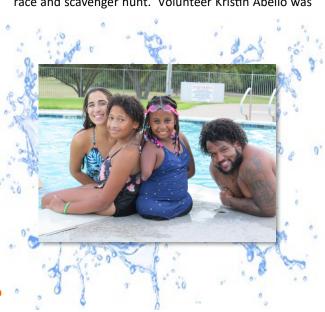
Leadership Newsletter

November 2022

TIRR Foundation

Record High Attendance Moran Camp Xtreme's Summer and Family Camps

Moran Camp Xtreme Summer session opened on Sunday, July 10, at Camp for All in Brenham, Texas. It was a hot Texas 110-degree start to camp, but that did not put a kink in any of the day's activities. There were 41 kids registered to attend, and fourteen were new campers. Safety protocols required the staff, campers, and volunteers to test negative for COVID before opening day. Throughout the week, campers engaged in laser tag, horseback riding, swimming, fishing, Pickleball, basketball, wheelchair football, and much more. To cool off, there was the Kona Ice truck, s'mores, and build a fruit pizza contest. Many thanks go out to David Gaston and his crew from Turning Point Nation, who staffed the hand-cycling and the skeet shoot activities. On volunteer day, 11 energetic volunteers showed up to help cheer the kids on during the mile race and scavenger hunt. Volunteer Kristin Abello was





down for the count with COVID, but her crew of young, new volunteers showed up and made the day. Camp ended with the Burton Fire Department rolling in to cool off many happy and hot kids with a lot of water.

Thirty families enjoyed Moran Camp Xtreme's Family weekend at Morgan's Wonderland. In total, there were 136 kids and family members enjoying a pool party, poolside dinner, trip to Sea World, movie night, and much more. "At one point, there were six different activities taking place at the same time. It was impressive how smoothly everything ran, and I must shout out to all the Morgan's Wonderland staff and how they worked to ensure we had everything we needed." Genny Gomez. Thanks to Josh Franklin and his family for helping us start the weekend with a fantastic pulled-pork dinner. "The majority of campers attending our Family session are too medically fragile to participate in our summer and spring break sessions. I am especially thankful to Sea World for having activities that all the families could enjoy. At one point, there were families spread across the Sea World campus attending every show." Genny Gomez.

You Say Quadriplegia, I Say Tetraplegia



There is a movement afoot to replace the term quadriplegia with tetraplegia. You may wonder why, as they both mean the same thing; paralysis of all four limbs. The impetus for

the change lies in the derivation of the words. 'Quadri' means four in Latin; the word 'plegia' means paralysis in Greek. Thus, quadriplegia combines two different languages: Latin and Greek. Conversely, 'tetra' and 'plegia,' also meaning four-limb paralysis, derive from a single language, Greek. The British have always used the term "tetraplegia" when describing four-limb paralysis. However, the combination of Greek and Latin has not ruffled the linguistic feathers of laypersons in America. Outside of medical literature, tetraplegia has never caught on in the US. Those who prefer that things remain unchanged may take comfort in knowing that 'para' and 'plegia' both originate from a single language, Greek. Thus, paraplegia is acceptable on both sides of the pond.

Moran Camp Xtreme Opens New Young Adults Camp

It's official; Moran Camp Xtreme, which started with one summer session, now offers four unique camps: Summer, Spring Break, Young Adults, and Family Camp. The latest session joining the line-up is the Young Adults Camp, held in late summer. Camp Director, Genny Gomez, recognized the need among campers aging out of the summer and spring break sessions to continue engaging in self-affirming recreational and social activities. Through her work in adaptive recreation, she saw this same need for connectedness among newly injured young adults. Small pilot camps were held in 2020 and 2021 to fine-tune the format and content of the program. Despite restrictions due to COVID-19, both garnered a lot of interest. "The most frequent age of spinal cord injury is age 19, so this new camp meets a critical need for programs serving young adults. They are just learning to navigate life in a new way, and the Young Adults camp introduces them to others who have overcome obstacles and mastered the skills needed to live life more freely." Genny Gomez. At this unique camp, friendships are forged, new life skills are learned, and with a few modifications and specialized equipment, campers realize they can continue many of the pre-injury activities they enjoyed.

On Friday, August 19, 2022, the Young Adults Camp officially became part of the Moran Camp Xtreme family, with Morgan's Wonderland in San Antonio, Texas, as its official site. On opening day, 22 eager young adults aged 21 and over were ready to start their three-day adventure. "Many Adult Camp attendees also serve as summer camp counselors for Moran Camp Xtreme's summer and spring break

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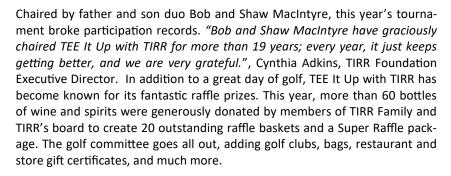
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TEE It Up with TIRR Boasts Record Attendance!



