



Mirman School for Gifted Children
Celebrates
**WOMEN IN SCIENCE, TECHNOLOGY,
ENGINEERING, and MATH**

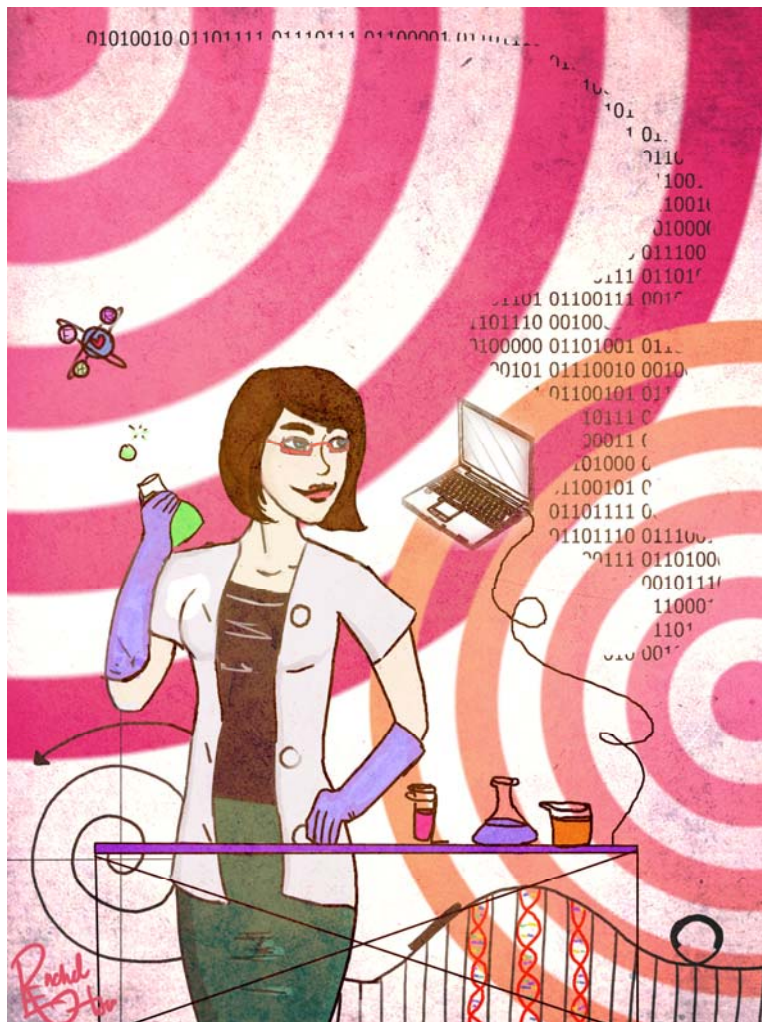


Illustration generously provided by Rachel Hsu, Upper School

March 23, 2011

KEYNOTE SPEAKER



Elaine Chew, Ph.D.

Associate Professor, University of Southern California

Presentation Title: Music, Mathematics, and Computers

Elaine Chew, Ph.D. is an associate professor of electrical, industrial & systems engineering, and music, at the University of Southern California. She is the founder and the director of the Music Computation and Cognition Lab where she conducts and directs research on music and computing. An operations researcher and pianist by training, her research activities aim to explain and de-mystify the phenomenon of music and its performance through the use of formal scientific methods. Dr. Chew received a Ph.D. from the Massachusetts Institute of Technology.

PRESENTERS



Keary Ann Bixby

Entrepreneur, Playa Pilates and Yoga Vista

Presentation Title: Anatomy and Movement with Clay

Keary Ann Bixby is the owner and founder of Playa Pilates and Yoga Vista. Keary combines her passion for business and wellness while running her two companies and sharing her knowledge at workshops and events throughout the year. Some of her leadership and community involvement activities include AVP sponsorship, Camp Harmony, United in Harmony Art Exhibit, Heal the Bay, and working with the Boys and Girls Club of Venice.



Susan Casey

Author

Presentation Title: America's Woman Inventors 1715-Today

Susan Casey is the author of *Kids Inventing! A Handbook for Young Inventors* and *Women Invent! Two Centuries of Discoveries That Have Shaped Our World*. She is also a journalist and her articles and photographs have appeared in *Family Circle*, *Americana*, *USAir*, *Women's Sports*, *Soap Opera Digest*, the *Los Angeles Times*, the *San Francisco Chronicle and Examiner*, *Inventors Digest*, *Electrical Contractor*, and many other publications.

Cheryl Mae Craft, Ph.D.



Mary D. Allen Endowed Chair for Vision Research at the Doheny Eye Institute, University of Southern California

Presentation Title: Crafting a Career in Science

Cheryl Mae Craft, Ph.D. is the founding holder of the Mary D. Allen Endowed Chair for Vision Research at the Doheny Eye Institute, and a University of Southern California Professor with tenure in Ophthalmology and Cell & Neurobiology. As a neuroscientist, her research focus is on understanding the delicate balance of the photoreceptor in health and disease, including age-related macular degeneration and retinitis pigmentosa. She received a B.S. with honors from Valdosta State University, and a secondary teaching certificate from Eastern Kentucky University. In 1984, she earned her doctorate from the University of Texas Health Science Center at San Antonio and completed a postdoctoral fellowship at the NIH National Eye.



