STARS NOTES

SCIENCE TEACHER ACCESS TO RESOURCES AT SOUTHWESTERN

STARS Summer Research Program for Teachers 2013 Our SRP 2013 was a huge success! See what the Teachers had to say:

"SLC6A14 Protein Levels in Response to Inflammation"



Kimberly Harkrider Forest Meadow Junior High

Hosted by: Zemfira Karamysheva, Ph.D. Physiology

"I feel that the STARS program has been an invaluable experience for me. It was incredibly enlightening to be part of a lab, immersing myself in experimental design, and actually being able to perform experiments that were meaningful to the mission of the Thomas Physiology Laboratory. I have gained a deeper appreciation for all members of the scientific research community and their efforts towards understanding the complexities of the human body. I am grateful to have participated in STARS and to have been matched with an incredibly supportive mentor. She challenged me to go beyond my comfort zone and eventually to become autonomous, performing my own lab experiments. Many thanks to my mentor Dr. Zemfira Karamysheva and her ongoing support through this process. I am so sad to be leaving and I hope that my short stay at the Thomas lab was mutually beneficial. I cannot wait to translate what I have learned into the classroom, making science more engaging and relevant to my students."

"Characterization of Piperlongumine as a Potent Inhibitor of Glutathione S-Transferase π "

Brandi Bastas Arlington High School

Hosted by: Kenneth Westover, M.D., Ph.D. Radiation Oncology, Biochemistry



"Part of my school's mission statement is to have students become life-long learners. How can I expect kids to want to do this if I, as a teacher, don't embody this and set an example for my students? Each summer I focus on my life-long learning and participate in some kind of learning experience. I cannot express how wonderful the STARS program has been for me this summer. I have learned more than I ever thought was possible and can't express in words how thankful I am for being chosen to participate in this program. I not only have gained knowledge from my lab experience and refreshed my lab techniques, but I know it has made me think of teaching in a whole new light. I am so excited to now take my knowledge and experience from STARS program back to my classroom and engage my students in a whole new way." STARS Notes September 2013 Issue XVIII, Number 1

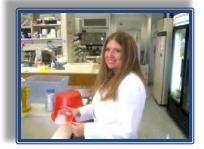
Core funding for the STARS Program is provided by the State of Texas.

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STARS Summer Research Program 2013 cont

"Regulator of Calcineurin I (RCANI) influences adipose differentiation"



Sara Wrenn Peak Preparatory

Hosted by: Beverly Rothermel, Ph.D. Internal Medicine, Molecular Biology

"The experience that I gained through the STARS program was absolutely incredible. I had the opportunity to experience scientific discovery in labs that were completing breakthrough studies, but I also had the opportunity to become a student again. It was difficult, and at times scary, but well worth the experience that I gained. I would encourage every teacher to seek out opportunities like the STARS program, because it can truly transform your teaching and the way you approach science learning in your classroom."

"The development of mycobaterial strains expressing high levels of M. tuberculosis efflux pumps and the isolation and purification of phage specific to M. tuberculosis"

Scott Sharp Rockwall-Heath High School

Hosted by: Nicolai van Oers, Ph.D. Immunology



"The UT-Southwestern STARS program has been instrumental in my classroom teaching. Working under a PI in the lab and the role reversal accompanied with that has reminded me what it is like to be a student. Understanding what goes on in a research lab is no easy feat, and it has enhanced my ability to share complex information to students at an easy to understand level. I will forever remember my experience at UT-Southwestern, and will be forever grateful for the STARS program."

"SPI-6 Response to Acetaminophen (APAP)"



Ashely Brooks Arlington High School

Hosted by: Yonas Getachew, M.D. Internal Medicine

"Working with the STARS summer research program allowed me to reignite my passion for science! I was able to be exposed to real studies that will soon affect millions of real people, and I am able to take this experience and information back into the classroom"

