

2018 STARS Summer Research Program for Teachers
Our 2018 SRP was a huge success! See what the teachers
had to say:

**“The Shape of Things - Protein Localization in *Zaprionus
davidi* Egg Chambers”**



Rebecca Bottin
Rice Middle School

Hosted by:
Miriam Osterfield, Ph.D.
Cell Biology

“Participating in the STARS Summer Research Program was one of the best experiences! I acquired knowledge that I will carry with me in all aspects of my life. Additionally, the science research setting allowed me to develop new techniques and abilities that I will implement with my students. Dr. Osterfield, my Principal Investigator, guided me in creating a lesson related to the research we did this summer. I am so thankful to the entire STARS team and my host lab, The Doubrovinski Lab, for this amazing opportunity.”

**“Quantifying Differences in Soft Tissue and Girth in Common
Hip Conditions of Femoroacetabular Impingement (FAI) Versus
Controls”**

Phillip Jacob Jones
North Mesquite High School

Hosted by:
Dr. Avneesh Chhabra, M.D.,
D.N.B.
Radiology



“The summer STARS research program was a wonderful experience. I came in hoping to hone my laboratory skills and revitalize my classroom experience. Eight weeks later, I am confident the skills I learned will help me to develop activities for my students so that they may gain a better understanding of research and the scientific process.”

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“MEK RASopathy Mutant Protein Expression and Purification”



Abbey Keeton
Richland High School

Hosted by:
Elizabeth Goldsmith, Ph.D.
Radiology

“I am so fortunate that I got to spend my summer at UT Southwestern as a part of the STARS program. I was constantly in awe of the important work that was going on all around me and thrilled that I got to partake in meaningful research. I had to switch out of teacher mode and get back into the role of student, disregarding my fear of asking “dumb” questions. I asked a lot of these “dumb” questions and everyone, Dr. Betsy Goldsmith, Dr. John Humphreys, Dr. Rahda Akella, and Haixa He alike, paused what they were doing to explain or demonstrate the answers to my questions. I felt a part of the team almost immediately and am excited about how the relationships I have formed and the experiences I have had will impact my students. John has brainstormed a plethora of ideas of how various experiments can be effectively translated into the high school classroom laboratory and I am eager to try these ideas with my students. I have learned an abundance of information from both my time in the lab and in conversations with my cohort of teachers and Ms. Lynn Tam and Dr. Joel Goodman. I am walking away from this eight weeks renewed in passion for teaching science and refilled with rich knowledge. STARS is an invaluable program that should be replicated throughout the nation. It has been the most formative professional program that I have been a part of and I’m so grateful for my time at UT Southwestern.”

“Fate Mapping of Postnatal Pericytes”

Denise Lopez
Amon Carter-Riverside High

Hosted by:
Woo-Ping Ge, Ph.D.
Neuroscience



“The UT Southwestern STARS program has been an unforgettable experience. My appreciation for science and research has increased tremendously, as I have seen first-hand the time and commitment invested by the many in this field of study. I am honored to have been able to work in Dr. Ge’s lab, and truly grateful for the patience, teaching, and time invested in me. Being a STARS participant has improved my knowledge and skills of science, while using cutting-edge scientific methods and equipment. I look forward to starting this upcoming academic year and sharing with my students all that I have gained from this amazing program.”

“Targeting the Metabolic Vulnerabilities of Myeloid Leukemias”



Marcelo Migoni
Raul Quintanilla Sr. Middle School

Hosted by:
Jian Xu, Ph.D.
Pediatrics

“The STARS Research Program for teachers has given me the opportunity to enjoy the most fulfilling summer I have ever had as a teacher. Working daily alongside such brilliant and dedicated researchers has further enhanced my passion for science. I feel so invigorated and am actually excited to go back to my campus with new ideas and a fresh perspective.”

“Effect of Growth Factors on Canine Lung Growth and Remodeling After Pneumonectomy”

Lisa Phillips
Prestwick STEM Academy

Hosted by:
Connie Hsai, M.D.
Internal Medicine



“The STARS program has been an amazing opportunity for me to grow as an educator and scientist. The seminars taught by leading researchers gave us an opportunity to learn about current studies and discoveries in a variety of fields. I have truly enjoyed the opportunity to contribute to active research projects. I plan to use what I have learned this summer to create research-based lab activities and science career options to my middle school students.”

