

# WEST VALLEY STEM CLUB

March 2021 NEWSLETTER

[www.engineersaz.com](http://www.engineersaz.com)

The Engineers Club is a social organization which meets monthly for lunch with a speaker on a topic of interest. Spouses and guests are invited and many attend regularly. Short field trips are occasionally scheduled. Membership is open to anyone who has worked in or has an interest in Engineering, Science or Technology. Meetings are held at 11:30am on the first Friday of each month (unless otherwise noted), October through June, at Briarwood Country Club, 135th and Meeker in Sun City West, AZ Currently we are not meeting in person, but are continuing monthly programs by Zoom.

## MARCH 5 PROGRAM

### Science of Preventing Alzheimer's Disease

Mike Malek-Ahmadi, PhD, GStat Bioinformatics Scientist  
Banner Alzheimer's Institute



Can scientists find a way to stop Alzheimer's disease before it ever affects your memory and thinking? Research efforts to prevent the disease are now focused on individuals who may be at risk for Alzheimer's but do not show any symptoms. This fascinating presentation will provide an overview of how Alzheimer's disease is

defined before symptoms appear and how it is being used to develop preventative therapies.

Malek-Ahmadi earned a BS from the University of Arizona, a MS from the University of South Florida, and a PhD from the University of Westminster. He has worked in the field of Alzheimer's disease research since 2003 and is an author on over 60 peer-reviewed journal articles in the areas of Alzheimer's disease, mild cognitive impairment, and normal aging. Dr. Malek-Ahmadi's current work at the Banner Alzheimer's Institute involves the analysis of clinical, neuroimaging, neuropsychological, and neuropathological data used toward identifying and characterizing pre-clinical Alzheimer's disease.

17604 N Buntline Drive  
Sun City West, AZ 85375-5148  
623-748-8222 (Home)  
623-826-0101 (Cell)

Remember a majority of the Club's Dues goes to support the annual STEM Scholarship Program.

We hope you enjoy this Special Bonus Meeting and we thank you for your continued support!

Respectfully,  
West Valley STEM Club Board of Directors

## FROM THE SCHOLARSHIP COMMITTEE By Jim Schlenvogt

We are happy to announce the 2021-2022 West Valley STEM Club Scholarship winner. The Scholarship Committee is one of the long standing committees of the West Valley STEM Club with the goal to recruit qualified student(s) who are entering their Junior Year in a qualified four-year Engineering, Science or Technology University. The West Valley STEM Club Scholarship Committee includes the following members: **Carol Mungas, Karen Campbell, George Zieglansberger, and Jim Schlenvogt (Chairperson).**

On December 18th, the committee met via Zoom with the Glendale Community College (GCC) personnel to discuss the GCC Scholarship process, to update the Scholarship Application, and to complete the 2021 schedule. The GCC Scholarship West Valley STEM Club applications were due on February 10th, and the West Valley STEM Club Committee received three applications. The Committee reviewed the applications and scheduled the Zoom Interviews for February 22nd. The Scholarship Committee recommended to the West Valley STEM Club Board of Directors to approve the award of the following 2021-2022 West Valley STEM Club Scholarship:

**\$3,000 Scholarship: Julian Najera-Amarillas - Computer Science Major - May, 2021 GCC Graduate, 4.0 GPA, to attend ASU in Fall, 2021 – Scholarship Awarded: \$1500 in August, 2021 and \$1500 in January, 2022.** Julian graduated from Glendale Apollo High School. He has a Biology Degree from Grand Canyon University. After working in some medical offices and helping with the digital files, Julian saw the need to obtain a Computer Science degree from GCC and ASU.

**This year with the lack of in-person Club Meetings, no 50/50 Raffle and limited donations, we were not able to provide a se-**

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## BONUS PROGRAM MARCH 9

The West Valley STEM Club's Board of Directors have decided to offer to a "Special Bonus Zoom Meeting to Paid Members Only" on **Tuesday, March 9th at 10:30-Noon.** So far in 2021, our paid membership has dropped below 50 members. We are requesting, if you have NOT already paid your 2021 Annual Membership Dues of \$25.00 by March 6, 2021 you do so as soon as possible. All paid 2021 members only will be provided with the Zoom Meeting login.

