“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.”

Brandi Bastas
Arlington High School

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

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

“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.”
“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 mycobacterial 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”
<table>
<thead>
<tr>
<th>Students Name</th>
<th>School</th>
<th>Host</th>
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<tbody>
<tr>
<td>Dagem Adera</td>
<td>Harmony Science Academy</td>
<td>Denise Marciano, M.D., Ph.D.</td>
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<tr>
<td>Ivette Alvarez</td>
<td>Peak Preparatory High School</td>
<td>Rana Gupta, Ph.D.</td>
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<tr>
<td>Olatunde Badejo</td>
<td>North Garland High School</td>
<td>Michael Shiloh, M.D., Ph.D.</td>
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<tr>
<td>Emily Barnes</td>
<td>Episcopal School of Dallas</td>
<td>Dean Smith, M.D., Ph.D.</td>
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<tr>
<td>Yesenia Barrios</td>
<td>Saginaw High School</td>
<td>Zhi-Ping Liu, Ph.D.</td>
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<tr>
<td>Andrew Bazley</td>
<td>Booker T. Washington HSPVA</td>
<td>Jenny Hsieh, Ph.D.</td>
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<tr>
<td>Susy Briones</td>
<td>Williams Preparatory</td>
<td>Ivan D’Orso, Ph.D.</td>
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<tr>
<td>Kevin Chow</td>
<td>Coppell High School</td>
<td>Ezra Burnstein, M.D.</td>
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<tr>
<td>Emanuel Cortes</td>
<td>School for the Talented and Gifted at Yvonne A. Ewell Townview Center</td>
<td>Shawn Burgess, Ph.D.</td>
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<tr>
<td>James Ding</td>
<td>Flower Mound High School</td>
<td>Jennifer Kohler, Ph.D.</td>
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<td>Felonie Doss</td>
<td>Trinidad Garza Eearly College High School</td>
<td>Ann Stowe, Ph.D.</td>
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<td>Julian Escamilla</td>
<td>Desoto High School</td>
<td>Sandeep Burma, Ph.D.</td>
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<td>School for the Talented and Gifted at Yvonne A. Ewell Townview Center</td>
<td>Helmut Kramer, Ph.D.</td>
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<tr>
<td>Juan Galindo</td>
<td>Summit International Preparatory</td>
<td>Xiaoying Bai, M.D., Ph.D.</td>
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<tr>
<td>Joseph Giroux</td>
<td>Bryan Adams High School</td>
<td>Fan Gao, Ph.D.</td>
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<tr>
<td>Samya Isa</td>
<td>Plano East High School</td>
<td>Lind Baker, M.D.</td>
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<td>Jorge Jaimes</td>
<td>W.H. Adamson High School</td>
<td>Joel Goodman, Ph.D.</td>
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<td>Sofia Joison</td>
<td>J.J. Pearce High School</td>
<td>Ian Corbin, Ph.D.</td>
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<td>Erik Lamas</td>
<td>W. T. White High School</td>
<td>Michael Buszczak, Ph.D.</td>
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<td>Lucy Lin</td>
<td>Lamar High School</td>
<td>Matthew Lewis, Ph.D.</td>
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<td>Christy Purnadi</td>
<td>R.L. Turner High School</td>
<td>Ming-Chang Hu, M.D., Ph.D.</td>
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<tr>
<td>Wesley Runnels</td>
<td>School of Science and Engineering Magnet</td>
<td>Genevieve Konopka, Ph.D.</td>
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<td>Cecilia Serrano</td>
<td>John A. Dubiski Career High School</td>
<td>Vitaly Margulis, M.D.</td>
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<td>Caroynn Van Zandt</td>
<td>Waxahachie High School</td>
<td>Benjamin Chen, Ph.D.</td>
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<td>Rachana Vemireddy</td>
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<td>Plano East Senior High School</td>
<td>Thomas Carroll, Ph.D.</td>
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<td>Dylan Altschuler</td>
<td>St. Mark’s School of Texas</td>
<td>Robin Hiesinger, Ph.D.</td>
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<tr>
<td>Mason Amelotte</td>
<td>Jesuit College Preparatory School of Dallas</td>
<td>Deborah Clegg, Ph.D.</td>
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<tr>
<td>Patrick Arraj</td>
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<td>Jin Jiang, Ph.D.</td>
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<td>Mary Clare Beytagh</td>
<td>The Hockaday School</td>
<td>Kathryn O’Donnell, Ph.D.</td>
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<tr>
<td>Aarohan Burma</td>
<td>St. Mark’s School of Texas</td>
<td>Robert Bachoo, M.D., Ph.D.</td>
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<tr>
<td>Jonah Donnenfield</td>
<td>Highland Park High School</td>
<td>Joseph Takahashi, Ph.D.</td>
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<tr>
<td>Angela Hillsman</td>
<td>Greenhill School</td>
<td>Doris Lambracht-Washington, Ph.D.</td>
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<td>Trevor Johnson</td>
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<td>Dwight German, Ph.D.</td>
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<td>John Rivera</td>
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<td>Christopher Derderian, M.D.</td>
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<tr>
<td>Amy Tao</td>
<td>The Hockaday School</td>
<td>Kim Orth, Ph.D.</td>
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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.