STARS Summer Research Program 2013 For Students

Students Name	School	Host
Dagem Adera	Harmony Science Academy	Denise Marciano, M.D., Ph.D.
lvette Alvarez	Peak Preparatory High School	Rana Gupta, Ph.D.
Olatunde Badejo	North Garland High School	Michael Shiloh, M.D., Ph.D.
Emily Barnes	Episcopal School of Dallas	Dean Smith, M.D., Ph.D.
Yesenia Barrios	Saginaw HIgh School	Zhi-Ping Liu, Ph.D.
Andrew Bazley	Booker T. Washington HSPVA	Jenny Hsieh, Ph.D.
Susy Briones	Williams Preparatory	Ivan D'Orso, Ph.D.
Kevin Chow	Coppell High School	Ezra Burnstein, M.D.
Emanuel Cortes	School for the Talented and Gifted at Yvonne A. Ewell Townview Center	Shawn Burgess, Ph.D.
James Ding	Flower Mound High School	Jennifer Kohler, Ph.D.
Felonie Doss	Trinidad Garza Eearly College High School	Ann Stowe, Ph.D.
Julian Escamilla	Desoto High School	Sandeep Burma, Ph.D.
Cecilia Esquivel	School for the Talented and Gifted at Yvonne A. Ewell Townview Center	Helmut Kramer, Ph.D.
Juan Galindo	Summit International Preparatory	Xiaoying Bai, M.D., Ph.D.
Joseph Giroux	Bryan Adams High School	Fan Gao, Ph.D.
Samya Isa	Plano East High School	Lind Baker, M.D.
Jorge Jaimes	W.H. Adamson High School	Joel Goodman, Ph.D.
Sofia Joison	J.J. Pearce High School	Ian Corbin, Ph.D.
Erik Lamas	W. T. White High School	Michael Buszczak, Ph.D.
Lucy Lin	Lamar High School	Matthew Lewis, Ph.D.
Christy Purnadi	R.L. Turner High School	Ming-Chang Hu, M.D., Ph.D.
Wesley Runnels	School of Science and Engineering Magnet	Genevieve Konopka, Ph.D.
Cecilia Serrano	John A. Dubiski Career High School	Vitaly Margulis, M.D.
Carolynn Van Zandt	Waxahachie High School	Benjamin Chen, Ph.D.
Rachana Vemireddy	Plano East High School	David Boothman, Ph.D.

STARS Summer Research Program 2013 For Students—STARS Associates

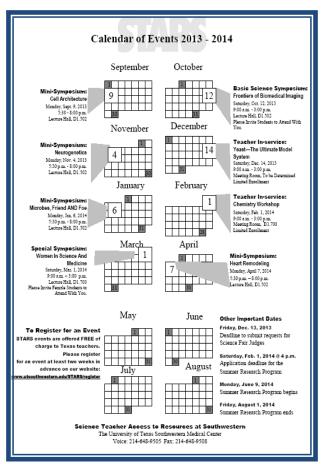
Students Name	School	Host
Sarah Ahmed	Plano East Senior High School	Thomas Carroll, Ph.D.
Dylan Altschuler	St. Mark's School of Texas	Robin Hiesinger, Ph.D.
Mason Amelotte	Jesuit College Preparatory School of Dallas	Deborah Clegg, Ph.D.
Patrick Arraj	Jesuit College Preparatory School of Dallas	Jin Jiang, Ph.D.
Mary Clare Beytagh	The Hockaday School	Kathryn O'Donnell, Ph.D.
Aarohan Burma	St. Mark's School of Texas	Robert Bachoo, M.D., Ph.D.
Jonah Donnenfield	Highland Park High School	Joseph Takahashi, Ph.D.
Angela Hillsman	Greenhill School	Doris Lambracht-Washington, Ph.D.
Trevor Johnson	Jesuit College Preparatory School of Dallas	Dwight German, Ph.D.
Alexis Jones	The Hockaday School	Yuh Min Chook, Ph.D.
Traian Pop	School for the Talented and Gifted at Yvonne A. Ewell Townview Center	Rolf Brekken, Ph.D.
John Rivera	Greenhill School	Christopher Derderian, M.D.
Amy Tao	The Hockaday School	Kim Orth, Ph.D.

STARS Summer Workshops 2013

With funding from HHMI and TWC, STARS was able to hold 3 Summer Workshops in Biology, Chemistry, and Physics. These workshops gave teachers an opportunity to fine-tune their teaching skills. Teachers were coached by two "Master Teachers" as they presented biology, chemistry, and physics lessons and laboratory exercises to 25-28 rising 9th, 10th, and 11th grade students. The students learned concepts in biology, chemistry, 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 science labs.



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



Exploring Post @ UT Southwestern



Upcoming Meetings: 6pm to 7:30pm Monday-Oct. 21st Monday-Nov. 18th Monday-Dec. 16th Monday-Jan. 27th Monday-Feb. 24th Monday-Mar. 24th Monday-April 21nd Monday-May 19th



2013-2014 Exploring Post Leaders

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Imari Parham, Admin. VP
Christine Ramjee, Programs VP
Tiffany Loe, Secretary
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Maria Miranda Education Assistant <u>maria.miranda@utsouthwestern.edu</u>

PROGRAMS Symposia

Basic Science Symposia Mini-Symposia

DUTREACH

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

Proteins & Enzymes Protein Crystal Growth Genetics PCR & Gel Electrophoresis Suturing Techniques

SCIENCE TRIATHLON

Supported by Howard Hughes Medical Institute

SCIENCE WORKSHOP

Supported by Texas Workforce Commission

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UT Southwestern is an equal opportunity institution. Core funding for the STARS program is provided by the state of Texas.

Visit our web site at <u>www.utsouthwestern.edu/stars</u>

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