CUYAMACA · COLLEGE ·

# *President's Report to the Governing Board*
# *November 19, 2019*

## *Cuyamaca College Student Presents at National Science STEM Conference*

EOPS/RISE student Moises Espinoza, a biochemistry intern at UCSD, was selected to present his findings on Identification of Protein Binding Partners of mascRNA at the Society for Advancement of Chicanos/Hispanics and Native Americans in Science National Diversity in STEM Conference in Hawaii last month.

## *Mole Day*

Science faculty and staff from Cuyamaca College presented their Annual Mole Day Event on October 23rd (named for Avogadro's number: $6.02 \times 10^{23}$!) Students took part in a number of different chemistry activities, including slime-making, as well as watching a "Chemistry Magic Show". The finale was a demonstration of liquid nitrogen being used to make instant ice cream. Students and faculty alike tested the product by eating it.

## *Ornamental Horticulture in the Fine Arts and Graphic Design Faculty Art Exhibition*

The 2019 Annual Fine Art & Graphic Design Faculty Art Show in collaboration with the Ornamental Horticulture Advanced Floral Design class, had another fabulous opening reception on Wednesday, November 6. Selected faculty art work was complimented by floral arrangements created by the OH class. There were approximately 75 guests, faculty and students in attendance. The faculty art show continues until December 6, third floor, B Bldg. East.

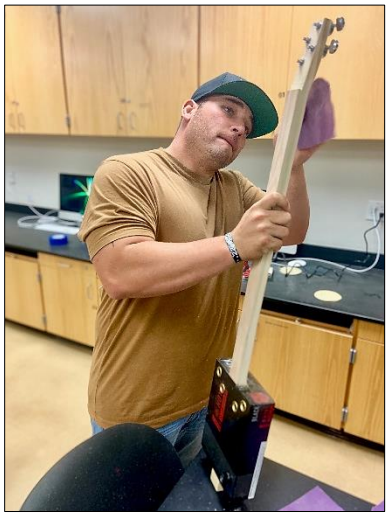
## *Tea Time*

It's always a good time for tea! The CalWORKs office serves up hot tea for students outside their door to welcome them.

## *The October Sky Rocket Project*

Scott Stambach's Physics 290 students were given a mission: design, build, and maximize their rocket's altitude in order to deploy a "prototype" (a model of some payload a rocket might deliver: satellite, space probe, tourism capsule, etc). Students begin by designing their rockets using software called RocketX which allowed them to run simulations for different rocket designs so that they could maximize altitude, minimize drag, and test aerodynamic stability before they actually launch. Once they had a design that worked, they created a schematic of their fins and then cut them out of basswood using the laser cutter in the engineering department. Then they constructed their rocket complete with a combustion propulsion engine and parachute recovery system, which deployed at the peak altitude to allow a safe landing of the rocket. Finally, the students designed an aesthetic and color scheme before painting. After the project, the students, their friends and families, and some Cuyamaca College staff met on Fiesta Island for a launch exhibition. Each student brought posters explaining the science and process behind their rockets and then launched all fifteen rockets before sunset, most of which reached an altitude of 1,500 feet or more. It was very powerful to watch the excitement as the students witnessed the fruits of their labors and calculations paying off after 8 weeks of hard work.

## *Cigar Box Guitars*



Building electric guitars and other instruments out of old cigar boxes, cookie tins, and other household items has been an American folk tradition since the 1840s. In Scott Stambach's Physics 200 (Electricity and Magnetism) class, the history, novelty, and fun of these instruments is leveraged in an active-learning project to help fortify student understanding of circuits, electronic components, and practical STEM skills like soldering and measurement. The project also reinforces scientific content learned in Physics 190, like waves, frequency, and harmonics. Students spend about eight weeks building the guitars, each week focusing on a different aspect of the physical principles employed in the operation of the instrument. Along with the guitars, students also deepen their understanding of the concepts by building small electric amplifiers powered by 9-V batteries. The students are then actually able to plug their cigar-box guitars into their amps and learn their instrument, embedding a bridge to the arts in the project. At the end of the semester we will plan to have a small exhibition that will include poster talks on student process and a performance of the instruments.

## *American Indian Heritage Month Activities*

Various events were held at the college to celebrate American Indian Heritage Month. Ms. Ana Gloria (Martha) Rodriguez spoke about all the work and time in making woven baskets. Due to the resent fires, it has destroyed some of the plants used to make the baskets, which can take up to a month to weave together. This tradition has been passed down through her family. She also talked about the pottery, how it is made. They pottery pieces are then placed in a pit in the ground to fire overnight. Traditional Kumeyaay songs and flute were performed by Kumeyaay Studies instructor Stan Rodrigues (Ipai-Kumayya, Santa Ysabel), and History instructor David Solomon. Stan translated the story behind each of the songs that were sung. The library display is celebrating Native American History Month. The display has items on loan from the San Diego History Museum. There is also a Kumeyaay Ribbon Shirt and Dress on loan from Ral Christman Kumeyaay, Viejas. The display is also filled with items from LRC's Interim Multi Media Technician Maria Gearhart's personal collection.

## *CalWORKs/CARE Halloween Trick or Treat*

Two Student Services departments teamed up to provide a fun Halloween experience for the families of CalWORKs and CARE students. Both staff and children dressed up for the occasion. Each child received a bag with some goodies in it and then they walked around the One Stop to Trick-or-Treat from the many departments. They also enjoyed pizza along with the candy. More fun came from Ms. Smarty Plants from the Water Conservation Garden who taught us about the different parts of a plant and climate. A parting gift for each family was a pot, dirt, and herb seeds courtesy of the Cuyamaca Nursery.

## *Anthony Zambelli Honored for His Dedication to Economics*

Cuyamaca College economics professor emeritus Anthony (Tony) Zambelli has been honored by the California Council on Economic Education with its Excellence in Teaching Award, the latest in a string of recognitions Zambelli has earned during his more than four decades as an educator. The council cited his immeasurable dedication to economic education and innovative leadership through the San Diego Center for Economic Education, which is now based at Cuyamaca College. The Center disseminates programs that promote economic and financial literacy to teachers and students throughout San Diego and Imperial Counties. Under Tony's leadership, the San Diego Center has conducted in-service trainings at Richard J. Donovan Correctional Facility in Otay Mesa to educate prisoners nearing parole on the ins and outs of managing their finances, holds financial literacy workshops for former foster youth, and recently launched the Federal Reserve Institute at the University of San Diego in association with five Federal Reserve Banks.

## *Automotive Technology Gets an Overhaul*

Brad McCombs, along with the other faculty and staff in Automotive Technology, are enthusiastic about their department cleanup modernization implementation. Large flat screens have been installed throughout the lab, and new tool boxes are being installed so that Lab Assistants can be in the lab rather than tool room. A new hoist is also being installed in K-114. The Ford ASSET program started a new cohort with over 18 sponsored students. We have partnered with Palomar College, and have our first sponsored student placed at Poway Ford. Partnership with other colleges' automotive programs is progressing. Additionally, five ASEP students received a scholarship from the Over The Hill Gang.