 territor y (San Mateo, Santa Clara, Santa Cruz, San Benito and Monterey Counties). The award consists of a plaque and a check for $500 for the winner, with another $500 check being donated to the winner’s chemistry department. The publicity surrounding these awards is expected to increase the visibility and respect accorded to community college science education, both by other chemists and the general public.

The Teacher-Scholar award is the brainchild of Harry Ungar, one of our Alternate Councilors and an emeritus faculty member in the Chemistry Department at Cabrillo College in Aptos, California. Harry was also an innovator of ChemEd Bridges, an NSF funded program that offered travel support for community college faculty to attend ACS meetings.

The past winners of the Teacher-Scholar award are:

2009: Jeanette Medina, Cañada College
2010: TR Dickson, Cabrillo College
2011: Madeline Adamczewski, San Jose City College

The Teacher-Scholar award is the most recently instituted award presented by the Santa Clara Valley Section.

We also present the Harry and Carol Mosher award to the candidate whose work has recognized and encouraged outstanding work in chemistry, advanced chemistry as a
Chair’s Message, continued from front page

profession, and has volunteered service to ACS. The Harry and Carol Mosher award is usually presented at the January dinner meeting, but will be presented in February this year to accommodate the travel schedule for the recipients.

The SCV Section also presents the Ottenberg Service Award and the Radding Award at the annual picnic meeting in early July. The Abraham Ottenberg Service Award recognizes members who have rendered outstanding service to the Section. The Shirley Radding award is presented to the nominee who has demonstrated dedicated, unselfish leadership, service, and significant contributions, over a sustained period of time, to industrial or applied chemistry and to the American Chemical Society at local, regional and national levels.

Please join us at the November dinner meeting to help celebrate the 2012 Teacher-Scholar award, and at the upcoming meetings for the other SCV awards.

Volunteers are welcome at all SCV events. Please contact any of the Section officers www.scvacs.org or simply show up at an event.

Reminder

November Dinner Meeting

Science is Elementary

Dr. Tzipor Ulman, Executive Director and Founder at Science is Elementary

Abstract

Many of the issues facing the US and the world today can only be solved by science and engineering: global warming, access to clean water and air, and cures for cancer, diabetes, and other diseases. Yet according to a recent Index of Silicon Valley, local companies are having a hard time filling positions that require a science or engineering degree and many of the students who arrive to pursue advanced degrees in California return to their home countries. To sustain Silicon Valley’s innovation culture, we need to “grow” our own scientists and engineers. But we are not meeting this challenge today. About half of Silicon Valley’s 5th graders scored below proficient on the state science test (CST).

Additionally, only 20% of the college students surveyed for a recent study felt that their K-12 education prepared them extremely well for their STEM college courses. When asked what could have prepared them better, responses included “more application, less theory” and “more opportunities for hands-on experience and programs.” How do we make science relevant and engaging, especially for the youngest students? What are some fun, inquiry based activities that can be done with students at the youngest age?

Biography

Tzipor Ulman, PhD, is the founder and Executive Director of Science is Elementary (SiE). Tzipor has a passion for science education along with solid experience in the corporate and non-profit sectors. While a graduate student at Stanford, Tzipor co-taught an interdisciplinary course in “Science for Non-Scientists.” While teaching, she realized that many students who had not already developed an interest in science were either lost or uninterested in the subject matter. Sadly for them, science had come too late. If those students had been exposed to science at a younger age, perhaps they would have maintained a lifelong interest in the field. Thus, the idea for SiE was born.

Before founding SiE, Tzipor worked with Fortune 500 and startup clients as a business strategy consultant at Helmer & Associates, consulting on matters ranging from technology spin-offs to corporate business opportunities. She has also served on the boards of several non-profit organizations.

In college, Tzipor was a mentor and tutor and later a site coordinator for Project Step-Up, a mentoring and tutoring program in some of Cleveland’s toughest inner city schools. She was also a volunteer math and science tutor at Mountain View High School and a private tutor for public and private school students.

Tzipor is the proud mother of two boys in whom she has instilled a curiosity about the world and the way things work. She holds a PhD in physical chemistry from Stanford University and a BSc in Chemistry from Case Western Reserve University.

November Dinner Meeting

Date: Thursday, November 15, 2012
Time: 6:00 p.m. Social Hour
7:00 p.m. Dinner
8:00 p.m. Presentation

Speakers: Dr. Tzipor Ulman
Science is Elementary
Executive Director and Founder at Science is Elementary

Location: Biltmore Hotel & Suites
2151 Laurelwood Boulevard
Santa Clara, CA

Cost: $26.00, Broiled pork loin or Vegan stuffed manicotti

Reservations: www.scvacs.org
Sally Peters 650-854-4614

Reservations should be made by November 12th stating your name, address, company or school affiliation, number of people in party. Watch the web site for more information. If you are unable to honor your reservation and do not cancel by Wednesday, November 14th, you will be invoiced following the dinner meeting.
Peter Rusch
Dr. Kristin Sainani and SCVACS Councilor

