This month’s issue of On the Bayou is delayed because of me; the Editorial Board was right on schedule. This time of year is extremely busy with all the performance evaluations and preparation of new performance plans. The new format demanded extra time as well.

We have a lot to be thankful for as Thanksgiving week approaches. We are thankful that our staff is safe, and that we are all following the WWW guidance, wear your mask, wash your hands, watch your distance. Safety of our staff is of utmost importance. We are also thankful that, unlike many of our fellow citizens, we have financial security through our employment. This security gives us the opportunity to share our blessings with others in need. The Combined Federal Campaign (CFC) is a very good way to do that, if you so choose.

Our agency is encouraging us to conduct research in a safe manner, so that we can meet our objectives. For SRRC, I have seen a significant number of scientists taking advantage of this opportunity. I encourage others to do so, this includes Scientists as well Support Staff. After all, we are evaluated on our research accomplishments each year.

I wish you a very happy thanksgiving. Even though it may be different from previous years, do make the most of it. Best wishes to all and stay safe.
In October, with the arrival of some brisk cool weather, we focus on disability awareness. It is hoped that disability awareness events will help us recognize ways to identify and assist with unmet needs that are a part of everyday life for colleagues, families, and friends with disabilities. We find ourselves in an unprecedented time in that respect.

During our event this year, held on October 15th, we first reflected on this by sharing in a moment of silence for those who passed during the pandemic. And, especially Althea Lane who was a part of the SRRC family for so many years.

**History of NDEAM**

It is important to realize when we meet to focus on disability awareness, there was a time when it was not even on the radar. And, today it may be viewed to some extent as being in its infancy. So in that vein, a brief history of disability awareness was reviewed. Congress declared October ‘National Employ the Physically Handicapped Week’ at the end of WWII in 1945. And in 2020, we celebrate the 75th anniversary of what came to be known as National Disability Employment Awareness Month (NDEAM). Also, this year we mark the 30th anniversary of the signing of the Americans with Disabilities Act. This law has helped put some teeth into rights for Americans with disabilities and enabled a generation of Americans with disabilities to begin to realize some progress.

The statesman Adlai Stevenson has often been quoted: “A government may be judged by the way it treats those in the dawn, the twilight and the shadows of life”. It was in this spirit that in 1962 the word ‘physically’ was dropped to include individuals with all types of disabilities, and in 1988 the one week observance was expanded to a full month and changed to National Disability Employment Awareness Month. We recognize that many barriers to equal opportunity remain, and it is hoped that special events like this one will help people recommit to help improve opportunities for those with disabilities so that they may achieve their dreams and reach their full potential.

In 2001, the Office of Disability Employment Policy (ODEP) was established and assumed responsibility for NDEAM. ODEP also selects each year’s theme. This year’s theme was “Increasing Access and Opportunity”. If you go to the website of the Office of Disability Employment Policy you will see the familiar image of the coronavirus that we have grown accustomed to associate as a sign of these past months. Our presentation, from a panel of advanced nurse practitioners on the current impact of Covid19, fit well with this theme.
SRRC Disability Awareness Month Celebration (cont.)

This Year’s Presentation

In that vein, a panel of Doctors of Nursing Practice gave an engaging presentation that covered much of the tele-spectrum world we now live in: teleworking, telemedicine, and telehealth. Drs. Mia Schexnayder and Abby MacNeil, who are board-certified Psychiatric Mental Health Nurse Practitioners, spoke via Zoom to an SRRC audience of over fifty teleworkers. The presentation entitled “The Impact of Covid19 on telework and Stress Related Issues in the Psychiatric Community” was indeed a timely topic that ‘hit home’ with the audience.