2018 STARS Summer Research Program for Students

Name	School	Host
Favour Adeyinka	Young Women's Leadership Academy at Arnold	Dustin Hancks, PhD
Titilayo Arowolo	Lloyd V. Berkner High School	Kevin Williams, PhD
Brian Avendano	Gunter High School	Steve Jiang, PhD
Meghan Backoo	Carroll Senior High School	Digant Dave, PhD
Ty Bogar	Byron Nelson High School	Mark Henkemeyer, Ph.D.
Shannon Boyle	North Forney High School	Zhao Wang, PhD
Nicolás Carrero	Lakeview Centennial High School	Todd Roberts, PhD
Cesar Castillo	Uplift Luna Preparatory	Jacqueline Gallet, Ph.D.
Vincent Dang	Bowie High School	Xiankai Sun, PhD
Anthony De Maria	Texas Academy of Biomedical Sciences	Ganesh Raj, MD, PhD
Ammar Dharani	Hebron High School	Elizabeth Maher, MD, PhD
Sawyer Diaz	Wylie High School	John Hulleman, PhD
Osadebamwen Eliaho	Little Elm High School	Doris Lambracht-Washington, PhD
Hannah Engebretson	Timber Creek High School	James Brugarolas, MD, PhD
Shelly Goel	School of Science & Engineering Magnet (SEM)	Genevieve Konopka, PhD
Mariana Gomez	MacArthur High School	Li Liu, PhD
Hana Hendi	Brighter Horizons Academy	Yuh Min Chook, PhD
Sean Holden	Jesuit College Preparatory School of Dallas	Mike Henne, PhD
Andy Huynh	Uplift Summit International Preparatory	Melanie Cobb, PhD
Sami Joudeh	Midlothian Heritage High School	Helmut Kramer, PhD
Rishika Kaja	Greenhill School	Sherwood Brown, MD, PhD
Kanika Kappalayil	Liberty High School	Vitaly Margulis, MD
Tanvi Kongara	The Hockaday School	Kim Orth, PhD
Surabhi Lamsal	Jack E. Singley Academy	Wei Xu, PhD
Arnold Langat	Harmony Science Academy - Euless	Esra Akbay, PhD
Maanasa Lanka	Ranchview High School	Guo-Min Li, PhD
Natalie Lanners	The Hockaday School	Asaithamby Aroumougame, PhD
Surina Livingston	Poteet High School	Xun Jia, PhD
Pranav Manjunath	Carroll Senior High School	Chao Xing, PhD
Rachel Monger	Greenhill School	John Abrams, PhD
Amanda Moon	Plano East Senior High School	Yang-Xin Fu, MD, PhD
Jessica Nguyen	Centennial High School	Prasanna Alluri, MD, PhD
Victor Nunez	Trinidad Garza Early College High School	Ivan D'Orso, PhD
Sofiu Ogunbiyi	Mansfield Timberview High school	Caroline de Gracia Lux, PhD
Blanca Perez	Waxahachie Global High School	Jacques Lux, PhD
Eddy Pineda	School of Education and Social Services at Townview Magnet	Jennifer Kohler, PhD

2018 STARS Summer Research Program for Students Cont.

Name	School	Host
Kate Pinkerton	Booker T. Washington HSPVA	Diana Tomchick, PhD
Lorelai Pop	The School for the Talented and Gifted (TAG)	Helen Lai, PhD
Andy Qiao	Plano West Senior High	Ondine Cleaver, PhD
Jacqueline Ramirez	Wylie East High School	Alice Ann Holland, PhD, ABPP
Aidan Ravnik	The School for the Talented and Gifted (TAG)	David Corey, PhD
Chethan Reddy	Keller High School	Shin Yamazaki, PhD
Aida Reyes	James W. Martin High School	Ming Chang Hu, MD, PhD
Merissa Rieken	Harmony School of Nature and Athletics	Rajiv Chopra, PhD
Jean Luna Rojo	Irving High School	Charlie Khemtong, PhD
Aubree Rooney	MacArthur High School	Gloria Lena Vega, PhD
Kota Ueshima	Jesuit College Preparatory School of Dallas	Michael Buszczak, PhD
Dalia Vasquez	Uplift Hampton Preparatory	Matthew Petroll, PhD
Henry Wang	Highland Park High School	Munro Cullum, PhD
Brian Zhou	Greenhill School	Chen Liu, PhD
Reed Zimmerman	Jesuit College Preparatory School of Dallas	Murat Cobanoglu, PhD



