

# Palo Alto Rotary Pinion

November 13, 2017

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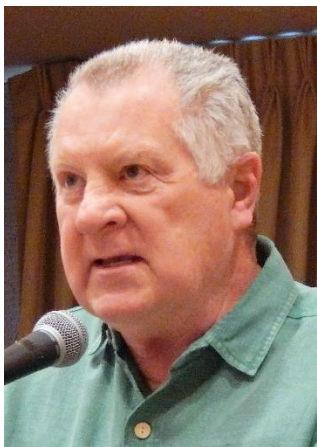
President-elect GINNY opened the meeting early in an effort to accommodate a full agenda. After GINNY explained that eye surgery accounted for President BETSY's absence, JULIE JEROME led us in the Pledge.

For his Thought for the Day, ANDREW PIERCE quoted George Orwell's 1940's cry that restating the obvious is the duty of all intelligent individuals, as apt now as then.



GINNY thanked today's Room Set-uppers STEVE MADSEN and RICHARD KELLER Greeter TERRY FATEHI, Cashier KATIE SEEDMAN (accompanied by REBECCA GERALDI), Pinion writer DON MORGAN, and Pinion Photographer and Editor LYLE CONNELL.

GINNY asked for a show of hands by those who had received last week's Pinion, as many had not. Possibly explaining the non-receipts, ELIZABETH SANTANA said her copy had shown up in the Spam folder.



PETER SHAMBORA informed us that the 100 underprivileged young-person free tickets to the Palo Alto Players Peter Pan that a Club grant funded fell 200 short of the demand. Players is subsidizing 150, leaving 50 to be funded by us, initially through contributions in an envelope at each table, with DICK BUSH (absent due to illness,

or possibly Michigan State's football misfortune on Saturday) generously covering whatever those present did not produce.



IAN KROES received his Blue Badge and a round of applause.

KATIE SEEDMAN for her round received a Rotary Foundation Pin with One sapphire.

DANA TOM told us his



Vocational Scholarship Committee had awarded a large grant to Avis Chiu, a particularly deserving aspirant for a Physician's Assistant degree. Ms. Chiu

said she was born in rural Taiwan and was the first in her family to attend college and Stanford's medical school. She has an ambitious program to enable others to follow in her footsteps.



GINNY called on DENNIS MCGINN to tell three truths and one lie, but it turned out that it was not truthful that he would be in attendance. Into the breach swept HAL MICKELSON, admonishing that one should never count on anything that eats.

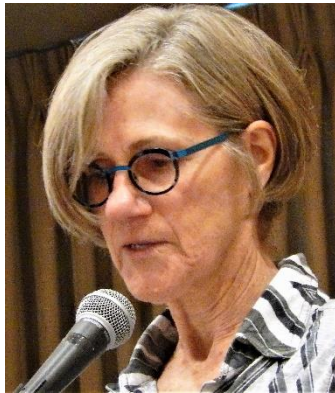
GINNY encouraged us to join a Rotary Polio Immunization trip to India in March and offered to provide details to anyone interested.

**THE PROGRAM:** Pamela Ronald, Distinguished



Professor in the Department of Plant Pathology and the Genome Center at the University of California, Davis: "Tomorrow's Table: Ecologically-based Farming, Plant Genetics and the Future of Food"

Introducing our speaker, SALLY TOMLINSON mentioned several of a very long list of distinguished scientific awards and honors that Professor Ronald has received, including listings in 2015 as one of the world's 100 most influential people in biotechnology and in 2016 as one of the 50 innovators and visionaries who will lead us toward a more sustainable future.



To illustrate advances in plant modifications Professor Ronald showed slides of ancient and modern corn - a hammer needed to crack the former and the latter showing a 100 fold increase in a very available yield. Historically, changes resulted from plant breeders, grafting, and random radiation-induced changes in DNA, and now from genetic engineering. She emphasized that in 40 years of experience with genetic engineering in medicine and crops, not a single case of harm has been reported, in contrast to pesticides and other chemical compounds (for which genetically-engineered materials are developing substitutes). A world-wide consensus thus exists among scientific associations that genetic engineering has caused no harm. She pointed out that genetically engineered changes were strictly regulated by two scientific federal agencies, FDA and EPA, whereas claims of "Natural" and "Non-GMO" were ill defined or unregulated, with "Non-GMO" labels being available for purchase. (In fact, Non-GMO yogurt is produced with a pesticide that other yogurts are free of.)

When Herbert Boyer and Stanley Cohen obtained the basic biotechnology patents at and for Stanford in the 1970s, scientific guidelines were developed to guide and control research and those guidelines are universally viewed as effective to this day.

Adverting to worries about unforeseeable possible future adverse developments, she favored weighing known present benefits of genetic engineering. Using rice as an example in which she specializes, a staple food for over half the people in the world, she noted that 25% of rice is grown in areas that are flood prone, increasingly so, and that until recent improvements rice would die in three days submerged in water. Genetically engineered changes developed rice that withstands two weeks submerged, and that increases yields by 3 to 5 fold. Similarly, the papaya crop in Hawaii was threatened with destruction by a disease but genetic engineering produced higher-yielding and disease-free alternatives.

Unfortunately fake news abounds, often dramatically endorsed by celebrities with no scientific background. Education is one way to counter harmful falsehoods. Professor Ronald recommends two comprehensive analyses of a wide variety of issues or questions, one by US Department of Agriculture in 2014 and one by the National Academy of Sciences in 2016, and a book she co-authored, *Tomorrow's Table: Organic Farming, Genetics, and the Future of Food*, a new version of which appeared yesterday!

## PROGRAMS AND EVENTS

November 20 Phillip Dean, Rotary Club of Livermore, District Paul Harris Society Coordinator: "The Rotary Foundation and Polio Plus"

November 27, Georgie Gleim, President and Owner, Gleim Jewelers: "Diamonds: What You Should Know About Origin, Mining, Grading, and Beauty"