TEE It Up with TIRR took place on Monday, October 24, and after a couple of years of Covid restrictions, everyone was ready to play. At 12:00 pm, 132 players loaded their clubs into their carts and headed off to their first hole at BraeBurn Country Club. "Tee it Up with TIRR was only the second tournament to play at the club's newly renovated course; we were happy to welcome our golfers back to experience the enhancements for themselves." Maudie Werlin, Director of Spe-

cial Events. Making the 2022 tournament particularly special was Johnny Carrabba's very humble acceptance of our request to pay tribute to him as the honoree. "Whenever asked, Johnny has enthusiastically and graciously helped TIRR Foundation. We are pleased to have him as our friend and honoree; for all he does for others, he deserves this and much more." Bob MacIntyre, TEE It Up with TIRR Co-Chair.



It was TEE It Up with TIRR's day for breaking records in more than attendance. TIRR Foundation former board member, Melinda Chernosky, made the tournament's first-ever hole-in-one! Sadly, there was no car on the hole to take home, but we think it was a big deal anyway. Melinda took home a lovely BraeBurn Country Club charcuterie board to celebrate her achievement and remember the moment.















7aste of 71RR Cooking Up Some Fun

On September 22, guests gathered for Taste of TIRR at the River Oaks Country Club for an evening of demonstration cooking and exquisite food served with a generous portion of laughter. Chef John Folse and Houston restauranteur Johnny Carrabba led 120 lucky people through a dinner featuring the finest southern creole and northern Italian cooking. This amazing culinary experience began with lobster bisque, one of Chef Folse's most celebrated dishes, and was followed by Johnny Carrabba's Osso Buco, created from a prized family recipe. Sprinkled throughout the evening was the lively banter between old friends and famous foodies, Chef Folse and Johnny.

At the end of the evening, some guests headed home with something you never see at dinner events; doggy bags to be enjoyed the next day, but not by fido. A huge thank you goes out to Chef John Folse and Johnny Carrabba for making the



evening memorable and to our guests and TIRR Family, who made this evening possible. The funds raised through Taste of TIRR support TIRR Foundation's brain and spinal cord injury research program Mission Connect and the adaptive wheelchair sports program, Moran Camp Xtreme.











Mission Connect: When the Whole is Far Greater than the Sum of its Parts

Mission Connect boasts more than 140 scientists, physicians, and engineers, and the prolific physical resources of 18 institutions. Each scientist and institute is uniquely and powerfully equipped to advance neurotrauma science. However, it is the whole of Mission Connect, working collectively, that opens doors to breakthroughs unattainable by its singular parts. How the human central nervous system functions and its response



to injury are intensely complex. If collaboration is best used to solve the most multifaceted and intricate scientific questions, then Mission Connect and its collaborative structure possess the best hope we have to restore neurological function after injury.



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Moran Camp Xtreme Opens New Young Adults Camp continued from page 2

sessions; it was a pleasure to see them have an opportunity to relax and enjoy themselves." Genny Gomez. Upon arriving, the first activity was relaxing in the pool and floating down the lazy river. This was followed by horseback riding, a corn hole tournament, a S'mores cookout, and basketball to end the evening. On Saturday, a full day began with a trip to Sea World and Aquatica. That evening, everyone settled in for a movie, popcorn, and sweets. Those who were not exhausted ended the night with a game of wheelchair basketball. Before heading home on Sunday, everyone made their way to the ropes course to reach new heights while testing their skills and confidence. "We are incredibly pleased that Genny brought the Adults Camp to fruition; it truly meets a need and is helping improve the lives of many young adults living with the challenges of paralysis." Cynthia Adkins, Executive Director, TIRR Foundation.