Unlikely Pair Share Toxin
By Sarah Everts (C&E News)

You wouldn’t expect a great orange tip butterfly and a predatory sea snail to have much in common, but researchers in Austria have discovered that the animals have the same chemical defense weapon: a 63-amino-acid peptide toxin called glacontryphan-M. The compound blocks the action of a voltage-gated calcium channel required for body movement in ants, spiders, lizards, frogs, birds, and even mammals (Proc. Natl. Acad. Sci. USA, DOI: 10.1073/pnas.1209632109). Gert Lubec and colleagues at Medical University of Vienna made the discovery after grinding wings from the butterfly Hebomoia glaucippe for a proteomics analysis designed to figure out why so many bird, ant, and insect predators avoid consuming the butterfly’s wings, choosing instead to feast on its tiny body. The team discovered that the wings contain glacontryphan-M, a potent toxin previously found only in the sea snail Conus marmoreus. The researchers note that they are now looking to see whether glacontryphan-M is also found in other poisonous animals to answer the evolutionary question of why a butterfly and a sea snail share a specific toxin.

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In 2009 I was fascinated with _Sacrament of Fear_ (2007) by local first-time author Will Dresser and reviewed it here. I consider it and this, his second Wes Franklin novel, to be of the enjoyable science-in-fiction genre of novels promoted by familiar Stanford Chemistry Professor Emeritus Dr. Carl Djerassi (www.djerassi.com).

The general plot of _The Methuselah Man_.

Dr. Wes Franklin, a one time child prodigy in medicine, science and engineering, is now a member of a loose civilian covert international intelligence network called the Cloister of Akhenaten. He and his shapely Stanford computer jock colleague are called in to sort out the mysteries surrounding the life of one Jared Keenan Cain, an enigmatic now dying man, who apparently has a near perfect genetic code and the power to heal himself of any injury or illness – forever?

The high action plot sets the stage quickly in a Colma, CA cemetery with the words of Dr. Joe Rosenfeld, “God, I never knew a man who wanted so much to be dead…or deserved it more.” The action continues to high tech Menlo Park/Palo Alto, CA in the center of the Silicon Valley (but in this case the area is better labeled: Biotech Bay). There are overtones of secret illegal government agency intrigue at the highest levels of the federal government, impersonation of federal officers, assassination plots, murder, disarmament, etc. Dresser skillfully keeps you engaged as the story unfolds with events that at times do pleasantly stretch the scientific mind and credibility. The characters are believable and at times endearing. For those who enjoy high action, _The Methuselah Man_ delivers - with travels to Washington DC, Monterey CA, shootings, a wild car chase on the Big Sur highway and finally a move to Las Vegas NV where Jared Keenan Cain apparently commits slow-motion suicide with an unforgettable massive public stroke of violence... or does he?

The book is a page-turner, and at times reads like a Greek tragedy. An underlying unanswered moral question - “Is the ability to live forever a good thing.” Man has sought it and the Fountain of Youth in vain for thousands of years. This reader found at times _The Methuselah Man_ was also akin to reading _MacBeth_ as a high school senior with lots of thoughtless action and mayhem. A reading of _MacBeth_ at age 60 is at a different level after thousands of years. This reader found at times _The Methuselah Man_ reads like a Greek tragedy. An underlying unanswered moral question - “Is the ability to live forever a good thing.”

The next time I read it I will get more out of it – and so will you. Available at www.amazon.com in hard copy and KINDLE format.


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**Book Review: The Methuselah Man**

Written by Will Dresser | Reviewed by Howard Peters, Ph.D., J.D.

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**BUCKET Grant Awarded**

For the second year, the BUCKET Grant of up to $500, has been awarded to a middle school science teacher. The teacher’s application gives a good explanation of the need and proposed use of the funds:

The Jerry D. Holland Middle School has faced severe budget cuts for the past several years. The school does have some of the basic science equipment needed to teach, but they are still reaching into the paper-based labs because the school does not have some of the essential tools to really get the students engaged. Through this grant opportunity, they hope to acquire materials that will aid us in our physical science teaching. The school will use this money for 36 digital timers, to work into our STEMS activities focused on calculating rate of change, specifically in the areas of chemical reaction rates, acceleration, and velocity. The timers are essential in real-life applications to calculate the speed of everyday objects. The money will also be used to purchase micro chemical plates. The micro chemical plates which allows a reduction in the amount of chemicals used in the reaction based chemistry units and also the study of acid-base chemistry. Currently, we use test tubes, which require significantly more of our limited chemical supply, and instead of having multiple students per group; we will be able to allow students a more individualized experience.

The Committee awarded the full amount of the requested funds.