Each speaker shared, in a tag-team talk, subjects regarding the current statistics of stress related impacts of the Covid19 environment, effects on demographic representations from society, and especially the effects on children. They also gave helpful insights and advice on how to circumvent and cope with stress in the current stay at home culture. An emphasis on the effects on children piqued considerable interest from the SRRC zoom audience. The event was a fully packed hour also designed to lift spirits of SRRC zoom attendees by sharing colorful slides on therapeutic past times that the Committee and speakers pursue to alleviate stress. The Committee expressed its gratitude in the traditional manner with award plaques, virtually shared. The traditional ambiance of coffee and deserts with social interaction in physical space was sorely missed. Nonetheless, the event marked a moment in cyberspace to connect with the SRRC family and share on the NDEAM theme for this year, all facilitated beautifully by two gifted Hero Warriors, Drs. Abby and Mia.

Special thanks to the Disability Awareness Committee members:
Mia Schexnayder, Stephanie Gross, Jamie Howell, Steven Lloyd, Catrina Ford, Trinia Bax, Suzi Brashear, Shawndrika Reed, and Vince Edwards.

Dr. Abby McNeil, DNP, PMHNP-BC, FNP-BC
Assistant Clinical Professor at Louisiana State University Health Sciences Center School of Nursing.

• Assistant Clinical Professor & PMHNP Program Director at LSUHSC
• Bachelor of Science in Nursing, Master’s in Psychiatric Nursing and Nursing Education, Family Nurse Practitioner, Psychiatric Mental Health Nurse Practitioner, Doctor of Nursing Practice from the University of Southern Mississippi.
• Advanced Practice Registered Nurse and is board certified as a Family Nurse Practitioner and Psychiatric Mental Health Nurse Practitioner. She practices psychiatric mental health via telemedicine in a community based mental health clinic in New Orleans.
• Served as PMHNP Program Director in academia for the past 9 years with 17 years of experience in teaching undergraduate and graduate level nursing students and over 22 years of experience as an advanced practice nurse.
• Research interests include secondary traumatic stress, mental health professionals who work with sexually abused children, academic practice partnerships, substance abuse screening, integrated healthcare and nurse practitioner readiness to practice.
• Served on numerous HRSA grants related to Academic Practice Partnership and Nurse Practitioner Readiness to Practice in Integrated Healthcare.
2020 Combined Federal Campaign
Submitted by: Matt Lebar and Scott Pelitire

The Southern Regional Research Center kicked off its annual Combined Federal Campaign with a Halloween-themed event. The CFC is the most successful annual workplace charity campaign in the world and raises millions of dollars each year. It has been a crazy year and donations to the Combined Federal Campaign are more important than ever. Gabe Harvey from CASA New Orleans spoke about the needs of the most vulnerable population in New Orleans, children and youth in foster care. Gabe's presentation lead to engaging questions from the audience and inspired many.

The SRRC CFC event's participants dressed up for a virtual costume contest and answered quiz questions, which tested their knowledge of Halloween and CFC trivia. A popular vote selected the top two costumes, and the winners received Whole Foods gift cards, given by an anonymous donor. We also learned that Reese's cups were the most coveted candies of the options provided, beating out the runner-up Starbursts by a significant margin.

Quiz Winner: Jane McBride
(6 correct, 3-way tie with Jacobs Jordan and Brian Mack resolved by random # generator)

Costume Contest Winners:
1st place: Lina Castano-Duque as Persephone, goddess of the underworld, springtime, and flowers.
2nd place: Rajah Rajasekaran as ????????? aka Kraft Punk

Thank you to all who attended and please remember to give or volunteer at:

http://msdeltacfc.givecfc.org/

Scientific Recognition

Dr. Sunghyun Nam et al.’s work on developing a practical surface-enhanced Raman spectroscopic (SERS) method for quantifying silver nanoparticles was featured on the front cover of the March 2020 issue of Analytical Methods.

To develop safe and reliable nanoparticle-enhanced products, it is essential to have proper analytical techniques. However, currently available techniques are complicated, destructive, expensive, and time consuming. Dr. Nam et al. developed a simple, fast, yet accurate SERS method to quantify silver nanoparticles by utilizing the “coffee ring effect” of nanoparticles. The nanosized gap between silver nanoparticles aggregated to the ring generated a plasmonic “hot spot,” i.e., dramatically enhanced Raman signal, that strongly correlates with the concentration of nanoparticles.

