



TRIANGLE CHAPTER
SOCIETY FOR NEUROSCIENCE

THE TRIANGLE TRANSMITTER

Reflections 2017

ANNIVERSARY CELEBRATION



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JUNE 2017

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3rd Annual Spring Neuroscience Conference

From advancing the understanding of the brain to providing professional development activities, the Triangle Chapter of the Society for Neuroscience (Triangle SfN) hit the mark April 13 at their annual spring conference. NIEHS was a sponsor of the well-attended event in Cary, North Carolina.

The society invited three local neuroscientists to give presentations:

- Serena Dudek, Ph.D., deputy chief of the NIEHS Neurobiology Laboratory.
- Leslie Sombers, Ph.D., from North Carolina State University (NCSU).
- Michael Nader, Ph.D., from Wake Forest University.

Patricia Jensen, Ph.D., head of the NIEHS Developmental Neurobiology Group, serves as president of Triangle SfN. “Due to our prior success, we extended this year’s program to a full day event, filled with new and exciting research presented by our members and esteemed speakers,” she said. This was the third annual spring conference for the group.

Participants agreed with her assessment of the day. “It was exciting to hear the awesome research going on in the Triangle area,” said Georgia Alexander, Ph.D., from Dudek’s Synaptic and Developmental Plasticity Group.

“This symposium exposed me to research I don’t usually have the chance to think about,” added Negin Martin, Ph.D., managing director of the NIEHS Viral Vector Core. “For instance, at NIEHS, we do not use primates in any studies, so the link between biological expression of D2 receptors and social behavior in primates was new to me.”

The conference offered a variety of networking opportunities, including two poster sessions, more than a dozen exhibitors, a luncheon opportunity with the keynote speaker, and an “Ask a Grad Student” luncheon session to allow undergraduates to learn more about graduate education.



Left: Attendees listen to local neuroscientists’ presentations. **Right:** Graduate student volunteers host the “Ask a Grad Student” luncheon session. Photos courtesy Kati Healey.

“Having the vendors available at the same time allowed people to move between vendors and posters,” said Korey Stevanovic from the NIEHS Neurobehavioral Core.

“It was outstanding that so many undergraduates were able to present their research,” observed another attendee.

Lunch with the keynote speaker, David Anderson, Ph.D., from the California Institute of Technology, was a popular choice. One participant commented that Anderson provided insight into how to maintain understanding of broad biological questions while developing a narrow focus to address pertinent hypotheses.

Anderson’s keynote presentation focused on his lab’s research on “Internal States and the Control of Innate Behaviors.”



The poster sessions allowed for Triangle scientists to discuss and share ideas. Photo courtesy Kati Healey.

“He was famous for his work in *Drosophila*, which is a powerful genetic tool,” said Qing Cheng, Ph.D., from the NIEHS Ion Channel Physiology Group. “He brought that expertise into a mammalian system and combined it with optogenetic techniques, to study the complex relationship between aggression and courtship.”

“Dr. Anderson showed that in both systems, the state of mind that allows these incongruent behaviors has a similar dependence on a few cells and on stimulus intensity,” Cheng continued. “It was the work of a great mind.”

By all reports, the local society is serving an important role. “I like that the neuroscientists in the Triangle area have this opportunity to come together,” said Bernd Gloss, Ph.D., of NIEHS. “I think it was a perfect venue for the participants.”

One of the organizers, Shannon Farris, Ph.D., from the NIEHS Synaptic and Developmental Plasticity Group, was already thinking about next year. “Looking forward, the Triangle Chapter seeks to continue connecting neuroscientists across North Carolina by hosting events for scientific exchange and networking, while also keeping our community and legislators informed of the importance of neuroscience research to our state,” she said.

This same sentiment was echoed by Jensen in her welcome address, where she encouraged all members, at all stages of their career, to commit to service and to participate in the neuroscience community’s vibrant, scientific exchange.

