

STARS NOTES

SCIENCE TEACHER ACCESS TO RESOURCES AT SOUTHWESTERN

Fall 2011 STARS Events

All STARS activities and events are offered free of charge to teachers in the state of Texas.

STARS SYMPOSIA consists of a series of lectures given by scientist and physicians currently doing research at UT Southwestern Medical Center and affiliated institutions. The science symposia and in-service sessions are excellent resources for teachers to learn about cutting-edge research in the biomedical sciences, to discover new classroom activities, and to obtain professional development credit at the same time. If you wish to attend any event, please pre-register by visiting our online registration page at <https://ais.swmed.edu/starsevent/user/welcome.do>

Mini-Symposium: Asthma – September 12, 2011

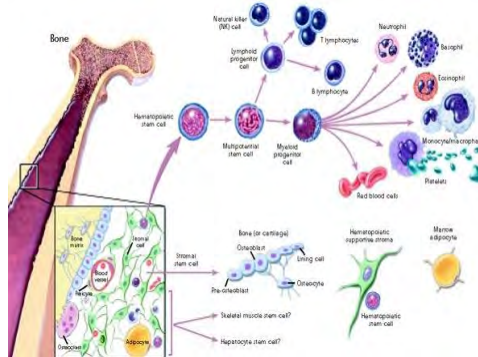
This month our symposium was based on Asthma which is the inflammation of the airways. We started with a talk from Rebecca Gruchalla, M.D., Ph.D., Internal Medicine and Pediatrics, on *Inner City Pediatric Asthma-What are we doing about it?* After the a break, Iwona Stroyanowski, Ph.D., Professor in Immunology and Microbiology, gave a presentation on *The Meaning of Self: MHC antigens and their role in the immune system*. The symposium was closed by Joel Goodman, Ph.D., STARS Director.

Basic Science Symposium: Obesity and Diabetes – October 15, 2011

In collaboration with the UT Southwestern Center for Human Nutrition Obesity Prevention Outreach, our symposium was a success. We had 162 attendees who consisted of teachers, students, and parents. In our first session with Vincent Aguirre, M.D., Ph.D., Assistant Professor in Internal Medicine, he discussed *Translational Medicine*. After Dr. Aguirre, Sandeep Das, M.D., Assistant Professor in Internal Medicine, joined and presented a lecture on *Dallas Heart Study*. Deborah Clegg, Ph.D., Assistant Professor in Touchstone Diabetes Center, closed the first session with *Metabolic Diseases: Women are Different*. After our first break, Joel Elmquist, D.V.M., Ph.D., Professor and Director of Hypothalamic Research, began our second session with a talk on *Strategies to Combat Obesity: Why Your Brain is Not Listening*. This talk was followed by a presentation by Philipp Scherer, Ph.D., Professor in Touchstone Diabetes Center, on *Fat Tissue: Evil Flubber or Protective Friend*. To end our second session, Jeff Browning, M.D., Assistant Professor in Internal Medicine, delivered a great talk on *Fat Deposition in Liver*.

Mini-Symposium: Stem Cells – November 7, 2011

Stem Cells have become an important topic today. Kent Harma, Ph.D., Assistant Professor of Pharmacology, started our symposium with a presentation on *Stem Cells in Research and Medicine* followed by *Lung Cancer Stem Cells* from John Minna, M.D., Professor and Director of Hamon Center for Therapeutic Oncology, to end our session.



Teacher In-service: Science Suitcases – December 3, 2011

Our science suitcase in-service was started with a presentation on *Mutations that cause Lipodystrophy* followed by a demonstration of the Genetic Diseases Science Suitcase by Joel Goodman, Ph.D., Professor of Pharmacology and STARS Director. After a lunch break, Bing Li, Ph.D., Assistant Professor in Molecular Biology, spoke on *Epigenetic Inheritance of Chromatin Modifications*. Melinda Ludwig, Adjunct Instructor in Inquiry Science at Texas A&M University-Commerce at Navarro College, finished the in-service with a presentation on *Teaching Genetics and Evolution with Mrs. Potato Head*.



STARS Notes

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1st Annual
Uplift Education
SCIENCE FAIR
January 21, 2012

The 1st Annual Uplift Education District Science Fair was a success as UT Southwestern Medical Center STARS program collaborated with Uplift Education and hosted their district science fair at UT Southwestern Medical Center. There were 180 projects entered in the Junior and Senior divisions and over 300 students, teachers, and family members who attended this First Annual event. With the help of over 40 grad/med/post-doc students, the judging of the projects was a success. As some of the projects were being judged, different educational programs were provided for the community members. Stuart Ravnik, Ph.D., STARS Associate Director, started off with a presentation on *Preparing for Science Careers* which was followed by *Preparing for Medical Careers and Medical Schools* presented by Angela Mihalic, M.D., Associate Dean of Student Affairs. Following Dr. Mihalic was a presentation by Stephen Wooding, Ph.D., Assistant Professor, Eugene McDermott Center for Growth and Development, on *The Evolution of Taste*. And to close the event, *A Party in Your Gut: Bacteria, Viruses, and You* was presented by Julie Pfeiffer, Ph.D., Assistant Professor, Microbiology. Other hands-on programs included Suture Clinics, Hampton Preparatory's robotics team demonstrations, and the Human Anatomy Game.

