

Science Team Mission Statement

We are a team of teachers passionate about science. We believe a solid understanding of scientific concepts and thinking is essential to being a good citizen who can make informed decisions about a variety of complex issues. We also believe that cultivating scientific literacy will help our students lead healthier, happier, and more successful lives. We want students to fall in love with science as a way of knowing more about themselves and their world. We believe that all students are born scientists who are naturally curious about how the world around them works. We teach students to ask scientific questions and then how to seek answers to those questions using the same techniques and technology used by scientists. We coach students in how to think critically, analyze deeply, and communicate their understanding of scientific principles. We believe that every student is entitled to a rich and engaging science curriculum that prepares them for the dynamic and demanding challenges of college science courses or their career choice. To help students develop as scientifically literate citizens we design our own curricula that emphasizes the interconnectedness of science concepts across disciplines. These cross-cutting concepts strengthen connections between science, technology, engineering, and mathematics so that they are prepared for the increasingly complex combination of skills required in college and career. We prepare our students to become environmental stewards of the Earth and make sustainable decisions. Most of all we love and look forward to getting our students excited about science!

EAST SIDE COMMUNITY HIGH SCHOOL



The ESCHS Science Team is proud to present the 2nd Annual

WOMEN IN SCIENCE NIGHT!

Thursday April 23rd, 2015

Schedule of Events

5:00 - 5:30 pm: Welcome

5:30 - 6:10 pm: Breakout #1

6:10 – 6:50 pm: Breakout #2

6:50 - 7:30 pm: College Fair

Follow us live tonight:





Visit us at

www.eastsidescience.weebly.com

Welcome!

Tonight, impressive women scientists join us from a variety of disciplines to share their story from school to college to careers in science. We know they will inspire you to pursue your own science careers. We, your science teachers, created this *Women in Science Night* just for you because every day we see incredible potential in you!

East Side Science Team

I'm ready to meet the scientists! What should I do before leaving tonight?

- ☐ Ask a scientists at least one question
- Give your business card to at least two scientists and / or college rep
- ☐ Find at least one in-school or summer science opportunity inside your folder
- Add tonight's event to yourCollege Bound Portfolio or Naviance
- ☐ Introduce yourself to next year's science teacher or to Sonia (college counselor)
- ☐ Visit the ESCHS Science Team website: <u>eastsidescience.weebly.com</u>

Special Guest Scientists

Latasha Wright, Ph.D.



Science Educator and Chief Scientist at Cell Motion Laboratories, BioBase at LESGC

Latasha Wright received her Ph.D. from NYU Langone Medical Center in cell and molecular biology. She went on

to continue her scientific training at Johns Hopkins University and Weill Cornell Medical Center. She has co-authored numerous publications and presented her work at international and national conferences. Currently, she is the program director of the BioBase. Her work at the BioBus and the BioBase enables her to share her love of science with a new generation of potential scientists. Students are encouraged to ask questions, formulate hypotheses, and design experiments. Every day that she spends teaching students about science in this transformative environment helps her remember that science is fun. She loves sharing the journey of discovery with students of all ages.

Dr. Anne Plessis



Plant Biologist at NYU. Studied at AgroParisTech and Ecole Polytechnique, France

I try to understand how genes act together to make plants adapt to changes in their environment (in particular

weather conditions that create some kind of stress, for example drought). I am currently working on rice and instead of studying it in the lab, I conduct my experiments directly in the field to make my results more useful for crop improvement.



Marisa Macias, Ph.D.



Evolutionary Anthropologist at the American Museum of Natural History. Completed degrees at Stanford (BA), NYU (MA), and Duke (Ph.D.).

I study fossilized humans, as well as living humans and primates, to understand the locomotion of our ancestors. I primarily focus on the shape and function of the upper limb musculoskeletal system.

Sabrina Campbell



Environmental, Health, and Safety at NBC Universal. Studied Civil Engineering (BS) at Penn State as well as at Nanyang Technological University in Singapore.

