, all flammable chemicals should be stored in the built-in cabinets located under your hood (or a comparable external cabinet), and the door should be labelled as such. These cabinets have extra thick doors, and hardware that is manual-close (not a spring-style catch where you just swing the door shut, but a handle you actually turn to close).
- ◆ In the Industrial Wing labs, the built-in cabinets under your hood are out-of-date, and not true Flammable Storage cabinets, and many of the labs have bought their own external cabinetry that meets the current standards. We are upgrading labs that need these cabinets so that everyone will have proper storage cabinets.

If anyone needs storage bins that could be used for chemical secondary containment or segregation, please see Michel Easson (ext. 493) in Lab 3112. He has 50 large gray plastic tubs and 72 smaller, stackable clear plastic bins.



Also a reminder that scheduling for appointments for OMSP (**Occupational Medical Surveillance Program**) will begin shortly. All tests will need to be completed by September 30.

The tenure of Dr. Chris Mattison as the Safety Committee Chair will be coming to an end. SRRC staff is grateful for his service at a time when a number of safety items had to be addressed in preparation for the BISHOP review.

Beginning on October 1, the new leadership of the **SRRC Safety Committee** will be:

Steve Boue, Chair

Jeff Cary, Assistant Chair

Chris Mattison, Immediate Past Chair

Scientific Presentations and Meetings

ARS Research Biologist **Dr. Kanniah Rajasekaran** of the Food and Feed Safety Research Unit will present a poster entitled "*RNAi-mediated control of preharvest aflatoxin contamination in maize*" at the 12th Congress of the International Plant Molecular Biology to be held in Montpellier, France on August 5-10, 2018.

ARS Research Chemist **Dr. Matthew Gilbert** of the Food and Feed Safety Research will present a poster entitled "*Environmental interactions that influence secondary metabolism and development in the saprophytic crop pathogen *Aspergillus flavus**" at the 2018 SIMB Annual Meeting and Exhibition to be held in Chicago, IL on August 12-16, 2018.

ARS Research Chemist **Dr. Vince Edwards** of the Cotton Chemistry and Utilization Research Unit will attend the 2018 Military Health System Research Symposium (MHSRS) on August 20-23 in Kissimmee, FL. He will present two poster presentations entitled, "*Electrokinetic & Thromboelastographic Analysis Demonstrates That Retention of Cotton Cuticle Components Promotes Hemostasis in Hydroentangled Nonwoven Blends and Design*" and "*Preparation and Activity of Intelligent Cellulose-Based Protease Sensor & Modulating/Fibroblast Promoting (PROTOS-FIBRO) Dressings*".

Submitted by: Terri Von Hoven

August 3 – 8	35th International Sweetener Symposium, Traverse City MI
August 5-10	2018 International Plant Molecular Biology, Montpellier, France
August 19-24	International Assoc. for Plant Biotechnology, Dublin, Ireland
August 19 - 23	ACS National Meeting & Expo, Boston, MA
August 20 - 21	20th International Conference on Carbohydrate, London, UK

A Note from the Editorial Board

If you have a professional or community activity or award/recognition you'd like to share, please notify Trinia Bax in the Director's Office.

Should you have any suggestions or items you would like to include in OTB, contact a member of the editorial board.

Another communication tool is our SRRC Intranet Website. Look for its new look with updated and helpful information and links. <http://nola.srrc.usda.gov:8000/srrcmenf.htm>.

Guest contributors will be featured as needed.

Getting to Know Your Colleagues

Cotton Structure and Quality Research Group



The primary research objective of our scientists is to increase the value and global competitiveness of U.S. cotton by enabling new technologies and methods for accurately assessing the quality of cotton fiber at various processing stages from field to fabric.

Cotton Structure and Quality Research Group

Mike Dowd, Acting Research Leader	Matthew Indest	Donna Peralta
Chris Delhom	Holly King	Bruce Potter
E.J. Deshotel	Yongliang Liu	Michael Cintron Santiago
Melissa Dunn	Raisa Moiseyev	Linda New
Chanel Fortier	Adrian Mejia	Mia Schexnayder
Ashleigh Gabriel	Jeannine Moratis	Terri Von Hoven
Anne Guajardo	Nia Nelson	Tommy Williams

Tips For Managing Your Utility Bills

PAGE 10

Submitted by: Shelia Parker

Did you know, that for every degree lower than 78 degrees on your thermostat, it can increase your bill as much as 3 percent? So, if you crank down your air conditioner to 72 degrees, you've already increased your bill by 18 percent.