In addition to its remarkable sensitivity, the developed method can differentiate silver nanoparticles from other silver forms, which conventional methods cannot. This method revealed the silver release behaviors of textiles and the fate of silver when silver nanoparticle-treated textiles are washed.

This work was supported by the ARS Innovation Fund and the National Science Foundation. The cover art was produced by Dr. Matthew Hillyer.


Dr. Rebecca Sweany, Research Postdoc in the Food and Feed Safety Research Unit gave the fifth installment of the AgriCulture Seminar Series on Wednesday, November 4 via Zoom.

Her presentation was entitled, "Fighting aflatoxin contamination of corn with biocontrols and anti-fungal peptides". Rebecca talked about her work with the opportunistic fungal plant-pathogen, *Aspergillus flavus* and its contamination of corn with acutely-toxic carcinogen, aflatoxin. Reducing aflatoxin requires multiple tools including biocontrols and transgenes. Globally, nonaflatoxigenic *A. flavus* isolates are deployed in fields to limit aflatoxin contamination of grain. The biocontrol works by direct replacement of toxigenic isolates with nonaflatoxigenic isolates and inhibition of toxin production through direct contact. Rebecca presented her dissertation research that demonstrated fast growing nontoxigenic isolates inhibited toxin production by secreting inhibitory substances. She also introduced her post-doctoral research investigating the use of synthetic anti-fungal peptides incorporated into maize to reduce aflatoxin contamination.
Outreach Activities

Submitted by: Rebecca Sweany

Rebecca Sweany met with the LSU School of Soil, Plant and Environmental Sciences Graduate Student Association on Friday, October 16th. Rebecca talked about her research experience as a Post-Doc at the USDA Southern Regional Research Center in the Food and Feed Safety Research Unit. She also gave advise for finding and applying for jobs at the USDA.

The zoom event was organized by the GSA president, Ms. Paola Andrea Mosquera and graduate student adviser, Dr. Maude Walsh.

Recycling Reminder

Submitted by: Jade Smith

I know everyone is on max telework, but we still have been generating loads of cardboard and junk mail. If you have essential or scheduled work at the Center and have received mail or boxes, please make sure to remove all plastic and Styrofoam from the items before placing in the hall or a bin. We can’t recycle Styrofoam, plastic bubble wrap, plastic magazine packaging, or carbon paper.

Thanks for recycling when you do enter SRRC!
Submitted by: Shannon Beltz

Just a reminder …. These are the Types of Work Currently Allowed:

**Essential Work:**
- Only specific employees who have been designated as such (can do tasks and check on things for other employees)
- Not a specific time limit, but only done as necessary
  - Work is logged/approved by RL and Location Pandemic Coordinator (LPC) is notified

**Quick Visit:**
- Visit must be approved by RL and LPC
- Limited to 2 hours
- NOT meant to be research/science/planting
- Pick up files/computer files, quick lab maintenance (plug in freezer, reboot equipment, refill water bath)
- Appointment with IT
- Pick up/send packages
- Meeting an outside contractor (visit time can be negotiated based on work)

**Important Work:**
- ANY science/research/planting falls under this category if not Essential
- Requires ALL proposal documentation (narrative & spreadsheet) completed by employee
- Keep work time to a minimum and should NOT appear as full time
- Work locations and safety/pandemic precautions are of the utmost importance
- Proposals must go through the LPC (who will acquire signatures from employee, RL, LPC, Senior Management Official, and two at the Area level)
- Work is managed and monitored by LPC

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**PLEASE NOTE:**

If you are at SRRC and there are any problems with air temperature, air flow, fume hoods, or ANYTHING facility-related, please do not hesitate to contact the Front Desk. The contractors are onsite and will address many of these issues.
From the SEA Pandemic Coordinator, David Daniels:

**CDC Redefines Close Contact**

**Close Contact (Definition):**

Someone who was within 6 feet of an infected person for a cumulative total of 15 minutes or more over a 24-hour period* starting from 2 days before illness onset (or, for asymptomatic patients, 2 days prior to test specimen collection) until the time the patient is isolated.

