

# WEST VALLEY STEM CLUB

October 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

## OCTOBER 1 PROGRAM

### "ADOT'S 2022-2026 CAPITAL CONSTRUCTION PROJECTS in ARIZONA

Gregory D. Byres, P.E.  
Director of Multimodal Planning Division, ADOT



Greg obtained his Bachelor of Science Degree in Civil Engineering Technology from New Mexico State University. He worked as a consulting engineer on transportation, airport and utility projects for ten years. Greg then went back to

school which included course studies in Geotechnical Engineering at University of Missouri – Rolla and worked as a geotechnical / materials engineering consultant for ten years. He then started his own engineering consulting firm which provided design services for transportation, airports, utilities and development projects for both private and public sectors, for about twelve years. After selling his firm, Greg moved to Arizona and began working for the Arizona Department of Transportation first as a Senior Project Manager, then State Roadway Engineer, and is currently the Director of Multimodal Planning Division. He has been with



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Briarwood Country Club  
135th and Meeker  
Sun City West, AZ



Membership is open to any adult who has worked in or has an interest in Science, Technology, Engineering, or Math. Meetings are held at 11:00 am on the first Friday of month October through June. The Club sponsors Scholarships for incoming college Juniors in approved STEM programs. [www.engineersaz.com](http://www.engineersaz.com)

## COME ONE! COME ALL!!!

### THE WEST VALLEY STEM CLUB IS LOOKING FOR NEW MEMBERS AND RETURNING MEMBERS

Membership is open to those who have a special interest in the fields of Science, Technology, Engineering or Math. At the next few monthly meetings, each person who attends the luncheon will be given at least five (5) West Valley STEM Club business cards. You are encouraged to keep one card for yourself, and share the other cards with prospective STEM Club members.

Invite them to visit our web site: [www.engineersaz.com](http://www.engineersaz.com) and to sign up for a monthly West Valley STEM Club Meetings, the first Friday of every month during October to June at the Briarwood Country Club. If they have any questions, please have them contact one of the West Valley STEM Club Officers or Board Members.

## PRESIDENT'S MESSAGE

### Steve Sumner

Welcome back to In-Person Monthly Luncheons. It feels great to finally be back to live presentations. Thanks to all of you who have stuck with us during the past nineteen months. Unfortunately we have lost some members as a result of the COVID Pandemic. Please talk up our Club so that we can get our membership numbers up to where they were before the Pandemic.

We have changed the name of our club from V.E.S.T (Valley Engineering, Science and Technology) club to the West Valley S.T.E.M. (Science, Technology, Engineering and Math) club. This new name more accurately conforms to the curriculum many schools are currently using. We have adopted a set of By Laws for the Club. These will be available to view on our web site: [engineersaz.com](http://engineersaz.com).

At our meeting on November 5, 2021, we will present a slate of candidates for the 2022 calendar year. Elections will take

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## 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)

*(President's Message continued from page 1)*

place at the December meeting. We are looking for volunteers for the positions of Vice-president and Secretary. If you are interested in running for these positions, please advise us. Your volunteering for a Board position will ensure the continuation of our club.

## 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 VEST, to: Philip Main, 17604 N Buntline Drive, Sun City West, AZ 85375-5148, [maintwin3@gmail.com](mailto:maintwin3@gmail.com),

## TREASURER'S REPORT April 2021

General Fund Balance: \$ 6147.90

Membership Total: 51

**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. Please consider a donation for scholarships!**

## 2021 VEST MEETING DATES

November 5, Aging of the Brain & Alzheimer

December 3, Hydrology of Arizona

## 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. Huentelman's research interests center around the investigation of the "-omics" (genomics, transcriptomics, and proteomics) of neurological traits and disease. His laboratory's overarching goal is to leverage findings in these disciplines to better understand, diagnose, and treat human diseases of the

nervous system. 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 where he investigated the application of gene therapy in the study and prevention of hypertension. His undergraduate degree is in Biochemistry from Ohio University's Department of Chemistry and Biochemistry at Clippinger Laboratories. Dr. Huentelman's career includes visiting researcher stints in Moscow, Russia and in the United Kingdom.

**Alzheimer's Disease** | The Huentelman lab examines Alzheimer's disease with the use of next generation DNA and RNA sequencing. They are interested in helping to identify an individual's personal risk for developing the disease as early as possible in life. **Aging** | Just like other physiological developmental stages our individual response to the process of aging differs dramatically from person to person. Importantly the natural process of aging takes place over many decades. The Huentelman lab is using genomics and transcriptomics to better understand why some individuals exhibit better cognitive aging when compared to others.

**Cognition** | Our individual differences in brain performance remain of great interest to the field of Neuroscience. Dr. Huentelman's group leverages their innovative web-based approach to study the demographic and genetic drivers of these individual differences in brain performance via their study site at [www.mindcrowd.org](http://www.mindcrowd.org). **Rare Disease** | The genetic dissection of rare human disease is uniquely powered by our ability to sequence the entire human genome and interpret the results with increasing clarity. The Huentelman laboratory utilizes this approach to tackle rare diseases in children - via TGen's Center for Rare Childhood Disorders - as well as in adults.