



On the Bayou

MARCH 2020



Editor-in-Chief
Suhad Wojkowski

Associate Editors
Trinia Bax
Dawn Reed

Committee Members
Michael Santiago
Christine Sickler
Terri Von Hoven

INSIDE THIS ISSUE:

Events &
Observances 2

Outreach
Activities 3

Scientific
Presentations
and Meetings 4

Safety Corner 7

Human
Resources 8

SRRC
Publications 11

Message from the Director

Dr. Deepak Bhatnagar

I am very delighted and proud to report that the safety assessment conducted by Shelia Parker and Darrell Williamson was “outstanding” at all levels. They indicated that our safety staff is very diligent, and the cooperation from lab staff was outstanding. They had difficulty finding items to correct. There were just a few items noted, which can be easily addressed.

The assessment is a testament to the hard work by all our staff, and especially by all those who volunteer their time as inspectors and serve on the Safety Committee. Our Safety and Biosafety officers are simply the best. All the time and effort spent on safety issues makes us all safe. Thanks to everyone for doing everything possible to keep our facility safe.

In a nutshell, the report gives us an outstanding grade. I recently shared with you the final reports from both Shelia and Darrell. This report will also go to the Area Director and others as well.

SEA Leadership, along with our ARS Administrators and many Section Heads from HQ visited SRRC for the SEA Business Operations meeting from March 3rd - 6th. Having over 80 attendees here gave us an opportunity to showcase our research and our facilities first hand. Everyone attending the meeting commented on how well our facility is maintained and managed. They were very impressed with our research program and our hospitality. I am quite confident that in the short and long term some good will come out of it.

African American History Month Celebration 2020

Theme: Celebrating Cultural Arts and Music

Submitted by: Chair: Mia Schexnayder, Co-Chair Dawn Reed

The African American History Month Luncheon was held on February 18th and featured four distinguished guests: Charmaine Neville, Amasa Miller, Derrick Hammond, and L. M. Labat. Attendees also enjoyed a delicious lunch catered by Neyow's Creole Café.

The event included entertainment led by the internationally celebrated jazz singer and musician, New Orleanian Charmaine Neville, accompanied by world-renowned pianist, Amasa Miller. In keeping with the theme of this year's celebration, Charmaine Neville, with her transmittable smile and passionate personality, spoke to the audience about the cultural contributions of African Americans. Through music and art, African Americans were able to endure poverty, homelessness, and other social ills. With Amasa Miller's accompaniment, Charmaine Neville reached out to her audience and welcomed participants from the audience to join in the music. Together, they sang, danced, and played musical instruments. The audience was enthralled with singing "The Flintstones", "All Ya Need Is Love", and "Do You Know What It Means to Miss New Orleans?" Our Director, Dr. Deepak Bhatnagar played an instrument and sang along with Ms. Neville to the song "Come Together Right Now over Me."

Following the dynamic musical entertainment, Derrick Hammond and L. M. Labat displayed their work in an immersive art gallery, detailing the lively origin and spirit of their work. Derrick Hammond, a visual artist and musician born in New Orleans, presented his artwork with its distinctive swirl that represents the heart of New Orleans. Traditional published author and illustrator, L. M. Labat, creator of *The Sanguinarian Id*, also exhibited her work. A New Orleans native, L. M. Labat is known for her dynamic work and emersion of history and horror.

Before the event ended, a grand raffle was held, and the winners took home an original piece of art from both Hammond and Labat.

The merriment enthralled the audience, and the event entertained over 120 people in attendance. It was amazing, with the take home message: continue to support the cultural arts, the talented musicians of New Orleans, and the African American impact.



Outreach Activities

Greater New Orleans Science & Engineering Fair

Submitted by: Thomas Klasson

The 2020 Greater New Orleans Science & Engineering Fair was held on February 11-13 at Tulane University. SRRC staff, **Michael Easson, Jacob Jordan, Geromy Moore, and Jade Smith** participated as volunteer judges to help select ARS award recipients. The SRRC judges scoured 143 project posters in the Junior Division (6th-8th grade) and 133 project poster in the Senior Division (9th-12th grade) for the best USDA-ARS projects. ARS-SRRC sponsored two awards, one for the Junior and one for the Senior Division for “A plaque and VIP visit to our facility to the best project demonstrating improvement in utilization or safety of agricultural products”. The winning project in the Junior Division was by a student at St. Andrew’s Episcopal School who investigated the possibility of using kale and sunflowers to phyto-remediate lead-contaminated soil. The winning project in the Senior Division was by a student from Isidore Newman School who sampled several commercial food products to see if genetically modified plants had been used in the preparation.