* Individual exposures added together over a 24-hour period (e.g., three 5-minute exposures for a total of 15 minutes). Data are limited, making it difficult to precisely define “close contact;” however, 15 cumulative minutes of exposure at a distance of 6 feet or less can be used as an operational definition for contact investigation. Factors to consider when defining close contact include proximity (closer distance likely increases exposure risk), the duration of exposure (longer exposure time likely increases exposure risk), whether the infected individual has symptoms (the period around onset of symptoms is associated with the highest levels of viral shedding), if the infected person was likely to generate respiratory aerosols (e.g., was coughing, singing, shouting), and other environmental factors (crowding, adequacy of ventilation, whether exposure was indoors or outdoors).

Because the general public has not received training on proper selection and use of respirato-
ry PPE, such as an N95, the determination of close contact should generally be made irrespective of whether the contact was wearing respiratory PPE. At this time, differential determination of close contact for those using fabric face coverings is not recommended.


David Daniels
SEA Pandemic Coordinator
(706) 248-8194

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**Combined Federal Campaign**


Please remember to give or volunteer at:

http://msdeltacfc.givecfc.org/

If you have questions or need help, contact Matt Lebar, Scott Pelitre, or Suhad Wojkowski.
SRRC Welcomes Three New Employees

Dr. Brennan Smith is the new Research Leader for the Food Processing and Sensory Quality Research Unit. Dr. Smith received his B.S. in Animal and Veterinary Science from the University of Idaho and his Ph.D. from Kansas State University. Before joining SRRC, he was most recently an Associate Professor in the Animal, Veterinary, and Food Science Department at the University of Idaho where his research focused on large molecule chemistry as it relates to agricultural commodity utilization and development of novel food products.

Dr. Even Terrell joins SRRC working in the Commodity Utilization Research Unit as an Interdisciplinary Research Agricultural Engineer. Dr. Terrell is a native of Lafayette, Louisiana and has a degree in mechanical engineering from Louisiana State University. He has also recently completed a PhD in biological and agricultural engineering from Washington State University.

Dr. Shyam Kandel is a Research Plant Pathologist (Research Associate) working with Dr. Jeffrey Cary in the Food and Feed Safety Research Unit. His prior research projects include genetics, epidemiology, and management of downy mildew of spinach. He received his M.S. in plant pathology from Washington State University and his Ph.D. in environmental and forest sciences from the University of Washington. He is interested in both basic and applied research to find solutions to minimize the damage caused by plant pathogens.

2020 Federal Benefits Open Season is November 9 - December 14

During Open Season, you may elect coverage, make changes to your health, dental or vision insurance benefits, or participate in the Federal Flexible Spending Account Program for 2021. Check out the following resources for guidance on insurance coverage and premium options:

Federal Employee Health Benefits (FEHB) plan options available, please go to: https://www.opm.gov/healthcare-insurance/healthcare/plan-information/compare-plans/

Federal Dental and Vision (FEDVIP) plan options available, please go to: https://www.opm.gov/healthcare-insurance/dental-vision/plan-information/

Open Season elections for dental and vision insurance are made at: https://www.benefeds.com/ or via MYEPP

Flexible Spending Account (FSA) information and options available, please go to: https://www.opm.gov/healthcare-insurance/flexible-spending-accounts/

Open Season elections for FSAFEDS are made at: https://www.fsafeds.com/

The links below are websites for the 2020 FEHB premiums:

2020 FEHB - FFS, HMO & TCC Premiums
2020 Dental and Vision Premiums
**Virtual Happy Hour with Garden District Book Shop**
Friday November 6 and 20, from 5 to 6 pm. The Nov. 6 event features Hannah Moushabeck, a book marketer at Quarto Kids and an editor at Interlink Books. She’ll be talking about publishing and what goes on “behind-the-scenes” to get a book into your local indie bookshop as well as some of the amazing books she has been working on this year. Enjoy on their YouTube channel: [https://www.youtube.com/channel/UCE_bC6Cv_VnbDrqqN1OhnCw](https://www.youtube.com/channel/UCE_bC6Cv_VnbDrqqN1OhnCw)