### Biology

Master Teachers

- Albert Leal
  Frisco Centennial High School

- Jeanie Harding
  Highland Park High School

Teachers

- Shade Badejo
  Skyline High School
- Dylan Cowart
  Kimball High School
- Dawn Dickey
  Moise E Molina High School
- Paige Baker
  Moise E Molina High School
- Monalisa Chadha
  Emmet J Conrad High School
- Matthew Griger
  Mesquite High School
- Nora Lizarraga
  WH Adamson High School
- Nekaya Morgan
  LG Pinkston High School
- Andrew Palacios
  Sunset High School
- Derek Singleton
  Justin F Kimball High School
- Kelly Suckow
  David W Carter High School
- Jennifer Whitaker-Cooley
  Justin F Kimball High School

### Chemistry

Master Teachers

- Jane Smith
  Frisco Centennial High School

- Lara Londot
  New Tech High School

Teachers

- Mae Doubrava
  Center for New Lives
- Sylvia Herrera
  WT White High School
- Rhonda Hyde
  Williams Preparatory
- Laura Atkinson
  Emmet J Conrad High School
- Dawn Dickey
  Moise E Molina High School
- Samantha Everett
  WH Adamson High School
- Tina Harris
  WW Samuell High School
- Jason Hogan
  Sunset High School
- Caitlyn Jones
  David W Carter High School
- Kindra Knight
  WW Samuell High School
- Chris Moore
  WW Samuell High School
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

**2013-2014 Exploring Post Leaders**
- Cecilia Esquivel, President
- Imari Parham, Admin. VP
- Christine Ramjee, Programs VP
- Tiffany Loe, Secretary

Register For Exploring Post @ explorer@UTSouthwestern.edu

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 7th
- Monday-May 19th
STAFF

Joel Goodman, Ph.D.
STARS Director
Professor of Pharmacology
Jan and Bob Bullock Distinguished Professorship in Biomedical Services
joel.goodman@utsouthwestern.edu

Stuart Ravnik, Ph.D.
STARS Associate Director
Assistant Dean, Graduate School
stuart.ravnik@utsouthwestern.edu

Lynn Tam
STARS Manager
lynn.tam@utsouthwestern.edu

Kristie Conner
Education Coordinator
kristie.conner@utsouthwestern.edu

Pearlie Crawford
Education Assistant
pearlie.crawford@utsouthwestern.edu

Maria Miranda
Education Assistant
maria.miranda@utsouthwestern.edu

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
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

5323 Harry Hines Blvd
Dallas, Texas 75390-9137
(214) 648-9505
(800) 81-STARS
FAX: (214) 648-9508

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