2018 STARS Summer Research Program for Students

2018 STARS Summer Science Camps

STARS was able to hold 4 Summer Science Camps in biology, chemistry, biotechnology and physics. These workshops gave teachers an opportunity to fine-tune their teaching skills. With the exception of the Biotechnology camp, teachers were coached by two "Master Teachers" as they presented biology, chemistry, and physics lessons and laboratory exercises to 30-35 rising 9th, 10th, and 11th grade students. The students learned concepts in biology, chemistry, biotechnology or physics through presentations and various laboratory exercises. Students also received information about careers in science and medicine, and had an opportunity to tour our research labs.

Biology



Master Teachers



Dr. Treavor Kendall
The Greenhill
School



Dr. Hillary Kasbarian
Ursuline Academy

Biology Teachers

- Marisela Aguilera
Lanier High School
- Adriane Davis
Irma Rangel Young Women's
Leadership School
- Crystal Delley
South Oak Cliff High School
- Nathaniel Edoghotu
Conrad High School
- Victoria Ehiogu
Poteet High School
- Debonie Enge
Conrad High School
- An Nguyen
L.G. Pinkston High School
- Brittany Powell
Barack Obama Male Leadership Academy
- Christopher Rollerson
South Oak Cliff High School

Chemistry



Master Teachers



Dr. Beverly Lawson
The Hockaday
School



**Rachmad
Tjachyadi**
Creekview
High School

Chemistry Teachers

- Cameron Burwell
R.L. Turner High School
- Elliot Charles
Everman High School
- Debonie Enge
Conrad High School
- Cherrie Lemon
Hector Garcia Middle School
- Fatemeh Mirghassemi
Bryan Adams High School
- Joel Strachan
Jack E. Singley Academy
- Wendy Wilson
West Mesquite High School



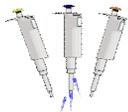
**2018 Biology Workshop
Teachers**



**2018 Chemistry Workshop
Teachers**

2018 STARS Summer Science Camps Cont.

Biotech



Master Teacher



Dr. Barbara Fishel
The Hockaday School

Biotech Teachers

- Shirley Anderson
School of Health Professions
- Jennifer Haught
Mabank High School
- Fatemeh Mirghassemi
Bryan Adams High School
- Mallorie Parks
Crandall High School
- Catalina Pineda
Irving High School

Physics



Master Teachers



Fred Hurst
Newman Smith
High School



Dr. Ken Hahn
John Brown
University

Physics Teachers

- Bryan Bolster
North Mesquite High School
- Teresa Cherry
Mesquite High School
- Willie Fowles
Piedmont Global
- Renita Hines
Harry Stone Montessori Academy
- Jessica Kreais
Marcus High School
- Cherrie Lemon
Hector Garcia Middle School
- Angela Sarrett
Timber Creek High School
- Ashley Steele
Longfellow CAE
- Opal Thomas
South Oak Cliff High School
- Nima Vojdani
W.W. Samuell High School



2018 Biotech Workshop
Teachers



2018 Physics Workshop
Teachers

STARS Upcoming Events

Science Symposia

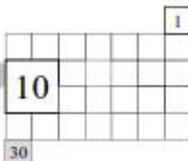
All events are held on the UT Southwestern Medical Center Campus.
For directions and to register, visit the STARS Web page.
www.utsouthwestern.edu/stars

Calendar of Events 2018 - 2019

September

Mini-Symposium:
Inferring Protein Function from DNA

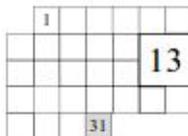
Monday, Sept. 10, 2018
5:30 - 8:00 p.m.
Lecture Hall, D1.502



October

Basic Science Symposium
Autism Spectrum Disorders

Saturday, Oct. 13, 2018
9:00 a.m. - 3:00 p.m.
Lecture Hall, D1.600
Please invite students to attend with you.
All participants must pre-register and confirm registration.