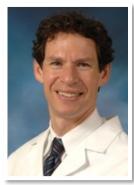
Survey Reveals Remarkable Duplication of Funding Within Mission Connect





In mid-2022, a survey was sent to Mission Connect researchers who were awarded funding between 2015 and 2020. They were asked if data gathered with Mission Connect funding led to follow-on funding from the National Institutes of Health and other large grant-making institutions. The information was compiled, and a report was presented at the October TIRR Foundation board meeting. Based on the five years measured, the total amount Mission Connect invested in research was \$8,437,469. Using the data they gathered, Mission Connect researchers leveraged Mission Connect's funding to receive \$65,036,494 in follow-on funding. "This is a remarkable leveraging of Mission Connect's resources and one we should be very proud of.", Cynthia Adkins. Behind these numbers are highly gifted researchers, a national committee of leaders in neurotrauma science, and a robust collaborative platform and program that rewards innovation and high-risk, high-reward explorato-

Mission Connect Annual Scientific Symposium—November 18, 2022



The Dr. Robert G. Grossman Mission Connect Annual Scientific Symposium is taking place at the Cooley Life Center in Houston's Texas Medical Center on November 18, 2022. The keynote speaker is David L. Brody, M.D., Ph.D. Dr. Brody is the Director of the Center for Neuroscience and Regenerative Medicine (CNRM) and a professor of Neurology within the

Uniformed Services University of the Health Sciences in Bethesda, Maryland. He is a board-certified neurologist with both a research and a clinical specialization in traumatic brain injury (TBI) and neurodegenerative diseases. His research focuses on accelerating better outcomes for U.S. military TBI patients.

Prior to his current positions, Dr. Brody was the Norman J. Stupp Professor of Neurology at the Washington University School of Medicine in St. Louis, Missouri. Dr. Brody was also the Washington University site director for the National Football League's Neurological Care Foundation.

His achievements have been recognized with several awards, including a Career Development Award from the National Institute of Neurological Disorders and Stroke, and a Burroughs Wellcome Career Award in the Biomedical Sciences. Dr. Brody

is a member of the Editorial Board of the Journal of Neurotrauma and Acta Neuropathological and a permanent member of the National Institute of Health Acute Neural Injury and Epilepsy study section.

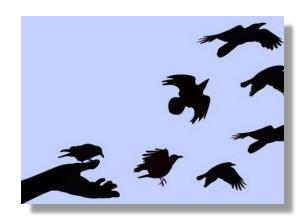
Dr. Brody earned a B.A. in Biological Sciences from Stanford University and his M.D. and Ph.D. from the Johns Hopkins School of Medicine. He completed his neurology residency at Washington University.

In addition to the keynote speaker, the Mission Connect Symposium features a poster presentation and competition. The competition allows graduate students and early postdocs to present their work before leaders in neuroscience research and medicine. They hone their presentation skills and receive critical feedback from senior researchers from multiple institutions. In 2021, 47 posters were on display representing nine regional institutions. Those presenting a poster at the symposium have the option to enter the judging. Senior members of Mission Connect serve as judges for the poster competition. Winners are announced at the end of the daylong event, and TIRR Foundation distributes cash awards. In 2022, the cash awards given to the poster competition winners increased. This decision was based on a review of current award amounts at other competitions. In 2022, awards will begin at \$250 and move to \$500, and then \$1,000 for the best overall score in SCI and TBI.

Leaving the Nest: Mission Connect as an Incubator for Future Leaders in Neurotrauma Repair and Rehabilitation

Matt Rasband, PhD. Professor of Neuroscience at Baylor College of Medicine and Scientific Director for Mission Connect

Mission Connect has long recognized the importance of training and supporting the next generation of scientists. These individuals include undergraduate students getting their first experience with research, graduate and medical students pursuing ground-breaking research as part of their doctoral degrees, postdoctoral research and clinical fellows developing additional research skills, and junior faculty building their own fledgling research programs — I refer to these scientists collectively as 'trainees'. It is these trainees who will build on the foundation of existing knowledge to eventually arrive at treatments for our friends and family living with disabilities from nervous system injuries. How does Mission Connect support these trainees and what is the evidence that our efforts do any good?



Mission Connect supports career development in many ways. I highlight several below:

- An annual scientific symposium where trainees present their latest research in both oral presentations and poster formats. Senior Mission Connect investigators judge these posters and presentations, and then provide feedback to the trainees. Learning how to communicate science is a core competency for a successful scientist.
- The Raymond J. Grill Excellence through Mentoring career development series. This series of workshops teaches trainees critical skills including how to give a powerful presentation, how to increase and maintain a professional scientific network, how to give a 'chalk-talk' and many other professional and research related skills. Workshops are held three times per year and are available to trainees from all participating institutions. These workshops are also build the core competencies needed by a successful scientist.
- Support for trainee attendance and sponsoring of national conferences including the National Neurotrauma Society and the International Symposium on Neural Regeneration. These conferences provide essential opportunities for trainees to share their latest research, expand their network of collaborators, and learn about the latest advances in neurotrauma.
- Pilot and Integrating Perspectives (IP) research grants. The majority of these awards go to junior faculty (Assistant Professors) starting their laboratories or developing their first independent research program. It is frequently difficult for junior faculty to secure major federal funding without preliminary data. These grants are designed to allow these trainees to pursue their best ideas and generate preliminary data leading to future federal grant applications.
- Mission Connect partners with institutions to recruit new faculty whose research is focused on neural repair, rehabilitation, or treatment of traumatic nervous system injuries. These junior scientists recruit their own trainees, write research grants, and make important discoveries frequently with the newest and most sophisticated technologies and approaches they've recently learned during their postdoctoral training. Mission Connect has provided 1:1 or 1:2 matching funds to recruit faculty to tenure track positions. In this way Mission Connect leverages not only foundation resources, but also institutional resources to focus on nervous system injuries. In the last decade Mission Connect has partnered with UTMB, TAMU, UT Health, and Baylor College of Medicine to recruit new faculty. Continued on page 9