- Dr. Simone Otto (NIEHS Ion Channel Physiology Group)

*Article originally printed in the [NIEHS Newsletter](#)

2nd Annual Neuroscience Trivia at Bull McCabe's



Triangle SfN's Outreach Committee organized the second annual Neuroscience Trivia at Bull McCabe's Irish Pub in Durham on March 21. The questions, written by trivia master Dr. Alex Kloth (UNC-CH), were neuroscience-themed with pop culture mixed in. There was a good turnout (~50 people) and enthusiasm was high again this year. This event wouldn't have been possible without generous support from Morehead Planetarium and Science Center, one anonymous benefactor, and Bull McCabe's Irish Pub.

Of the attendees, 40% were from UNC, 25% from Duke and 20% from NCSU. The participants were mostly graduate students (44%) followed by post-docs (16%) and general public (16%). Advertising the event as "Neuroscience Trivia" and not "Brain Trivia" likely led to large attraction of university scientists. For future events, we look forward to drawing in both neuroscientists and a larger general public audience.

If you want to get involved in organizing next year's event, please contact the Outreach Committee at trianglesfnoutreach@gmail.com.

- Christina Lebonville (UNC-CH)

Top Left: Outreach Committee Chair Christina Lebonville representing Triangle SfN at Neuroscience Trivia! **Top Right:** Former Chapter President Dr. Alex Marshall and Program Committee Chair Kati Healey having fun at trivia. **Bottom:** Neuroscientists and the general public enjoyed the evening, though there was a larger turnout of graduate students. Photos courtesy Christina Lebonville.



Can't get enough science? Check out these upcoming events!

June 30 – NC Museum of Natural Sciences Final Fridays: X-Men

5:30-9 pm, WRAL 3D Theater, Raleigh

Enjoy food and drinks, science stations, and live music followed by a screening of X-Men. Tickets are \$5 and can be purchased through the NC Museum of Natural Science website.

July 18 – No More Hidden Figures

7-8:30 pm, WRAL 3D Theater, Raleigh

This presentation seeks to motivate, encourage, and empower the next generation of engineers, doctors, and scientists of color who will be leaders in STEM fields. Admission is free to the public.

August 18 – Natural Selections: An Evening of Beer and Science

7-10 pm, NC Museum of Natural Sciences

Enjoy an evening of beer and science! Learn about the science of beer while sampling brews from over 20 NC breweries, take part in hands-on science of beer activities, and enjoy live music. For ticket pricing and purchase click [here](#).

Brain and Behavior Night 2017



Dr. Jon Kaas delivered a special Science Café lecture.

Brain & Behavior Night 2017 at the North Carolina Museum of Natural Sciences was a success! Eighteen different organizations sponsored interactive exhibits, along with 4 student and postdoctoral scholar talks, and a special Science Café from Dr. Jon Kaas (Vanderbilt University). Triangle SfN affiliated scientists educated the public about bed bug mating, neuroanatomy, action potential recording, the brain on love, and fish dancing. One laboratory even demonstrated electrical recordings from a potato! Attendance for this year was at a record high, and the event appealed to a wide range of age

groups and demographics, bringing together grandkids, millennials, boomers, and grandparents.



Triangle SfN Chapter members Christina Lebonville and Dr. Shannon Farris educate visitors about the brain.

Thanks to every person who made this event possible, with extra kudos to this year's organizing committee, Drs. Scott Belcher, Lisa McGraw and John Meitzen, our coordinator, Megan Serr, our speakers, Dr. Hongmei Li—Byarlay, Dilara Sen, Caroline Johnson and Jaime Willett, the NC State Keck Center in Behavioral Biology for sponsoring Dr. Jon Kaas, and Triangle SfN for advertising and coordination.