November

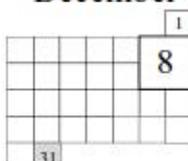
Mini-Symposium:
Immunotherapy

Monday, Nov. 5, 2018
5:30 p.m. - 8:00 p.m.
Lecture Hall, D1.502



December

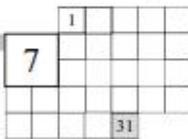
Teacher In-service:
Visualizing the Molecules that Drive Biology - A Workshop on Incorporating Structural Biology into the Classroom
Saturday, Dec. 8, 2018
9:00 a.m. - 3:00 p.m.
Meeting Room, K2.610
Limited Enrollment



January

Mini-Symposium:
How Neurons Find Their Way

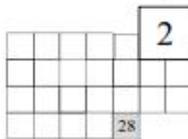
Monday, Jan. 7, 2019
5:30 p.m. - 8:00 p.m.
Lecture Hall, D1.502



February

Teacher In-service:
Biotechnology 101

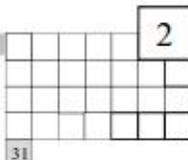
Saturday, Feb. 2, 2019
9:00 a.m. - 3:00 p.m.
Lecture Hall, K2.610
Limited Enrollment



March

Special Symposium:
Women in Science and Medicine

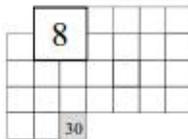
Saturday, Mar. 2, 2019
9:00 a.m. - 3:00 p.m.
Lecture Hall, D1.700
Please invite female students to attend with you. Male students are also welcome. All participants must pre-register and confirm registration.



April

Mini-Symposium:
Energy Homeostasis

Monday, April 8, 2019
5:30 p.m. - 8:00 p.m.
Lecture Hall, D1.502



May

To Register for an Event
STARS events are offered FREE of charge to Texas teachers.

Please register for an event at least two weeks in advance on our website:

www.utsouthwestern.edu/STARS/register



June

Other Important Dates

Monday, Dec. 3, 2018

Deadline to submit requests for Science Fair Judges

Thursday, Feb. 1, 2019 by 11:59 p.m.

Application deadline for the Summer Research Program

Monday, June 3, 2019

Summer Research Program begins

Friday, July 26, 2019

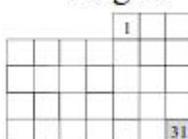
Summer Research Program ends



July



August



QR Code for STARS Registration Website

Science Teacher Access to Resources at Southwestern

The University of Texas Southwestern Medical Center
Voice: 214-648-9505 Fax: 214-648-9508

Exploring Post and Exploring Club at UT Southwestern



Exploring Post for High School Students



Upcoming Meetings: 6 to 7:30pm (D1.502)

Monday-Sept. 24th
Monday-Oct. 22rd
Monday-Nov. 12th
Monday-Dec. 10th
Monday-Jan. 28th
Monday-Feb. 25th
Monday-Mar. 25th
Monday-April 22rd
Monday-May 20th

2018-2019 Exploring Post Officers

- ☉ Kanika Kappalayil , President
- ☉ Brooke Aly, Admin. VP
- ☉ Priya Mandava, Programs VP
- ☉ Shruti Bindingnavile, Secretary

Register For Exploring Post@
<https://ais.swmed.edu/starsevent/user/welcome.do>

Exploring Club for Middle School Students

Upcoming Meetings: 6 to 7:30pm (D1.200)

Monday-Sept. 24th
Monday-Oct. 22rd
Monday-Nov. 12th
Monday-Dec. 10th
Monday-Jan. 28th
Monday-Feb. 25th
Monday-Mar. 25th
Monday-April 22rd
Monday-May 20th



Register For Exploring Club@
<https://ais.swmed.edu/starsevent/user/welcome.do>

STAFF

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PROGRAMS

SYMPOSIA

Basic Science Symposia
Mini-Symposia

OUTREACH

Bureau of Science Fair Judges
Research Assistance
Science Ambassadors
Student Mentoring

SUMMER RESEARCH

Summer Research Program for
Teachers
Summer Research Program for
Students

TOURS

UT Southwestern School of
Health Professions
UT Southwestern Medical
Center
Parkland Health & Hospital
System of Dallas
Children's Medical Center Dallas

IN-SERVICE SESSIONS

Visualizing the Molecules that
Drive Biology - Incorporating
Structural Biology into the
Classroom

Biotechnology 101

SCIENCE CAMPS

Biology
Chemistry
Biotechnology
Physics

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Visit our web site at www.utsouthwestern.edu/stars