The Club has confirmed from **Luke Air Base** they will provide a F-35 jet airplane Pilot as our Tuesday, March 9th Speaker. The F-35 Pilot will brief the group on Luke's mission and the F-35 airplane program. We hope to have additional information at our regular Zoom monthly meeting on March 5th.

For those who have NOT paid their 2021 West Valley STEM Clubs Annual Dues of \$25.00 they can mail the amount to Phil Main at the following address:

Philip Main - Membership Chairperson  
maintwin3@gmail.com

# WEST VALLEY STEM MARCH 2021 NEWSLETTER

## 2021 OFFICERS

President	Steve Sumner
Vice President	Jim Schlenvogt
Secretary	Marilyn Dumond
Treasurer	Carol Mungas
Asst. Treas.	Dave Campbell

## COMMITTEE CHAIRPERSONS

Programs	Peter Rauen & Jim Schlenvogt
Membership	Philip Main
Reservations	Philip Main
Luncheons	Peter Rauen
Scholarship	Jim Schlenvogt
Member at Large	Peter Rauen
Member at Large	George Zieglsangberger
Newsletter / Website	Dave Campbell
Event Audio	Hal Lind/Doug Totel
Event Computer	Paul Scherer
Publicity	Lance Berglund
Field Trips	Open
Hospitality	Open

Email the Board at: [board@engineersaz.com](mailto:board@engineersaz.com)

search institute dedicated to conducting groundbreaking research with life-changing results. TGen works to unravel the genetic components of common and complex diseases, including cancer, neurological disorders, infectious disease, and rare childhood disorders. By identifying treatment options in this manner, TGen believes medicine becomes more rational, more precise, and, well, more personal.

Kristen Kaus serves as TGen's Manager of Education and Outreach. In this role, she is the institute lead for education and community outreach initiatives, she oversees TGen's internship and training programs, most notably its flagship summer program Helios Scholars at TGen. Alongside her education efforts, she also stewards TGen's emerging partnerships within the education community to increase the working knowledge of genomics and educate, train and inspire the next generation of researchers and physicians. In this role, she seeks and establishes productive partnerships with local academic institutions and businesses.

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**cond scholarship. Based on the interviews, the second place student could have also been selected for a scholarship donation, but due to limited funds, this student was not recommended for a scholarship this year.**

Julian Najera-Amarillas will be attending a future West Valley STEM Club's monthly Zoom meeting to provide more information on his background and to thank the West Valley STEM Club for this 2021-2022 scholarship donation. Everyone at the West Valley STEM Club can be proud of their scholarship donations which will assist the future generation of STEM university graduates.

## TREASURER'S REPORT FEB 2021

**General Fund Balance: \$ 7,622.87**

**Membership Total: 89**

**Don't forget to renew your membership for 2021. Mail \$25 checks to Phil Main at 17604 N Buntline Dr Sun City West, AZ 85375**

## 2021 VEST MEETING DATES

**March 5, April 2, May 7, June 4, October 1, November 5, December 3**

## APRIL 2 PROGRAM



### TGen: Scientific divisions, Primary Research and Virtual Tour

Kristen Kaus  
Manager, Education and Outreach  
Translational Genomics Research Institute  
(TGen)

Kristen Kaus will be providing us an overview of the different scientific divisions as well as the primary research that is happening within TGen. As well, Kristen will be providing a virtual tour of the labs located in downtown Phoenix at their headquarters. TGen, the Translational Genomics Research Institute, is an affiliate of City of Hope. TGen is an Arizona-based, nonprofit medical re-

## MAY 7 PROGRAM

### Bioelectronic Devices in the Medical Field

Mark Porter

Sr. Engineering Manager, Technical Fellow at Medtronic  
Education: University of New Hampshire, BS Physics



An experienced engineer in semiconductor manufacturing and process integration, including wafer fab, assembly, and test. In the medical device field, Mark Porter has specialized in reliability statistics and data analysis, including risk assessment and reliability prediction. He leads a combined group of reliability engineers and technicians working in the areas of experimental mechanics, finite element modeling, and product reliability demonstration. The team employs a wide range of techniques to evaluate and improve the reliability of electronic assemblies used in implantable medical devices.

Mark Porter has a solid background in statistical analysis, Design of Experiments, Statistical Process Control, and exploratory data analysis. He has developed a number of applications using Spotfire as the visualization framework, including wafer-mapping, test program regression analysis, and time-to-failure data analysis.