These high summer temperatures are a good reminder to take steps to keep you cool now and all summer long.

Besides setting your thermostat at 78 degrees (or more), there are other things you can do:

- ◆ **Get your A/C inspected.** Inspectors can make sure your system is leak-free and operating as efficiently as possible. Your air conditioning and heating usage makes up more than half of your bill during the summer and winter months. Get incentives of up to \$125 with a tune-up.
- ◆ **Change your air filters regularly.** Some units require monthly cleaning or replacing.
- ◆ **Buy a programmable thermostat.** As energy usage rises, costs also rise. If you spend most of your day outside of the house, set your thermostat to automatically shut off or raise the A/C setting when you are away.
- ◆ **Use fans to cool off,** but remember – fans cool people, not rooms. Ceiling fans, box fans and oscillating fans use very little electricity and circulate the air, which helps you feel several degrees cooler. Just remember to turn them off when you leave the room.
- ◆ **Close blinds, shades and curtains** to keep the sun out and the cool air in. Also, close air conditioning vents in rooms that are not in use.
- ◆ **Seal cracks and holes around doors, windows and duct work.** Weather stripping and caulk will help keep the cold air inside the house and the hot air outdoors.
- ◆ **If your water seems very hot, you can turn it down to medium setting** to save energy, around 120 degrees. That is fine for dishwashers and washing machines. Wash with cold water when possible. Your electric water heater costs make up about 20 percent of your electric bill.
- ◆ **Use toaster ovens or crock pots** to prevent heating up your house with your stove and oven.
- ◆ **Use lower wattage bulbs or LED bulbs** to save energy. Lights do not use a lot of electricity, but it all adds up.

For more information on how to save money and keep your cool this summer, visit <http://www.energys.com>

New Employees

Submitted by: Janell Becker

Please welcome two new Post Docs to SRRC:

Dr. Jacobs Jordan, Research Chemist is working in CCU with Dr. Michael Easson. Jacobs received his PhD in organic chemistry from Tulane University. He is working on the “Chemical Modification of Cotton for Value Added Applications” project.

Dr. Matthew Hillyer, Research Chemist has joined the CCU staff under the guidance of Dr. Sunghyun Nam. Matthew received his PhD in chemistry from Tulane University. He is working on the “Cotton-based Nonwovens” project.

Please welcome a Visiting Scientist:

Dr. Susana Lozano joins us on a USDA/FAS Norman Borlaug Fellowship for a 6-week training in maize biotechnology. She is working in the FFS lab of Dr. Kanniah Rajasekaran.



AFM/HRD Retirement & Benefits Staff Contact Information & Client Assignments Effective 2-23-2017

Midwest Area (MWA) Economic Research Service (ERS) HDQ- Business Service Centers (BSCs)	Judith Barber HR Specialist	301-504-1464 <i>Judith.Barber@ars.usda.gov</i>
National Agricultural Statistics Service (NASS) Northeast Area (NEA)	Gloria Hill HR Specialist	301-504-4425 <i>Gloria.Hill@ars.usda.gov</i>
National Agricultural Library (NAL) Plains Area (PA) National Institute of Food & Agriculture (NIFA)	Jewel Vargas HR Specialist	301-504-4319 <i>Jewel.Vargas@ars.usda.gov</i>
	Sharon Neafsey HR Assistant	301-504-4376 <i>Sharon.Neafsey@ars.usda.gov</i>
Southeast Area (SEA) HDQ- Program Management Offices (PM Administrative & Financial Management (AFM)	Pamela Tolson HR Specialist (Contractor)	301-504-1524 <i>Pamela.Tolson@ars.usda.gov</i>
Pacific West Area (PWA)	Deborah Jones HR Specialist (Contractor)	301-504-1481 <i>Deborah.Jones@ars.usda.gov</i>



Blue Cross/Blue Shield Visit

Our Blue Cross/Blue Shield representatives will visit the Center on Wednesday, September 12, 2018. They will be located in Room 1021 from 10:00-11:30 a.m. If you would like to visit with them, a signup sheet is available at the Front Desk.

Community Garden Update

Submitted by Cathy Mason

The garden is in full production, and so far this spring, we have grown and harvested 82 pounds of squash, 25 lbs of okra and 19 lbs of peppers. Our two rows of squash (zucchini and Calabaza) were hit by three rounds of Squash Vine Borers this spring. In spite of our best efforts, this resulted in the loss of many of our squash vines.