Linda E. Duguay, Ph.D.

Research Associate Professor, USC Biological Sciences and Wrigley Institute for Environmental Studies
Presentation Title: A Life in Ocean Sciences

Dr. Linda E. Duguay is a Research Associate Professor in the Department of Biology, Section of Marine Environmental Biology at USC. She obtained her undergraduate education in Biology at the University of Rhode Island and completed her MS and Ph.D. research in Biological Oceanography at the Rosensteil School of Marine and Atmospheric Sciences of the University of Miami on Virginia Key, Florida. Her research focused on life history traits, physiological adaptations, and factors regulating the population dynamics of sub-tropical marine organisms.



Joy Dunn

Propulsion Engineer, Space Exploration Technologies (SpaceX)
Presentation Title: Rockets and Reaching for the Stars

Joy Dunn is a Propulsion Engineer at Space Exploration Technologies (SpaceX). She has been working as the production lead for the thrusters on the Dragon spacecraft for the past two years. Her recent achievements include launching her first engines into space aboard SpaceX's Falcon 9 rocket and getting to explain to Astronaut Sally Ride, the first American woman in space, how her thrusters and the Dragon spacecraft will reenter from orbit. Joy attended the Massachusetts Institute of Technology and graduated with a Bachelor of Science degree in Aerospace Engineering in 2008.



Judy Erickson

Director of Operations-Ground Systems Business Unit, Northrop Grumman
Presentation Title: My Journey Through Space

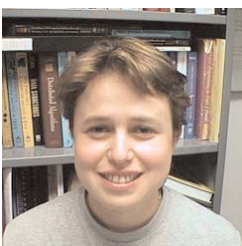
Judy is an executive level engineering manager at Northrop Grumman. During her career, she focused on the space industry, primarily in building systems that operate and control satellites from the ground. Over her 35-year career, Judy has progressed from independently developing software to leadership and management positions within organizations overseeing as many as 1,000 people. She has a Bachelor's Degree in Mathematics from the University of Pennsylvania. She graduated Summa Cum Laude with Honors in Mathematics.



Mary Farrow, Ph.D.

Postdoctoral Fellow, California Institute of Technology
Presentation Title: The Universe on the Head of a Pin

Mary Farrow is a Postdoctoral Fellow at the California Institute of Technology. She is currently working on engineering synthetic cellulases. Her ultimate career goals are to conduct cutting edge scientific research, and to mentor future generations of academic scientists. As a professor, Dr. Farrow intends to lead an interdisciplinary group whose technologies continually redefine the state of the art, and address important biological questions. Mary Farrow received her B.S. in Biology from the Massachusetts Institute of Technology, and her Ph.D. in Biological Sciences in Public Health from Harvard University.



Leana Golubchik, Ph.D.

Associate Professor Computer Science, University of Southern California
Presentation Title: Computational Thinking

Dr. Leana Golubchik is an Associate Professor of Computer Science and the Associate Chair for Ph.D. programs (with a joint appointment in Electrical Engineering) at USC. Prior to joining USC, Leana was on the faculty at Columbia University and the University of Maryland. Her research interests are in internet-based applications, multimedia systems, and computer systems modeling and performance evaluations. Dr. Golubchik earned her B.S. in Computer Science and Engineering and her M.S. and Ph.D. in Computer Science, all from UCLA. She is the mother of Katarina Cheng, a Mirman student.



Ines Horovitz, Ph.D.

Adjunct Assistant Professor, University of California, Los Angeles

Presentation Title: The World According to a Baby Mammal

Dr. Ines Horovitz is an adjunct professor at UCLA in Mammology. She is affiliated with the American Museum of Natural History in New York and the Natural History Museum of Los Angeles County as a Research Associate. She has published some 28 papers in scientific journals on mammal evolution and has conducted fieldwork in Argentina, United States, Cuba, Mongolia and Vietnam, working with both fossils and living mammals. Dr. Horovitz received her Bachelor's degree in Biology at the University of Buenos Aires in 1991 and completed her Ph.D. in Ecology and Evolution at Stony Brook University, NY, in 1997.



Tonica Houston

Los Angeles Police Department

Presentation Title: CSI: Los Angeles

Ms. Tonica Houston has worked for the Los Angeles Police Department for the past sixteen years. Her duties as an FPS include but are not limited to responding to crime scenes to search for and obtain latent fingerprint evidence, inputting latent fingerprint evidence into a criminal database, analyzing fingerprints, and testifying in Los Angeles Superior Courts as an expert witness. Ms. Houston also obtained a B.A. in Human Services from California State University, Dominguez Hills and a M.A. in Psychology from Pepperdine University. She is currently seeking to obtain her Ph.D. in Clinical Forensic Psychology.



Dr. Jenny Johnson, V.M.D.

Veterinarian, Oakhill Shockwave

Presentation Title: So You Want to be a Horse Vet?

