WEST VALLEY STEM CLUB

November 2021 NEWSLETTER 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

NOVEMBER 5 PROGRAM

"Aging of the Brain and Alzheimer Research"

Dr. Matt Huentelman, PhD

Professor Neurogenomics Division, Scientific Director Center for Rare Childhood Disorders, Head Neurobehavioral Research Unit



Dr. Matt Huentelman (pronounced: "Hun'-till-man") is a Professor in the Neurogenomics Division at the non-profit Translational Genomics Research Institute (or "TGen") in Phoenix, Arizona. His research interests center on the investigation of the molecular basis of human nervous system health and disease. The ultimate goal of his research is

to personalize our medical approach to aging and enable an individualized optimization of brain health in order to facilitate successful cognitive aging. This modern approach to brain aging – termed "Precision Aging" – will enable human cognitive healthspan to better match our lifespan and dramatically reduce the burden of age-related brain diseases on the population.

Dr. Huentelman joined TGen in July of 2004 after completing his doctoral work at the University of Florida's Department of Physiology and Functional Genomics at the McKnight Brain Institute. His undergraduate degree is from Ohio University's Department of Chemistry and Biochemistry at Clippinger Laboratories. Dr. Huentelman's career includes visiting researcher fellowships in Moscow, Russia at the MV Lomonosov Moscow State University "Biology Faculty" and in the United Kingdom at the University of Bristol's Department of Physiology. His research is/was supported in part by the National Institutes of Health, the Department of Defense, the Arizona Community Foundation, the Institute for Mental Health Research, Science Foundation Arizona, the Flinn Foundation, and the American Heart Association. He has published over 225 peer-reviewed manuscripts since 1998 which have been cited over 20,000 times by his peers.

Abstract: In this presentation, Dr. Huentelman will discuss several ongoing collaborative research studies focused on understanding brain aging with the goal of helping better match our cognitive healthspan with lifespan. He will discuss the past, present, and future approaches that empower this expanding area of research. Interestingly, much of this draws on the area of Precision Medicine which has traditionally been applied to fight cancer. Join us to learn about how these two scientific worlds are colliding to improve brain health. If you would like to join Dr. Huentelman's study you can do so at any time by visiting the study website www.mindcrowd.org - participation requires just 10 minutes of your time.

PRESIDENT'S MESSAGE Steve Sumner

Our election for Board Members for the 2022 Calendar Year will be at our December 3, 2021 Luncheon meeting. At this time we are still looking for a Vice-Presidential candidate. If you are a "Snow Bird" you are still eligible for the position. We have recently included our Board Meetings on the ZOOM platform so that those Board members who are not able to physically attend may participate virtually. Please consider stepping up to a Board position.

On November 6, 2021 STEM will participate in the <u>City of Surprise's SciTech festival</u>. We will have a table to present our Club to potential new members and hand out business cards. Please consider joining us! The continuing existence of our Club is dependent upon obtaining new members. Please talk up our Club to folks that may have been involved with Science, Technology, Engineering or Mathematics.

The final item is to ask you to please **consider a donation to our Scholarship fund**. Due to not being able to hold In-Person events over the last year and a half, we have not been able to have additional monies available to place into our Scholarship Fund. One of our Club's goals is to furnish an annual scholarship to a student working toward a degree in a STEM program.

Thank you for your help.

WEST VALLEY STEM November 2021

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

MembershipPhilip MainReservationsPhilip MainLuncheonsPeter RauenScholarshipJim SchlenvogtMember at LargePeter Rauen

Member at Large George Zieglgansberger

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

TREASURER'S REPORT November 2021

General Fund Balance: \$ 6419.93 Membership Total: 84

October 50/50 was \$ 62.00 - Congratulations to winner Carol Mungas who donated her winnings to the Scholarship Fund. Thanks!

2021-22 VEST MEETING DATES

December 3, January 7, February 4, March 4, April 1, May 6, June 3, October 7, November 4, December 2

DECEMBER 3 PROGRAM

Hydrogeology of the Phoenix Active Management Area

Jeff Inwood, Chief Hydrologist Arizona Department of Water Resources



Jeff Inwood is Chief Hydrologist for the Arizona Department of Water Resources, a position he has held since August 2018. He has been with the Department since January 2013. Prior to his appointment as Chief Hydrologist, Jeff served in ADWR's Adjudications Section and Colorado River Management Unit. Prior to joining ADWR, Jeff had over 13 years experience in water-resources consulting in the private sector. Jeff has a bachelor's degree in Geology and Business Administration from Augustana College in Rock Island, Ill. Jeff has lived in Arizona for over 30 years.

Abstract: This presentation will provide an overview of the hydrogeology of the Phoenix Active Management Area (AMA). The Phoenix AMA is located in the central portion of the state and includes the metropolitan Phoenix area. The presentation will focus on the general geology of the Phoenix AMA, including the geologic units, depth to bedrock, and land subsidence. Information on groundwater conditions, including groundwater level changes, water demands and supplies, regional-scale groundwater models, and physical availability of groundwater, will also be presented.

2022 MEMBERSHIP DUES

Dues for 2022 are \$25.00 of which half goes to the Scholarship Fund. Please consider making an additional donation to the Scholarship Fund (put scholarship in the memo line). Please mail your check(s), made out to West Valley STEM to: Philip Main, 17604 N Buntline Drive, Sun City West, AZ 85375-5148, maintwin3@gmail.com, 623-748-8222 (Home), 623-826-0101 (Cell)

You Can Help Recruit New Members

- Hand out business cards to friends and family
- Leave business cards at local businesses that have a display area for them
- Attend the Surprise SciTech Festival

If you need business cards, pick them up at the luncheon or contact Jim Schlenvogt at js3820@msn.com



