In order to advance understanding of the brain and the nervous system at our local institutions and in our community, we participated in the following programs in 2018-2019:

1. The theme of our annual research meeting (Research and Industry Day (RAID)) was tissue engineering. In addition to our collaboration with the LSU Health Shreveport Center for Cardiovascular Diseases and Sciences and LA Tech Center for Biomedical Engineering, we partnered with the new Center for Tissue Engineering and Regenerative Medicine, which is a collaboration between LSU and LA Tech. Collaborating with other centers and institutions builds unique partnerships and provides critical mass in terms of meeting attendance. The meeting was held on Oct. 11 at LSU Health Shreveport (free of charge), and had 180 attendees and 64 poster presentations, which is a record for this program. Participants included local high school students, undergraduates, graduate students, medical students, post docs, residents, faculty, staff and community partners. Speakers ranged from new faculty at LSUS to returning graduates working at bio start up companies (see http://researchandindustryday.org for meeting program and sponsors page). In addition, trainees were selected from each institution to give oral presentations, and outstanding posters received awards in each student category. LSU made a short video describing the event, and the SFN logo can be seen on the sponsors list (https://www.youtube.com/watch?v=bT_ibIXpbGA).

Based on feedback from last year, we increased industry presence to provide more information to trainees about this professional path. We also included panel discussions and community partner “booths” this year to give participants the opportunity to interact. Following the event, we surveyed participants using a 5 point Likert scale (from 0= not valuable to 5=very valuable) to obtain feedback. The graphs show that the speakers and panels were successful, while results from the booths were mixed. Thus we will likely retain the panel format and discontinue to booths in 2020. In addition, based on survey results we will be holding the 2020 meeting in Ruston LA, at LA Tech for the first time. We are discussing two possible themes, one is addiction, in partnership with the new Louisiana Addiction Research Center at LSU Health Shreveport. The other is nanotechnology, in partnership with the growing Center for Nanotechnology at LA Tech.

Medical students presenting their summer research projects

High School category poster winner, Caymen Hawkins, was recently admitted to Baylor University.

RAID 2019 t-shirts were designed by faculty and students and provided by Life Share Cellular Services. Meeting programs were printed courtesy of L.A.B. Industries, a division of LA Association for the blind.

Program turn-out was excellent
2. Educational outreach. We organize two hands-on learning programs for children in the community. Brain Awareness Week is a major outreach event coordinated by the Society for Neuroscience and serves as the largest annual outreach event for the Shreveport chapter of SFN. A group of faculty, staff, graduate, and medical students travel to elementary and middle school classrooms to perform demonstrations and activities to increase STEM engagement, specifically on topics of neuroscience and psychology including learning and memory, neuroanatomy, visual illusions, sensory processing, and concussion awareness. In the past three years, we have interacted with over 200 students in grades 4-8 at ten different schools and venues in Shreveport, including St John Berchmans, University Elementary, Southfield School, Barnes and Noble, and Red River National Wildlife Refuge. For the second year in a row, we also participated in the Fall Wildlife Celebration at
Red River National Wildlife Refuge, setting up an activity and demonstration booth to interact with many families and visitors. Young children were especially impressed by the dissection kits and models of sheep brains and cow eyes ($$$), egg-in-a-jar demonstration ($$$), and mirror-tracing activities. We also completed the third year of our “Neuroscience with Kids” program. About 30% of the population in Shreveport lives below the poverty line. To reach children in need, we have partnered with the Community Renewal Cedar Grove Friendship House. We bring experiments, for example on sensation and perception, to children with little or no opportunity to participate in this type of activity. Our theme last year was “Fun with Neuroscience.” These monthly meetings contribute to the community, but they are also a rich learning experience for us, the presenters. We gain insight into community need, bond with our fellow scientists from other departments or institutions and gain hands-on teaching experience. In the coming year, we will leverage new partnerships with LSU Shreveport, Community Renewal, and David Raines Community Health Center to expand our outreach and community engagement. Thus we request funds to provide supplies for our annual “Brain Awareness Week” and “Fun with Neuroscience” programs.

3. SFN funds were used to support outside speakers. This year funds were used to host Dr. Ryoichi Teruyama, PhD, as Associate Professor from the Department of Biological Sciences at Louisiana State University Baton Rouge. His talk was entitled “Sexually dimorphic expression of oxytocin receptor in the CNS.” We partnered with the Department of Cellular Biology & Anatomy to host a dinner for faculty as well as a pizza lunch for trainees to interact with Dr. Teruyama (see flyer at the end of this report). In addition we have an upcoming talk from Dr. Bart Rypma from the University of Texas at Dallas, School of Behavioral Medicine. He is an expert in experimental fMRI methodology and we are hoping to collaborate with him to look at cerebral blood flow in aging and disease. We are currently soliciting names for 3 speakers for our spring 2020 lecture series.