With her own personal background in riding and showing, Dr. Johnson has been able to develop a keen appreciation for both the physical and mental demands placed on the equine athlete. This has enabled her to have a unique understanding of the importance of maintaining the equine athlete at the highest level of comfort so that they might perform their job with ease and confidence. She earned her B.A. in Biology from Mount Holyoke College in Massachusetts, Cum Laude, and her V.M.D. in 1986 at The University of Pennsylvania School of Veterinary Medicine. Dr. Johnson is the parent of Mirman student Alexander Johnson.



Maria Klawe, Ph.D.

President, Harvey Mudd College

Presentation Title: Creativity, Math and Computing

President Klawe is the first woman to lead Harvey Mudd College since its founding in 1955. Maria has made significant research contributions in several areas of mathematics and computer science including functional analysis, discrete mathematics, theoretical computer science, human-computer interaction, gender issues in information technology, and interactive-multimedia for mathematics education. Her current research focuses on the development and use of multi-modal applications to assist people with aphasia and other cognitive impairments. She received her Ph.D. (1977) and B.S. (1973) in Mathematics from the University of Alberta.



Carrie Luecke

Ground Systems Maintenance and Upgrades Lead-STSS, Northrup Grumman

Presentation Title: I Work With Bugs

Carrie Luecke has worked for Northrup Grumman for over 25 years. She is currently the Ground Systems Maintenance and Upgrades Lead for the Space Tracking Surveillance System (STSS) satellite. In this position, Carrie is responsible for the maintenance of software and hardware and managing a team of engineers to resolve technical issues with the STSS ground system. Carrie has worked in a variety of positions: Operations Manager, responsible for software installations; Configuration Manager, responsible for software builds and tools administration; and Technical Editor, responsible for technical content of program documentation.



Dr. Linda Liau

Neurosurgeon-University California, Los Angeles Medical Center

Presentation Title: Brain Surgery 101

Dr. Linda M. Liau received her B.S. and B.A. from Brown University, then received her M.D. from Stanford University and Ph.D. in Molecular Neuroscience from UCLA. Dr. Liau is a neurosurgeon and Professor of Neurosurgery at the UCLA School of Medicine. She is Director of the Comprehensive Brain Tumor Program and Director of Neurosurgical Oncology at the UCLA Medical Center in Los Angeles. Dr. Liau is the parent of Mirman student Bianca and alumnus Brandon.



Urbashi Mitra, Ph.D.

Professor of Electrical Engineering, University of Southern California

Presentation Title: Communication Technology

Urbashi Mitra received B.S. and M.S. degrees with high honors from the University of California at Berkeley in 1987 and 1989 respectively, both in Electrical Engineering and Computer Science. In 1994, she received her Ph.D. from Princeton University in Electrical Engineering. She became an Associate Professor in 2000 and currently holds that position in the Department of Electrical Engineering at the University of Southern California, Los Angeles. Her research interests include Multi-user detection theory, code-division multiple-access communications for personal wireless and mobile applications, space-time coding, adaptive algorithms, equalization, wireless resource allocation, ultra wideband communications, and sensor networks.



Mrs. Barbara Rosenbaum

Executive Vice President, Gumbiner Savett Inc. CPA,CVA

Presentation Title: What is Money?

Mrs. Rosenbaum received her B.S. in Accounting at Case Western University and has more than 25 years of accounting experience. Her practice serves a number of industries, including entertainment, technology e-commerce and real estate. She is also a Mirman School Board of Trustee and the mother of Ora and Ari, Mirman School alumni.



Penny Wirsing

Environmental Manager, ExxonMobil Torrance Refinery

Presentation Title: What is Environmental Engineering?

Penny Wirsing is currently an Environmental Group Leader for ExxonMobil's Torrance Refinery where she is responsible for ensuring the refinery's compliance with local, state and federal regulations. Penny earned her BS in Civil Engineering from Michigan State University, and her MBA from the University of Washington. Throughout her career, Penny has mentored young women within her company, in the local community, and at colleges and universities. She is very active in the Society of Women Engineers, and was honored as a Fellow of the Society in 2007. Penny is also active in her community, serving on the Board of Directors and Advisory Boards for several non-profit organizations, and is an active member of Soroptimists International. Special thanks to the following people without whom today's event would not have been possible.

**Special thanks to the following people
without whom today's event would not
have been possible.**

Parent Co-Chairs

Debbie Kotzubei
Lisa Anderson

Administrative Chair

Jocelyn Balaban

**Mirman School Faculty, Administration and
Assistant Teachers**

Alana Brazis
Norm Brennan
Julie Clark-Hansen
Alison Denner
Sarkis Dovlatyan
Karin Durup
Craig Fine
Galen Gary
Leslie Mirman Geffen
Arpa Ghazarian
Ashley Henry
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Paul Kay
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Ana Sofia Nallar
Kate Nallar
Toy Kelly
Grant Olds
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Mike Sewell
Sheila Simmons
Rita Anne Smith
Romulo Tecson
Latu Topu
Nia Ujamaa
Tracy Walker
John Thomas West, III
Larry Wiener
Robert W. Woolley

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Helene Toomey
Shiho Yamamoto
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