Teacher Workshop in Neuroscience

On February 25, there was a teacher workshop in neuroscience at Northern Vance county High School. Teachers were trained to record action potentials from roach legs using spikerboxes from Backyard Brains. The workshop was organized by NC State's Science House, in collaboration with the Triangle SfN's Next Generation Award Winner Dr. John Meitzen (NCSU). The Science House's Dr. Jason Painter, Dr. Kylie Swanson and Kristie Gutierrez played critical roles. Over 40 spiker boxes and related supplies were purchased and distributed to the teachers, and spikerboxes can also be checked out from the Meitzen Lab at NC State. The 25 teachers who attended the workshop performed the neuroscience experiments at 4 different science clubs to over 150 middle school students in Northeastern Carolina.



Dr. John Meitzen helps teachers record action potentials using spikerboxes.

All articles by Dr. John Meitzen (NCSU). Brain and Behavior photos courtesy Melissa Robbins. Teacher workshop photo courtesy The Science House at NC State.

Addiction: A Treatable Brain Disease

You could see it in their eyes. They all had the same question. They were anxiously waiting for an answer. “Will I ever get back to normal? How long will it take?”

More than 250 recovering drug addicts at TROSA, a therapeutic community for drug addicts in Durham, had gathered to hear Dr. Amir Rezvani’s talk on addiction and hopefully receive an answer to their questions. Dr. Rezvani, former president of our chapter and professor of Psychiatry at Duke University, started his talk with a happy and factual slide indicating that “Yes, you will recover but only if you accept responsibility and work on it.”

He continued his lecture by explaining the involvement of the brain in addiction, the effects of drugs on the brain, and by comparing addiction as a brain disease with other mental disorders. Dr. Rezvani further explained the complex role of genetics and the environment on the manifestation of addiction. Lastly, he talked about the amazing capability and plasticity of the human brain, which can help in recovery.

The talk ended on a happy note based on more than two decades of TROSA resident success stories – that although addiction is a chronic brain disease, if we remain patient, determined, motivated and accept responsibility for our addiction, like after any cold and dark winter, we will witness spring again! All participants left the auditorium happy and more motivated with more dopamine released in their reward systems!

- Dr. Amir Rezvani (Duke)

DNA Day 5K!

Triangle SfN members, including Christina Lebonville, Meghan Jones, and Jacqueline Paniccia (UNC-CH, pictured below), participated in the annual DNA Day 5k race in Chapel Hill on May 20. Funds raised by the race help support science outreach across NC.



Triangle SfN Marches for Science!



Emeritus Triangle SfN Chapter President Dr. Amir Rezvani (Duke) poses with Chapter member Dr. Shannon Farris (NIEHS) at the Raleigh March for Science.

To keep the momentum from the March for Science going, the Triangle Chapter Science Policy Working Group (SPWG) set up April meetings with local leaders, including the Executive Director of the North Carolina Board of Science Dr. Hardin to learn best practices for engaging local and state government officials and North Carolina State Senator Floyd B. McKissick Jr. to discuss the impact of neuroscience research and issues affecting our State.

If you are interested science policy or looking to get experience or training in advocacy, consider joining our grassroots efforts. Contact Triangle SfN SPWG at trianglesfnscipol@gmail.com.

- Dr. Shannon Farris (NIEHS) and Dr. Ryan Bell (Duke)

On Earth Day (April 22), scientists and science supporters from more than 600 cities around the globe participated in the March for Science, “an unprecedented coalition...to defend to the role of science in policy and society” according to the March for Science website. Many described it as a non-partisan event meant to highlight how science positively effects our health, communities and economy.

North Carolinians participated in 8 marches across the state, including Raleigh, Charlotte, Asheville, Morganton, Washington, Wilmington, Morehead City and Greensboro. Using crowd science techniques, the organizers estimated the global attendance at 1.07 million.

Triangle chapter members joined the Raleigh March, which started at Shaw University and ended at Moore Square with a rally. RTP US Representative David Price (NC-4) joined the Raleigh March as well.



Triangle Chapter SPWG chair Dr. Ryan Bell met with North Carolina General Assembly Senator Floyd B. McKissick Jr. to discuss the importance of neuroscience research to our State.