We are trying to only use organic methods in our garden, so this fall we will try to control the larval stage of this moth by using beneficial nematodes. After adding the nematodes to the soil, we will plant a small test patch of White scallop squash; if the moth larvae are controlled, then we should be able to harvest before the cold weather.

Our basil is growing very well, and is attracting many pollinators to our garden. We harvested some of the basil earlier in the season, and delivered it to Second Harvest Food Bank with the rest of our produce. We are allowing the remainder to go to flower to draw in the pollinators.

Our volunteer list has also grown! I would like to welcome Heping Cao, Raj Majumdar and Charles Clayton to our group! Our committee is open to everyone....if you would like to try your hand at vegetable gardening, contact Cathy Mason at extension 241 or Christine Sickler at extension 480.



Recycle Dates: August 2 & 16



Recent SRRC Publications

Submitted by: Suhad Wojkowski

Full text pdfs of SRRC publications are available in the Eprints database via “Library” link on the SRRC Intranet page: <http://nola.srrc.usda.gov:8000/srrcmenf.htm>

Click on the article's title below to launch the pdf from Eprints.

Bechtel, Peter J., Bland, John M., Bett-Garber, Karen L., Grimm, Casey, Brashear, Suzanne S., Lloyd, Steven W., Watson, Michael A. and Lea, Jeanne M. (2017) [*Chemical and nutritional properties of channel and hybrid catfish byproducts.*](#) Food Science & Nutrition, 5. pp. 981-988.

Cao, Heping, Sethumadhavan, Kandan and Bland, John M. (2018) [*Isolation of Cottonseed Extracts That Affect Human Cancer Cell Growth.*](#) Scientific Reports, 8 (10458). pp. 1-12.

Delhom, Christopher D., Martin, Vikki B. and Schreiner, Martin K. (2017) [*Textile Industry Needs.*](#) Journal of Cotton Science, 21. pp. 210-219.

Dowd, Michael K., Pelitire, Scott M. and Delhom, Christopher D. (2018) [*Seed-Fiber Ratio, Seed Index, and Seed Tissue and Compositional Properties of Current Cotton Cultivars.*](#) Journal of Cotton Science, 22. pp. 60-74.

Easson, Michael, Condon, Brian, Villalpando, Andres and Chang, SeChin (2018) [*The Application of Ultrasound and Enzymes in Textile Processing of Greige Cotton.*](#) Ultrasonics, 84. pp. 223-233.

Eggleston, Gillian, Stewart, David, Aponte, Fernando, Montes, Belisario, Boone, Stephanie and Verret, Chardcie (2018) [*How to Use and Interpret the Results from a High Performance Liquid Chromatography System at a Sugarcane Factory.*](#) International Sugar Journal, 120 (1431). pp. 210-217.

Holt, Greg, Wedegaertner, Tom C., Wanjura, John, Pelletier, Mathew, Delhom, Christopher D. and Duke, Sara E. (2017) [*Development and Evaluation of a Novel Bench-Top Mechanical Cotton Seed Delinter for Cotton Breeders.*](#) Journal of Cotton Science, 21. pp. 18-28.

Liu, Yongliang and Delhom, Christopher D. (2018) [*The relationship between instrumental leaf grade and Shirley Analyzer trash content in cotton lint.*](#) Textile Research Journal, 88 (10). pp. 1091-1098.

Nam, Sunghyun, Condon, Brian, Xia, Zhiyu, Nagarajan, Ramaswamy, Hinchliffe, Doug and Madison, Crista A. (2017) [*Intumescent Flame-Retardant Cotton Produced by Tannic Acid and Sodium Hydroxide.*](#) Journal of Analytical and Applied Pyrolysis, 126. pp. 239-246.

Nam, Sunghyun, Park, Bosoon and Condon, Brian (2018) [*Water-Based Binary Polyol Process for the Controllable Synthesis of Silver Nanoparticles Inhibiting Human and Foodborne Pathogenic Bacteria.*](#) RSC Advances, 8. pp. 21937-21947.

Sui, Ruixiu, Byler, Richard K. and Delhom, Christopher D. (2017) [*Effect of Nitrogen Application Rates on Yield and Quality in Irrigated and Rainfed Cotton.*](#) Journal of Cotton Science, 21. pp. 113-121.