Alcorn STEM Students Visit SRRC

Students from Alcorn State University’s Collegiate FFA chapter visited the Center on February 28. FFA is the premier youth organization preparing its members for leadership and careers in the science, business and technology of agriculture. They were chaperoned by Michael Trusclair, USDA Program Liaison. Students toured the different labs of each research unit and learned about their research programs. Following the visit, Mr. Tusclair commented, “The information shared really opened their options for careers with USDA”.



Scientific Presentations Series features Food and Feed Safety Research Unit

The third installment of our Scientific Presentations Series was held on February 20, and featured the work of the Food and Feed Safety Research Unit. The Series gives us an opportunity to learn about the high priority research being done by our colleagues at the Center, and to facilitate collaboration and open communication. It goes hand in hand with the practice talk sessions where we learn about specific research in a little more detail.

As FFS's acting research leader, Dr. Rajasekaran gave an overview of the aflatoxin problem worldwide, and introduced Dr. Cary who talked about the multiple approach taken by FFS scientists to understand and control aflatoxin contamination. SRRC's seminal work on the cloning and functional characterization of the genes and enzymes responsible for the biosynthesis of the highly toxic and carcinogenic aflatoxins laid the groundwork to control aflatoxin contamination in crops. For the first time, SRRC scientists completed the sequencing of *Aspergillus flavus* genomes. This fundamental work resulted in functional genomics studies worldwide and is critical in identifying key genetic factors that are targeted for control of aflatoxin contamination.

Using classical and molecular technologies, SRRC scientists developed genetically modified corn and cotton lines that demonstrated resistance to *Aspergillus* infection and aflatoxin contamination.

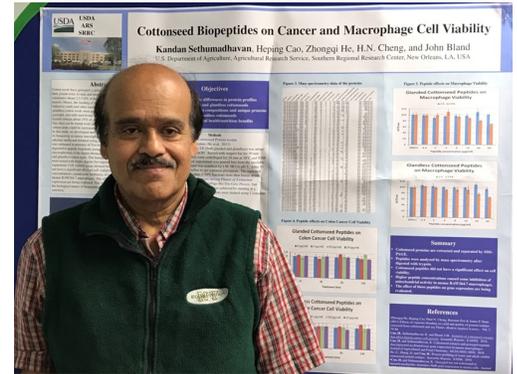
Also of great importance is the control of aflatoxin using biocontrol. One successful biocontrol strategy developed and applied to Arizona cottonseed uses natural non-toxin strains of *Aspergillus flavus* for field control of aflatoxin. From this work, natural biopesticides were developed for African nations to help reduce human exposure to aflatoxins.



ARS Research Microbiologist **Dr. Geromy Moore** of the Food and Feed Safety Research Unit gave an oral presentation entitled “*Genotypic and phenotypic diversity among a familial population of Aspergillus flavus*” at the 15th European Conference on Fungal Genetics held in Rome, Italy on February 17-20, 2020.

Scientific Presentations and Meetings (cont.) PAGE 5

Support Scientist **Kandan Sethumadhavan** of the Commodity Utilization Research Unit presented a poster at the Beltwide Cotton Conferences in Austin, Texas on January 8. Prior to that, Dr. Sethumadhavan gave a practice poster session in the Director's Conference Room. His poster was titled, "Cottonseed Biopeptides on Cancer and Macrophage Cell Viability". He is coauthor with Dr. Heping Cao on several cottonseed-related papers published in *Journal of Agricultural and Food Chemistry*, *Journal of Functional Foods*, and *Scientific Reports*.



Submitted by: Terri Von Hoven

March 2020 Scientific Conferences	City	Date
International Conference on Agricultural Science	Singapore	Mar 2-3
Pittcon	Chicago, IL	Mar 3-5
International Conference on Materials Science and	Prague, Czech Republic	Mar 13-15
International Conference on Agricultural Science and	Prague, Czech Republic	Mar 19-20
International Cotton Conference	Bremen, Germany	Mar 25-27

Reactivation of the Greater New Orleans Sigma Xi Chapter

Submitted by: John Bland and Bruce Ingber

The first meeting to initiate the Reactivation of the Greater New Orleans Sigma Xi Chapter was held on January 31, 2020. The meeting was held at the University of Holy Cross with Dr. Darryl Holliday, Associate Professor of Food Science, presiding. Also attending were Dr. Brian Adams, Assistant Professor of Biology, and Dr. Nabaraj Banjara, Assistant Professor of Food Microbiology, both also from UHC, Dr. John Bland, and Bruce Ingber.

Several items were discussed, notable among these were: how to promote STEM locally; to have researchers and/or students present discussions of their research at some meetings.