I ensure site compliance with local, federal, and state environmental, health, and safety (EHS) regulations and company standards. I look over the development and implementation of all the health and safety programs at the CNBC Headquarters. I also take the reins when it comes to the company's compliance with all environmental standards and regulations.

Sharon Eaddy



Environmental, Health, and Safety at NBC Universal. Studied at California State University Northridge (CSUN), BS Chemical Engineering.

Former Rocket Scientist turned safety professional. Responsible for tailoring federal, state and local regulations into policies and procedures for employees working in facility operations, broadcast engineering operations and staging operations.

Mary Ng



Cancer Immunobiology at Rutgers University and Eli Lilly. Completed degrees at SUNY Binghamton (BS) and Rutgers (MS). I am currently a graduate student at Rutgers University on

an education leave of absence from Eli Lilly in Manhattan. During my time there, I worked as a Research Associate assisting the evaluation of new cancer therapeutic targets for drug development. I have been in the research field for about 9 years.

Katarzyna Marcinkiewicz, Ph.D.



Cancer Researcher at NYU School of Medicine. Studied at Medical University of Warsaw , Poland (MS) and Weill Cornell Graduate School of Biomedical Sciences, NY, NY (PhD in Pharmacology)

I investigate various aspects of a phenomenon called cellular senescence, which occurs in our bodies throughout our entire lives, from helping to shape the developing fetus inside the uterus to maintaining tissue architecture to guarding us from developing cancer. My project in the lab involves employing a culture of fibroblasts- a type of cells- to discover new proteins that regulate cellular senescence. Most cancer cells are able to proliferate and form tumors because they keep the mechanism of cellular senescence "switched off". If we understand better which proteins switch cellular senescence "on" and "off", perhaps we can look for drugs that switch this process back "on" in cancer cells, thus curing some cancer types.

Dr. Judith Absalon



Vaccines Research at Pfizer, Inc.
Completed degrees at
Wesleyan, SUNY Stonybrook,
and Columbian University for
Math, Medicine, and Public
Health, respectively.

Medical Director, Vaccines

Research at Pfizer, Inc. Completed degrees at Wesleyan, SUNY Stony Brook School of Medicine, and Columbia University in Math, Medicine, and Epidemiology, respectively.

I provide medical oversight for the development of vaccines in adolescents and adults. This includes ensuring the safety of volunteers in vaccines clinical trials, developing strategy for vaccine clinical trial development, planning for regulatory submissions to support licensure of new products and new indications for licensed products, summarizing clinical trial findings for regulatory reports and for publication in peer reviewed scientific and medical journals.

Jen Tinsman



Sciences group at the AMNH.

Evolutionary Biology. Studied at Swarthmore College and currently working on a PhD at Columbia University.

I work in a conservation genomics lab at the American Museum of Natural History, and I study adaptive variation in two species of lemur in northwestern Madagascar. I also am the secretary of the Women in Natural

Dr. Sara Oppenheim



Evolutionary Biology and Genomics at American Museum of Natural History. Complete graduate school studies at NC State University (Raleigh, NC).

I am interested in how insects interact with their food. I study herbivorous (plant eating) moths. Many of the species I study are crop pests, yet many of their close relatives are completely harmless to human agriculture. This is because some species are specialists, eating only a few species of plants, while others are generalists, eating everything but the kitchen sink. Generalists feed on a wide range of crops, and if one crop is protected (by pesticides or by resistance to pests), they will move on to another. I use genetic sequencing to try and identify the genes that cause some species to be pests. I am especially curious about how these genes have evolved over the last several thousand years, since humans became farmers. My work combines old-fashioned field research and observation with cutting edge sequencing techniques.

Special thank you's to all of the guest scientists, East Side staff, East Side Parent Association, and of course the students (future scientists) who contributed their time and talents to make tonight a success.

Visit us online at: eastsidescience.weebly.com