Each year the BUCKET Grant is funded, up to $500 is available for K-12 science class projects. Applications by science teachers can be made through the ACS Santa Clara Valley Section web site: www.scvacs.org

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Welcome to the Santa Clara Valley Section of ACS

Each month the section receives a spreadsheet from national ACS with the names of members new to our section. The members are either new to ACS, have transferred in from other areas, or are the newest members -- students. To welcome you to the section and get to know you, the Executive Committee offers new members a free dinner!! To encourage you to attend a monthly section dinner meeting, we would like you to be our guest. When you register, make certain to mention that you are a new member and you and a spouse (or friend) will be our guests. The dinner meetings are often the 3rd Thursday of the month at a local spot, somewhat convenient to the entire section. If you are unable to attend in the evening, perhaps you would join us for an outreach event, like judging a science fair, participating in the Chemistry Olympiad, or a National Chemistry Week event in October. Then, there is our annual wine tasting and awards picnic in July. The local section is a volunteer organization. Please attend an event, volunteer to help, and get to know your local fellow chemists. Welcome!!

New Members List for October

Neel Alkoraishi
Mohammad A. Alsayah
Dr. Alexander Ayzner
Krista Barzen-Hanson
Shane Boyd
Prof. Noah Z. Burns
Dr. Ta Sen Chou
Dr. Lily Chu
Livia S. Eberlin
Nigama Ekad
Lucas Flagg
Rachel Freed
Erika Geihe
Dr. M J. Greene
Bro. David Gutierrez
Sunhee Hwang
Ivan Ivanov
Dr. Robert S. Kuczenski

Dr. Igor Leontyev
Kenneth M. Light
Brian Andrew Loy
Dr. Dan Marquess
Firouzeh Mohadjerani
Ross Moretti
Meisam Movassat
William Hoang Nguyen
Samba Reyes Njie Jr.
Dr. Ganapati R. Pamulapati
Bruce Drury Phebus
Niko R. Pogorevnik
Dr. Karthikan Rajagopalan
Ali Joseph Rastegar
Dr. Eric Rau
Dr. Jennifer K. Schwartz
Dr. Hui-Wen Shih
Sara Sievers
Dr. George C. Stafford Jr.
Eric Stenehjem
Jeffrey Stocker
Andrea Sutherland
Kristina Ellice Tan
Dr. Hanafi Tanojo
Dr. Andrew Michael Thomas
Anita C. Tong
Dr. Michael Vestel
Lu Wang
Olivia Wells
Dr. Shao-Yong Wu
Dr. Yi Yuan
Dr. Hai-Ren Zhang
Dr. Yong Zhu
Andrew T. Zill

She was chosen by the NTID student body to receive the prestigious 2012 Faculty Humanitarian Award. In addition to being deaf and hard-of-hearing, her students are largely from traditionally underrepresented groups and a majority are female students. She was a successful employee at IBM, but decided to return to NTID to "give back to the Deaf community" and leads by example when she shows students how to be successful because of their disability, and not "despite" it.

She is a member of several ACS committees, including the national Committee on Chemists with Disabilities — a committee of the Minority Affairs group — and often is looked to for her expertise in the area of diversifying the chemical enterprise. Professor Ross and others were recently featured in an award-winning video for the Campaign for Disability Employment’s “What can YOU do?” contest, which has been shown — with tremendous impact — by the upper administration of the United States Department of Labor at a recent summit. She is also active in outreach to children with disabilities, encouraging them to pursue education/careers in the sciences.

Professor Ross is not only changing people’s minds/attitudes about diversity, she is actively working (with profound results) to diversify the field.

Annemarie Ross wins 2012 Stanley C. Israel Regional Award
from ACS Diversity eBrief

The 2012 Stanley C. Israel Regional Award for Advancing Diversity recipient is professor Annemarie Ross. She is an assistant professor at the National Technical Institute for the Deaf, is a champion of diversifying the chemical sciences and a valuable leader to NTID, the ACS, and the scientific community. As a deaf professional, skilled scientist, and caring educator, Professor Ross is an ideal role model to the hundreds of students with disabilities that she has directly helped to find successful careers in chemistry.

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FUTURE MEETINGS

Nov 3-4  SPLASH–Stanford: Learning program for 7th-12th grade students  
www.stanfordesp.org

Nov 14  BioScience Forum  
www.biosf.org/programs.htm

Nov 15  Tzipor Ulman, Founder and Executive Director of Science is Elementary Teacher-Scholars Award  
Biltmore Hotel & Suites  
Santa Clara, CA  
www.scvacs.org

Nov 13, 20, 27  Department of Chemistry Seminars  
San Jose State University  
www.sjsu.edu/chemistry/Seminars/index.html

Jan 13-18  21st Winter ACS Fluorine Conference  
St. Pete Beach, FL  
http://fluorine.sites.acs.org/21stwfc.htm

Jan 17  Santa Clara Valley Section Meeting

Jan 13-18  Stanford Distinguished Alumni Lecture Series, Dr. Daniel Gamelin  
https://chemistry.stanford.edu/events/essler-lectures