4. We also used funds to sponsor community events. In an attempt to improve care for underserved populations at high risk for dementia and stroke, we have extensively expanded our community partnerships. We have created a network of institutional and community partners dedicated to patient and caregiver care, education, and support; clinician training and education; and bidirectional community participation and research recruitment for brain disorders. This network has several key elements:

   a. **Community Engagement Coordinator**

   To ensure effective and efficient communication with our target audience we have hired a Community Engagement Coordinator. Her objective is to raise awareness for CBH and community resources for brain disorder patients, their families, and caregivers. Our new Community Engagement Coordinator, Roslyn Goodall, will spearhead the development and monitoring of outreach programs for patient services and research recruitment. She will serve as a link between community members, local organizations, community clinics, and clinicians and researchers from LSU Health Shreveport and partner institutions to develop and implement community driven health.

   b. **Community Partners Advisory Committee**

   We propose to coordinate and streamline community support for brain disorder patients and their families and caregivers. To do so, we will to improve communication across agencies. A Community Partners Advisory Committee (CPAC) will be composed of a representative from each partnering organization, and will be co-chaired Ms. Roslyn Goodall, our new Community Engagement Coordinator and director of the St. Matthew African Methodist Episcopal Church's Outreach Ministries; and Monica Wright, Director of the Caddo Council on Aging. The Advisory Committee will contribute to and discuss strategies for addressing barriers and facilitators to care and research participation, monitor outcomes, supervise the development of educational and outreach materials,
and implement solutions as the needs and resources in the community evolve. Community partners include:

- Alzheimer’s Agency of Shreveport/Bossier, Inc.
- Caddo Council on Aging (CCOA)
- The American Association of Retired Persons (AARP)
- Alpha Kappa Alpha Sorority, Shreveport
- St. Matthew African Methodist Episcopal Church’s Outreach Ministries
- Global Alzheimer’s Platform Foundation (GAP-Net)
- Northwest Louisiana Parkinson Resource
- Grambling State University Master of Social Work Program
- LSU Shreveport Master of Counseling Program.

We are working with these community partners to promote health education and raise awareness of available services in the community. For example, this year we continued and expanded our partnership with St. Matthew African Methodist Episcopal Church. We helped to organize and support their 8th annual Alzheimer’s disease caregiver’s symposium. St. Matthew hosted Dr. Mark Pippinger, a dementia expert with Novant Health. Our chapter sponsored him as a grand rounds speaker in the Department of Neurology. This event was publicized using flyers and electronic message boards. On the following day he also spoke to the general public at the community symposium and was joined by government and community leaders. We spoke on several radio programs to publicize this event. In addition, many organizations had tables, including AARP, the local VA, monitoring companies, long term care facilities, the local sheriff and fire department, and our local clinical trials recruitment team to provide information to the public. The event was publicized in the traditional media, including a segment where our representative appeared on the local news, and the program was sponsored by KTBS television. Ms. Brenda Teele, a KTBS news anchor, was the mistress of ceremonies. New this year was a book signing event the night before the symposium with 4 local authors who had written books about their experiences with dementia and caring for people with dementia. We reached about 50 faculty and trainees through the grand rounds presentation and about 250 at the symposium. This experience helped us build relationships in the community and we hope to participate again next year. Our goal is to raise awareness of the importance of research participation, with a special emphasis on safety and privacy, to help reduce racial disparities in care.

HOPEFUL
Offering Hope to Caregivers
8th annual Alzheimer’s & Caregivers’ Symposium

Saturday, September 14, 2019
9:00 am – 2:00 pm

4 CEUs
Approved by NASW
(Check in and light breakfast begin at 8:30 am)
Mrs. Eddie B. Jones Special Programs Center 2226 Murphy Street – Shreveport, LA

Mistress of Ceremonies: Ms. Brenda Teele – News Anchor KTBS television

Guest Speaker: Dr. Mark Pippenger
Neurologist/Novant Health/Charlotte, NC

Other Speakers
Dr. Elizabeth Disbrow – LSU Health Science Center for Brain Health
Attorney Joseph Gilsoul

Free to attend. Register at Eventbrite.com. Search for HOPEFUL or call 1.318.570.9255

The proposed activities are part of a larger local program. We continue to grow our LSU Health Shreveport Center for Brain Health. Based on the relationships developed largely through our local SFN activities, our Center was established to enhance neuroscience research collaboration across departments and institutions, create a clinical center for the comprehensive treatment of brain injury and disease, expand educational opportunities for students interested in neuroscience related fields, improve professional development for faculty and post docs, and attract new faculty and students to a location that typically has difficulty with recruitment. In 2017 we received provisional approval from the LSU Board of Regents. In September of 2019 we submitted an application for 5 year full approval. This application has been approved by the Board of Supervisors and will be reviewed by the Regents at their December meeting. Since provisional approval we have expanded clinical care in an underserved region, hiring two new faculty with expertise in dementia and helping to coordinate community services across agencies. We have provided faculty development with programs like RAID, an intramural grant program specifically for neuroscience, and grant writing workshops targeting NIH funding. Finally, we have updated and expanded neuroscience education, overhauling existing courses and adding two new ones, a course on neuroscience methods and a neuroanatomy lab course. We have raised over half a million dollars in gifts and endowments, however probably the most important development is that the Center for Brain Health has been funded through the institution, with support for administrative infrastructure, mentorship and career development activities, and a new animal behavioral shared core laboratory. Institutional support for the LSU Health Shreveport Center for Brain Health ensures program stability and longevity as priorities and manpower evolve over time.
Society for Neuroscience Shreveport
Dept. of Cellular Biology & Anatomy
Center for Brain Health

Present

Ryoichi Teruyama, Ph.D.
Associate Professor
Department of Biological Sciences
Louisiana State University

"Sexually dimorphic expression of oxytocin receptor in the CNS"

Thursday, November 14, 2019
12:00 pm
Room 1-400