STARS Winners:

- ❖ Luci Lamers & Subhang Acharya—Biodiversity
- ❖ Pardis Ghamasaei—Wow, There's how much sugar in that?



Dallas
Independent
School
District



2nd Annual
Science Fair
January 27-28



Our 2nd Annual Dallas ISD Science & Engineering Fair was held at UT Southwestern Medical Center's Gooch Auditorium. With close to 300 projects entered in the Junior and Senior divisions and an attendance of 480 students, teachers, and family members, we could say it was a great success. Parents attended a UT Southwestern STARS sponsored parent education program while the students nervously waited for the conclusion of the Round One judging and the announcement of the top winning projects. Students then gathered to see who were identified as top winners, as the top winners returned to their projects for the Round Two judging and interviews. Any student not participating in the Round Two judging was encouraged to attend a UT Southwestern STARS sponsored Student Education Program. To conclude the event, Joel Goodman, Ph.D., STARS Director, began the awards ceremony by introducing Daniel K. Podolsky, M.D., President, UT Southwestern Medical Center, who gave the opening address to all of the students, teachers, and family members.

STARS Winners:

- ❖ Gwendolyn Edgar—To sustain or not to sustain, Aquaponics is the question?
- ❖ Judith Gasca—Chemical Analysis of 2 Artificial Ecosystems and David Pecina—Effects of Non-Target Pesticide on Germination



3rd Annual HHMI Reunion



On December 17, 2011 all year students of HHMI were invited to an HHMI Reunion with fellow HHMI students at the Plaza of the Americas. There they enjoyed a delicious lunch at J.Pepe's Mexican Restaurant as they reconnected with friends. Once they were done with lunch, Ice Skating was next on their agenda. Everyone had a spectacular time!!

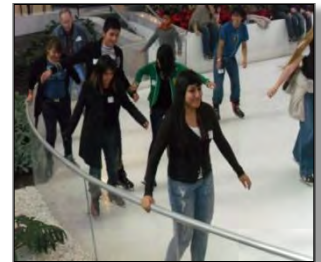
2008 HHMI Students:

- ❖ Cecilia Lopez
- ❖ Christopher Martinez
- ❖ Julian Martinez



2010 HHMI Students:

- ❖ Yesica Burgos
- ❖ Luis Cruz
- ❖ Taylor Davis
- ❖ Christian Estrada
- ❖ Melissa Herrera
- ❖ Viviana Hernandez
- ❖ Iridian Mendoza
- ❖ Sneha Patel
- ❖ Nancy Ruiz
- ❖ Carla Tirado
- ❖ Paloma Yrigollen
- ❖ Christian Rodriguez



2011 HHMI Students:

- ❖ Vincent David De la Cruz
- ❖ Gwendolyn Edgar
- ❖ Denise Garza
- ❖ Christian Martinez
- ❖ Alexis Orozco
- ❖ Alexander Ravnik



STARS Upcoming Events

Science & Health Careers Exploring Post at UT Southwestern



- Learn about careers in science and medicine
- Meet and network with professionals in different areas of medicine.
- Come and meet students from different Dallas and surrounding area schools that share a passion of health careers and science.
- Enjoy free snacks and engage in some fun hands-on activities and experiments.

Upcoming Meetings:
6pm to 7:30pm

Monday-Sept. 24th

Monday-Oct. 22nd

Monday-Nov. 26th

Monday-Dec. 17th

Monday-Jan. 28th

Monday-Feb. 25th

Monday-Mar. 25th

Monday-April 22nd

Monday-May 20th

The explorers meet monthly at UT Southwestern Medical center in Rm D1.200 from 6pm to 7:30pm. Interested students may attend for free and yearly membership is \$10.00. Parents are always welcome!



Summer 2012

Summer Research Program

June 4 thru July 27

STARS Science Triathlon

Teachers June 14 thru July 29

Students June 18 thru July 29

Fall 2012

Science Symposiums

Sept. 10, 2012

Oct. 13, 2012

Nov. 5, 2012

Dec. 1, 2012

The Busy Nuclear Envelope

Brain Fitness & Brain Disorders

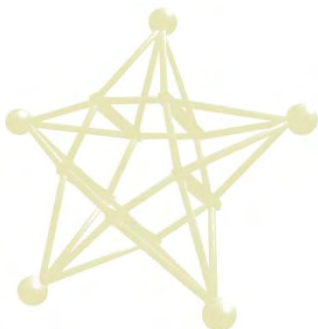
Fat: Is Really Good For You?

Hands-On Biology: Making Learning Memorable!

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



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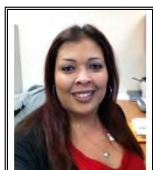
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A Warm Welcome!



Maria Miranda
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Meet the newest member of our STARS staff, Maria Miranda. She joined our staff in September 2011 as a STARS education assistant. She was previously employed for 11 years as a Department Secretary for Memorial Hospital Pembroke in Florida. Maria says, "It's an exciting experience to be able to help students and teachers."

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

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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 www.utsouthwestern.edu/stars