For now, the interim board members are Dr. Nabaraj, President, Dr. Adams, Vice-President, Dr. Holliday, Secretary, and B. Ingber, Treasurer. We have been designated to contact various local universities about the start-up of GNO Sigma Xi and to find those who may be interested in joining this endeavor.

Initially a luncheon meeting has been proposed for Friday March 27.

Anyone interested in joining GNO Sigma Xi, please contact John Bland.

Recognition

SRRC Winners of the 2020 Southeast Area Employees Recognition Program

We are proud that our nominees Janell Becker and Cathy Mason were recognized as the best in SEA. Congratulations!

Location and Administrative Staff

Janell M. Becker

“For consistently maintaining an outstanding degree of service to USDA, ARS, and the Southern Regional Research Center”

Outreach, Diversity, and Equal Opportunity-Non-supervisory / Non-managerial Category

Catherine B. Mason

“For her devotion of time, both personally and professionally, to activities that benefit the SRRC, ARS, the Greater New Orleans community and the environment”

Save the Date

Take Our Daughters and Sons to Work Day will be held on **Wednesday, April 15**. Please return completed forms to the mailbox of Darlene Downey, Chris Mattison, Suzanne Martin or Jeanne Lea by Monday, March 30 so the committee has time to plan for the event.

The Scientific Presentations Series will feature the work of the Cotton Fibers Bioscience Research Unit presented by Dr. Greg Thyssen on **Thursday, April 16**.

SRRC will celebrate **Earth Day** on **Wednesday, April 22**. We will have our traditional Plant and Book Swap, so please start preparing items to share!

The Magnolia planted in memory of **Dr. Robert Brown** is in full bloom, just as the announcement for his Research Plant Pathologist position was advertised; Bob must be smiling down on us!



Safety Corner

Submitted by: Shannon Beltz



Maximum Noise Level
102.7 dBa

Measured on 3/22/2018

Required Training: Slips, Trips, and Falls

Slips, Trips, and Falls and the injuries they cause are continuous trends when evaluating OSHA recordable injuries. ALL employees must please view the video below at your earliest convenience. It is only 5 minutes! This is required by our Area Safety Office for completion by the end of March. Please e-mail me (Shannon.Beltz@usda.gov) when you have completed watching the video.

Training Link: https://www.youtube.com/watch?v=k_GWTJp7pwE

SEA Inspection Follow-Up Report

Many thanks to ALL OF YOU for your preparation and participation in our recent inspection with Shelia Parker and Darrell Williamson. The inspection was fantastic!! Our program was described as 'second to none' and that is because of your hard work! Thank you again. We have just received our follow-up report and do have a few items to correct within the next 30 days. I will reach out to you for your assistance if any of these apply to your workspace. THANKS AGAIN for being awesome.

If your Noise Warning sign is from **2018** and has not recently been updated, please let me know. I need to come by and get new noise readings while you operate the instrument.

This is just a drill! I repeat, this is just a drill!

As part of Safety & Biosafety Awareness Month, the SRRC Safety Office held a mock OSHA Inspection on February 27. This gave us a chance to practice our SOP and call chain for everyone who would be involved. The Compliance Officer, Mr. Ned Flanders, was very gracious and said that our facility was in great shape! Many thanks to Mr. Flanders and to everyone who helped.



Martin Luther King, Jr. and Day of Service Committee

Submitted by: Janell Becker

SRRC held their 9th Annual Clothing Drive in honor of the 2020 MLK National Day of Service. Employees donated 44 boxes of men's, women's, and children's clothing to Ozanam Inn, a non-profit shelter and kitchen for the homeless in New Orleans.

Ozanam Inn works with all who seek their help to move them from homelessness and hopelessness to independent living and a renewed meaning of self-worth. Through case management, job and life skills training, medical treatment, legal counsel and more, the staff and volunteers work with each client's individual needs. It is the goal of Ozanam Inn to comfort and aid the suffering and help them realize their potential.



Recycling Corner

Parade Throws

Submitted by: David Ambrogio

Do you have any excess Mardi Gras throws? Wondering how to get rid of all the stuff you get from parades? Donate! SRRC employees are a generous bunch! A box has been set up in the cafeteria to collect your bounty for recycling or reuse. If you'd rather or if you have lots of beads/ throws, let me know and I will pick them up from your vehicle or lab.



Most beads and throws are donated to ARC of New Orleans, however, I have a stash of items to give to you if you have family, friends, and colleagues coming to visit you from other areas. You can create a gift basket for them with a touch of New Orleans using our collection of beads and trinkets, even plush animals. These tokens of SRRC are also good to give to visiting scientists and collaborators, as well as attendees of center meetings and conferences. Think of all the people who visit the center receiving such a gift for their loved ones, children, and other friends and leaving with a definite smile on their face as they remember your generosity!