The November 20 event focuses on real-life best friends behind the book *Billions of Besties*. Peggy Panosh and Susie Arons will be joining us for a drink and some good conversation. *Billions of Besties* is a celebration of fascinating and famous friendships both real and fictional. Check it out on their YouTube channel: [https://www.youtube.com/channel/UCE_bC6Cv_VnbDrqqN1OhnCw](https://www.youtube.com/channel/UCE_bC6Cv_VnbDrqqN1OhnCw)
Stream live on their Facebook page: [https://www.facebook.com/GardenDistrictBookShop/](https://www.facebook.com/GardenDistrictBookShop/)

**Missing Movies? Check out The Broadside**
The Broadside is the sister business of The Broad Theater. This new outdoor, open-air venue will be host to movies, music, magic, muppets and more. Enjoy a full bar, hot dogs, and of course, the best popcorn in town. [http://broadsidenola.com/](http://broadsidenola.com/)

**HispaNOLA Virtual Concert Series**
The New Orleans Jazz Museum is hosting events on Fridays from 3 to 4 pm: November 6, Amigos do Samba, Nov 13, Los Nortenos del Sur and Nov 20, Muévelo

**Did You Know…?**

**Using AI to predict river flooding events: Learning from the past big ones to predict the next even bigger one...** With the use of “… self-organizing maps, a type of artificial neural network, to perform unsupervised clustering of climate reanalysis data to identify synoptic-scale atmospheric circulation patterns associated with extreme floods across the United States.“ Essentially, patterns of data are identified and this information is used to categorize new data.

The United States is divided into three regions, east, west and central, where weather patterns were studied for record flooding to establish the self-organizing maps, and then applied to nearly record floods. The central region encompasses from the Mississippi River to the Appalachians, and had 316 record floods studied with 2183 near record floods were placed into the record flood groupings. The west, from the Pacific to the Mississippi River, had 169 record floods and 1223, near record events, while the east, the Appalachians to the Atlantic, had 196 record floods and 1467 near record floods. The clustering highlights three major circulation patterns associated with record flooding in the central region: moisture and heat from the Gulf of Mexico, Great Plains jet and winter storms. The eastern region has four major circulation patterns, the Atlantic and Gulf of Mexico storms, cold weather storms from the Atlantic and the north. The western region has five circulation patterns, northern and southern pineapple expresses, Pacific storms and troughs, and snowmelt. These 12 atmospheric patterns are further divided into four primary categories that can be effectively used for predicting future events. The greater the amount of historic data, the better the predictions. To access the data and the code, check out Hydroshare (Katherine Schlef, Extreme Floods Code and Data).

A Step Back in Time at SRRC
Submitted by: Christine Sickler

The Precision Torque Balance was made by Vereenigde Draadfabrieken of United Wire and Filament Works, based in the Netherlands. The balance was originally used in-house at Vereenigde Draadfabrieken for the manufacture of Philips light bulbs. Tungsten wire for light bulbs was pulled through a diamond with a tapered hole to cut it to the correct diameter. The wire was then weighed on the Precision Torque Balance to determine if the cut wire was the correct diameter.

Employees of Vereenigde Draadfabrieken weighing tungsten wires

Precision Torque Balance displayed in the Vintage Lab.
circa 1950s
Recent SRRC Publications

Submitted by: Suhad Wojkowski


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


Li, Wengying and Liu, Meilan and Dong, Xiang and Cao, Heiping and Wu, Ye and Shang, Hai and Huang, Huimeng and Zhang, Lin (2020) Flower Biology and Ontogeny of the Tung Tree (Vernicia fordii Hemsl.). Trees, 34. pp. 1363-1381.