Please Join Us!

Members of TIRR Foundation's board of directors and TIRR Family executive committee are welcome to attend the symposium. You can stop by for the poster competition, keynote speaker, or spend the day. If you are interested in attending please contact Carol Garibay, Mission Connect Coordinator (garibayc@tirrfoundation.org, or 713-877-0499.)

7:30—8:10 Coffee and Pastries 10:00—12:00 Poster Viewing and Judging

8:10 Opening Remarks 11:30—12:30 Lunch

8:15-10:00 Podium Presentations 12:30—Keynote Speaker

1:30—Award Presentations



Leaving the Nest: Mission Connect as an Incubator for Future Leaders in Neuro-trauma Repair and Rehabilitation... *Continued from page 7*



What is the evidence that this approach is working and that Mission Connect trainees are having an impact? While it is difficult to measure all the ways trainees are contributing to scientific advances, I highlight here just a few examples.

- Dr. Lingyong Li was one of the first recipients of an IP award. At the time, Dr. Li was a research assistant professor, working in the laboratory of Mission Connect scientist Dr. Kimberley Tolias (Dr. Tolias herself was recruited to Baylor College of Medicine with Mission Connect support in 2007). Dr. Li submitted projects to study mechanisms of neuropathic pain after spinal cord injury. Dr. Li subsequently used data generated from these proposals to secure a \$3.2M grant from the National Institutes of Health. With major funding available, Dr. Li applied for, and secured, a tenure track position as an Associate Professor at the University of Alabama. This recruitment also came with significant financial resources to further his work studying mechanisms of pain after traumatic injury.
- Dr. Trent Watkins was recruited as a tenure track assistant professor to Baylor College of Medicine in the department of Neurosurgery. Dr. Watkins' focus is on the molecular mechanisms underlying axon regeneration. Dr. Watkins' secured major private and federal research funding from the BrightFocus Foundation and the NIH totaling over \$2M. Dr. Watkins was recently recruited back to the University of California San Francisco with an Endowed Chair in Neurology and significant financial resources to expand his research program focused on axon regeneration.

It might seem odd that I highlight the departure of two of our colleagues and collaborators as 'successes'. It is true that we will miss them, but we must remember they are moving on to positions where they will have substantially increased opportunities to make discoveries, mentor their own trainees, and continue to build on the foundation of discovery and support they received through Mission Connect. In this way, Mission Connect will have an influence far beyond the greater Houston area. Although I have highlighted only two of our colleagues, many students, postdocs, physicians, and other colleagues will also move to new institutions and professional opportunities — some remaining in academic or health care settings, and others moving to the private sector (pharmaceutical and biotech companies). We should view all of these as successes, since it is impossible to predict where the next discovery will come from that will improve the lives of the people we love.



TIRR Family Executive Committee Meetings

3355 West Alabama Suite 950 12:00 pm

Tuesday, February 7, 2023 Tuesday, March 30, 2023 Tuesday, September 12, 2023 Tuesday, November 7, 2023

TIRR Family Events:

Taste of TIRR—TBD
TEE IT UP with TIRR—October 23, 2024



Executive and Finance Committee Meetings

3355 West Alabama
Suite 950
11:00 pm Investment Committee
12:00 pm Executive Committee

Thursday, February 9, 2023

Tuesday, April 11, 2023

Thursday, October 19, 2023

Board Meetings

3355 West Alabama First Floor Conference Room 11:30 pm

Thursday, February 23, 2023

Friday, April 14, 2023

Tuesday, November 2, 2023





Dr. Robert G. Grossman Annual Scientific Symposium

Friday, November 18, 2022

Friday, November 10, 2023

Review of Science

Wednesday, April 12 through Friday, April 14, 2023

Monthly Meetings (Friday):

January 13, 2023

February 10, 2023

March 10, 2023

May 12, 2023

September 8, 2023

October 13,2023

December 8, 2023