Don't throw away your catch, give it a good home here at SRRC and help recycle and reuse. It's good for the environment, good for SRRC, and good for you.

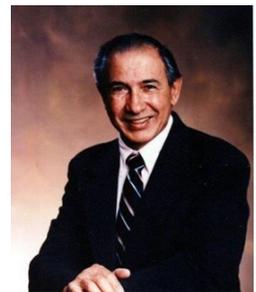
New Orleans Area Events

Submitted by: Terri Von Hoven

March 2020 New Orleans Area Events	City	Date
NOT Supposed 2 Be Here, BMike Odum Exhibit	Tulane, NOLA	Mar 1-23
Ahava Festival	Woldenberg Park, NOLA	Mar 7-8
NO Go Red for Women	New Orleans, LA	Mar 13
Chef Soiree	Covington, LA	Mar 15
NOLA Wine & Food Experience	New Orleans, LA	Mar 18-22
Top Taco	Woldenberg Park, NOLA	Mar 19
BUKU Music + Art Project	New Orleans, LA	Mar 20-21
Northshore Garden and Plant	Covington, LA	Mar 20-21
Audubon Pilgrimage	St Francisville, LA	Mar 20-22
Art in Bloom	NO Museum of Art	Mar 25-29
Tennessee Williams & NO Literary Fest	French Quarter, NOLA	Mar 25-29
Hogs for the Cause	UNO Lakefront Arena	Mar 27-28
Tunica Hills Music Fest	St Francisville, LA	Mar 28

Death of Former Employee

Joseph Salvador Bruno, age 91, husband, father, grandfather, chemist, golfer, lover of oysters, dancing and casinos, left this world on February 8, 2020. Joseph served his country in the Army and then went on to study at Tulane University and graduated from LSUNO (now UNO) with a degree in chemistry. He continued his education while working and was often referred to as Dr. Bruno for his patents that transformed textiles to the wicking fabrics so widely used today. He was a volunteer at St. Rita's Catholic Church in Harahan, golfed with the Peanut Butter and Crackers Golf Club until age 89, and was a former member of the T-A-K Social Club and the Greater New Orleans Bromeliad Society.



The family accepted visitors at St. Rita's Catholic Church in Harahan on February 12th. In lieu of flowers, the family requested donations to The Women's Foundation of Colorado (Katherine Bruno Prosperity Fund), The Louisiana Center For Children's Rights or St. Rita's Catholic Church.

SRRC Celebrates Mardi Gras!



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.](#)

Cole, Marsha and Eggleston, Gillian and Gaines, Deriesha (2019) [*Development of a Factory/Refinery Method to Measure Total, Soluble, and Insoluble Starch in Sugar Products.*](#) In: Proceedings of the Advances in Sugar Crop Processing and Conversion 2018 Conference, May 15-18, 2018, New Orleans, Louisiana.

Ihli, S. and Boone, Stephanie and Sanders, J. and Boihem, Jr., Larry L. and Montes, Belisario and Pontif, Kevin (2019) [*Using Sucrox® Liquid Permanganate as a Processing Aid in Louisiana Sugarcane Factories.*](#) In: Proceedings of the Advances in Sugar Crop Processing and Conversion 2018 Conference, May 15-18, 2018, New Orleans, Louisiana.

Ling, Zhe and Edwards, J. Vincent and Nam, Sunghyun and Xu, Feng and French, Alfred D. (2020) [*Conformational Analysis of Xylobiose by DFT Quantum Mechanics.*](#) Cellulose, 27. pp. 1207-1224.

Pagliari, Paulo H. and Wilson, Melissa and Waldrip, Heidi M. and He, Zhongqi [*Nitrogen and Phosphorus Characteristics of Beef and Dairy Manure.*](#) In: Animal Manure: Production, Characteristics, Environmental Concerns and Management. ASA Special Publication 67. ASA and SSSA, Madison, WI. pp. 45-62.

Wierdak, Andrew and Clayton, Charles and Watts, Nicholas and Lima, Isabel M. (2019) [*Powdered Activated Carbon to Adsorb Colorants from Sugar Beet Syrup A Pilot Plant Study.*](#) In: Proceedings of the Advances in Sugar Crop Processing and Conversion 2018 Conference, May 15-18, 2018, New Orleans, Louisiana.

Yu, Ping and Huang, Lan and Li, Qiansheng and Lima, Isabel M. and White, Paul and Gu, Mengmeng (2020) [*Effects of Mixed Hardwood and Sugarcane Biochar as Bark-Based Substrate Substitutes on Container Plants Production and Nutrient Leaching.*](#) Agronomy, 10 (156). pp. 1-12.