ComSciCon-Triangle Trains Future Science Communicators

This spring, 50 graduate students from across the Triangle attended the third annual ComSciCon-Triangle, a science communication conference “for graduate students, by graduate students”. The goal of the conference was to “empower STEM graduate students to communicate the concepts in their field and beyond to diverse audiences.” ComSciCon-Triangle is a local offshoot of the main ComSciCon conference, held annually in Cambridge, MA.



As in previous years, ComSciCon-Triangle was held across two days (March 25 and April 1) in Research Triangle Park. Events included multiple panels featuring local experts in science communication and a keynote speaker. Interspersed between panels were “pop talks,” in which attendees gave very short descriptions of their research and were “judged” for their use of jargon. These served to give attendees hands-on, real-time experience in simplifying communication.



This year’s keynote speaker was Dr. Jorge Cham, creator of Ph.D Comics, whose hilarious and entertaining talk was surely memorable for all attendees. Other ComSciCon-Triangle panels were just as informative and enjoyable. One panel, “Science Improv,” featured DSi Comedy’s Zach Ward, who had attendees participate in several hilarious exercises to practice improvisational communication. There were also two “breakout” career panels for academic and non-academic science communication career paths, featuring local experts in several unique career fields, as well as science policy and multimedia-focused panels.

The conference also included a “Write-A-Thon,” in which attendees drafted written or multimedia pieces under the guidance of an “Expert Reviewer.” Following the conference, attendees could submit these pieces to ComSciCon’s partner publications, such as Wired or American Scientist.

ComSciCon-Triangle 2017 was organized, managed, and led by an all-graduate student organizing committee. The co-chairs of this committee were Kayleigh O’Keeffe (UNC-CH) and Christina Lebonville (UNC-CH). Committee members included Reggie Bain (Duke), Kelsey Boes (NCSU), Molly Matty (Duke), Deirdre Sackett (UNC-CH), Michael Vella (NCSU), and Christina Marvin (UNC-CH).

- Deirdre Sackett (UNC-CH)



Top: Attendees “judge” the clarity of others’ pop talks, to improve and simplify communicating scientific topics. **Middle:** Dr. Jorge Cham, creator of Ph.D Comics, gives his keynote talk. **Bottom:** Group photo of all attendees and the organizing committee. All photos courtesy Kelsey Boes.

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Regular Membership: \$20.00/year or \$50.00/3 years

Student Membership: \$5.00/year or \$12.00/3 years

Partner Membership: \$25.00/year or \$60.00/3 years

**Membership in Triangle SfN
does not require membership in
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TO RENEW OR MANAGE YOUR MEMBERSHIP, VISIT US ONLINE AT

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Keep in Touch!

General questions and comments:

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Communications committee:

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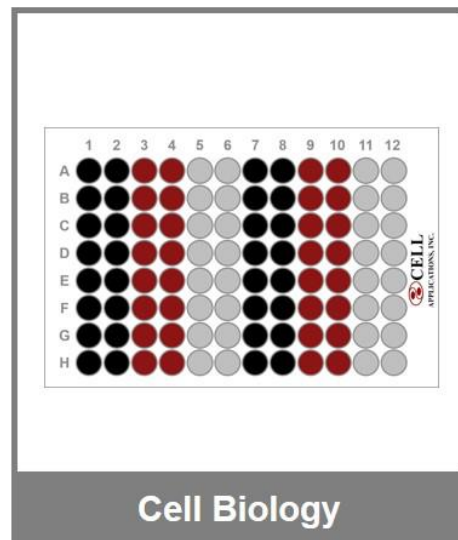
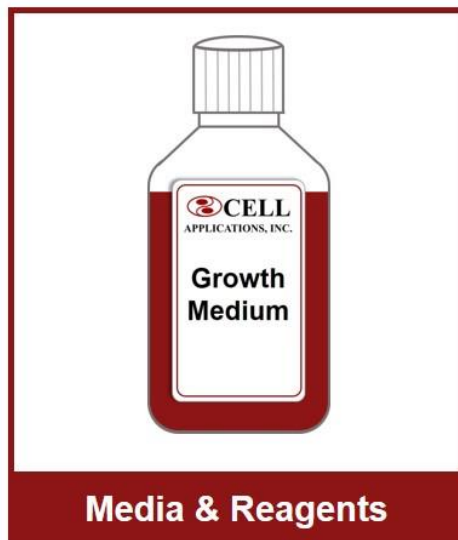
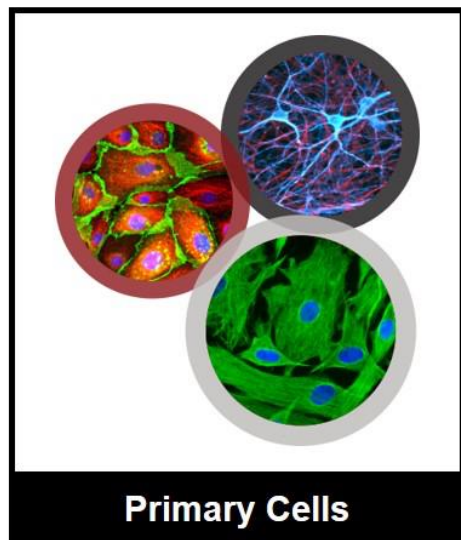
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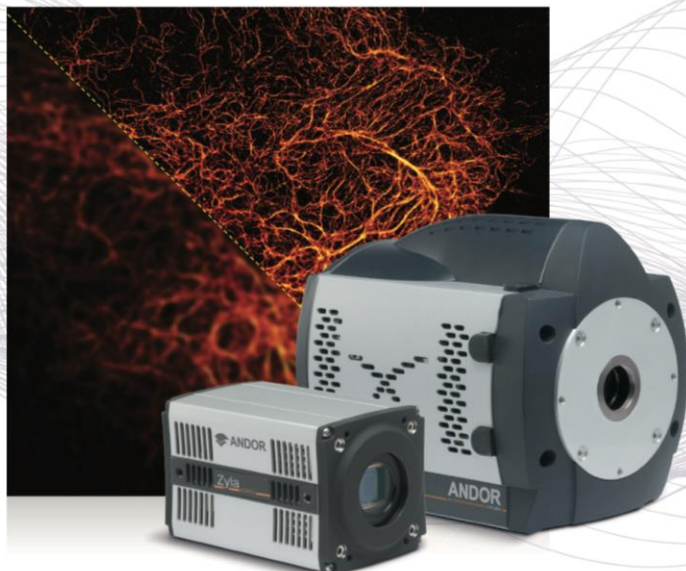
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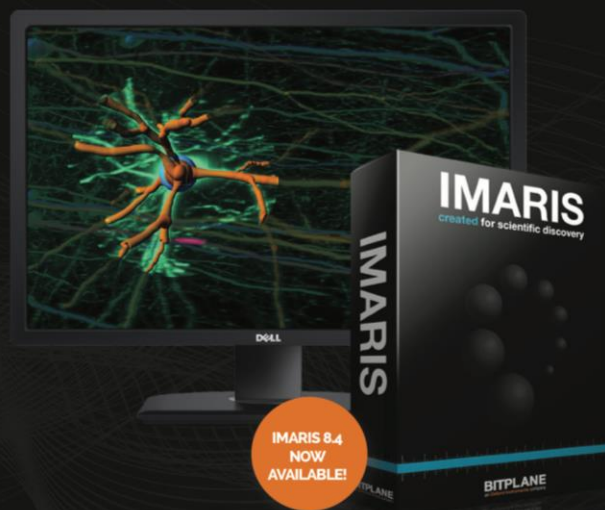
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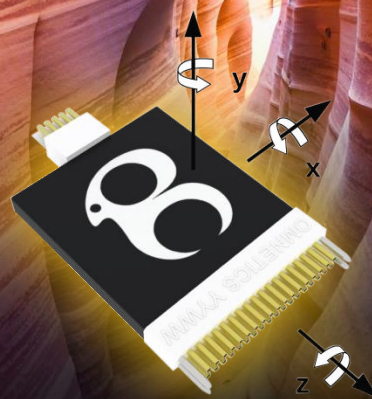
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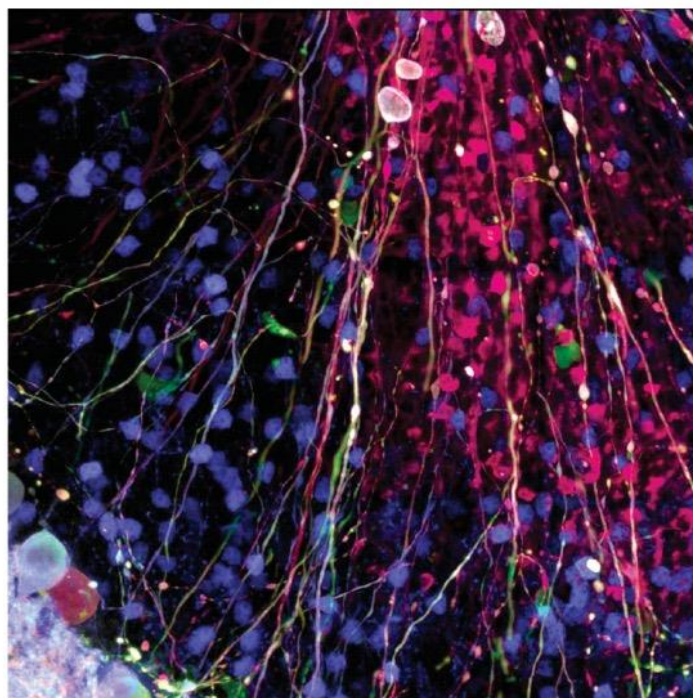
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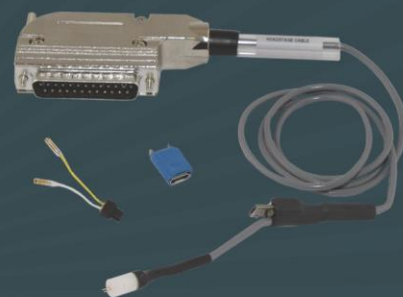
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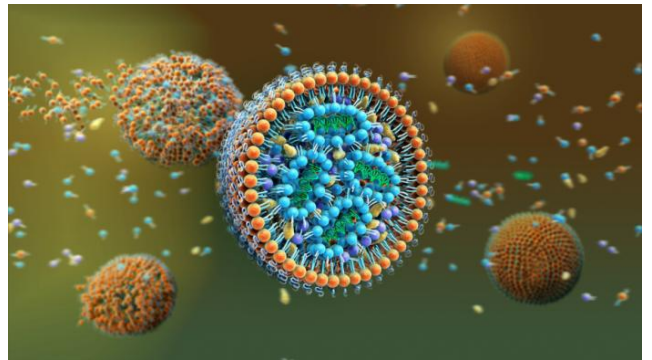


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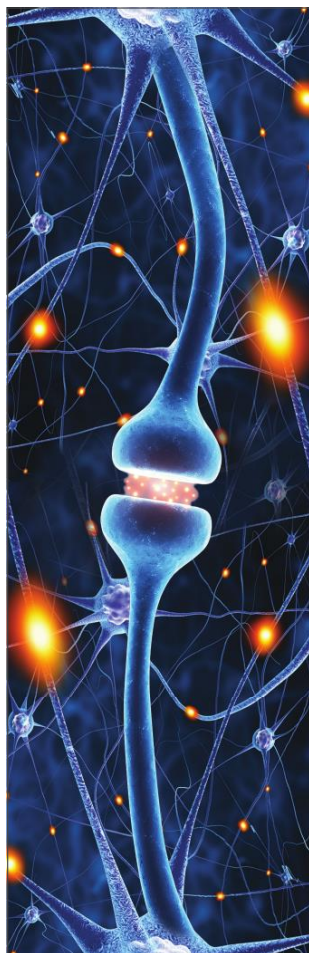


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