WEST VALLEY STEM CLUB

SCIENCE TECHNOLOGY ENGINEERING MATH

December 2026 Newsletter

www.engineersaz.com

The WV STEM Club is a social organization which meets monthly for lunch with a speaker on a topic of interest. 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 Grandview Terrace, in the fourth-floor ballroom, at 14515 W. Granite Valley Drive, Sun City West, AZ. **Guests and visitors are always welcome.** Contact Phil Main: maintwin3@gmail.com, 623-826-0101 (cell).

DECEMBER 4 PROGRAM

Parkinson's Disease: How the Brain Degenerates and How Can We Fix It

Jeffrey Kordower
Center Director and Professor, ASU-Banner Neurodegenerative Disease Research Center



Jeffrey Kordower is the founding director of the ASU-Banner Neurodegenerative Disease Research Center and endowed chair as The Charlene and J. Orin Edson Distinguished Director at the Biodesign Institute at ASU, Ph.D. The City University of New York. He has been a pioneer in the field of neural transplantation techniques and his path-breaking investigations into the underpinnings of neurodegenerative disease have made him a leader in the field. Kordower's interests include the study of gene and stem cell therapies, disease pathogenesis including the morphological and molecular changes during the course of neurodegeneration, learning and memory, and aging. He has also been a pioneer in the field of neural transplantation techniques. He comes to ASU from the Rush University Medical Center in Chicago, where he was faculty member for more than 30 years.

Jeff Kordower will discuss how specific regions of the brain degenerate in Parkinson's disease and what directions we are taking to prevent that degeneration from taking place.

SCHOLARSHIP DONATIONS

The West Valley STEM Club is continuing our Annual Scholarship Fund Donation Event at our meetings. Please consider contributing!

PRESIDENT'S MESSAGE
Gary Graunke

When I was much younger the book "Future Shock" was published. Its subject matter was the difficulty we have adapting to disruptive technologies. Today we are experiencing future shock on steroids--propelled by the confluence of massive data collection about most of us, the ability to communicate cheaply and quickly over the internet, and orders of magnitude improvements in computing hardware and it's optimization for AI. With the progress in large language models, directing AI agents does not depend on the use of programming languages. Natural language produces results much faster, but is prone to ambiguity, incompleteness, and other errors. In addition, AI hallucinations and bias to provide an answer often produce fake results. The cover of the August Communications of the Association for Computing Machinery magazine, published by the software professionals society, proclaims that "AI didn't make programming easier, it just made it differently difficult".

Lately we have experienced a number of disruptions in computer services that we have come to depend upon. Some, to be sure, are the result of bad actors using AI to attack services, but also services taken down to install updates to patch the record number of vulnerabilities found by AI use by responsible teams. The urgent nature of securely providing, verifying, and distributing these updates may also create errors that cause disruptions. At the same time, there is much progress in many STEM disciplines.

Today we will exit the artificial and return to the biological, where we learn about Parkinson's disease and its prevention.

2027 MEMBERSHIP DUES

Dues for 2027 are $25.00 of which half goes to the Scholarship Fund. Dues are due before January 2027. **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)

WEST VALLEY STEM December 2026

2026 OFFICERS

President	Gary Graunke
Vice President	Bob Parizek
Secretary	Marilyn Dumond
Treasurer	Carol Mungus
Asst. Treas.	Dave Campbell

COMMITTEE CHAIRPERSONS

Programs	Jim Schlenvogt/ Peter Rauen/ Rick Cecil
Membership	Steve Sumner
Reservations	Philip Main/ Maggie Williamson
Luncheons	Jim Schlenvogt
Scholarship	Jim Schlenvogt
Member at Large	Betty Goldberg
Newsletter	Dave and Karen Campbell
Website	Gary Graunke
Event Audio/Computer	Paul Scherer
Publicity	Lance Berglund
Field Trips	Bob Parizek
Past President	Jim Schlenvogt

Email the Board at: js3820@msn.com

TREASURER'S REPORT NOVEMBER 2026

Gross General Fund Balance	**$13,338**
Net Fund Balance (after payment of obligations)	**$9,238**
Membership	**94**

The 50/50 was won by Bob Ferrell who donated back to the scholarship fund. Thank you for your support!

FUTURE MEETING DATES

12/04/2026 (first Friday of the month)

1/08/2027 (second Friday of the month- due to the 1/1/27 holiday) **start at 10- need to be done by 1 PM

2/05/2027 (first Friday of the month) **start at noon, need to be done by 3 PM

3/05/2027 (first Friday of the month)

4/02/2027 (first Friday of the month)

JANUARY 8 PROGRAM

Supporting Data Center Development

Chelsea Sienicki
Senior Analyst – Large Customer Projects, Strategy & Development, APS



I'm originally from Georgia but have lived in Arizona for over 10 years. I received my MBA from ASU's W. P. Carey School of Business and have been at APS for over 7 years since. I've held roles on the Digital Engagement team, in Customer Research & Insights, and most recently on the Large Customer Strategy & Development team. When I'm not working, I enjoy running, practicing yoga, and spending time with my husband and our puppy, Fiddle.

The presentation will focus on how APS is responsibly planning for and managing growth in our service territory – particularly from large load customers like data centers. I'll walk through the APS Pledge and how it drives our strategy, policies, and process. Some specifics we'll cover include why Arizona has become an attractive market, how current large load growth differs from other types of customers, what responsible and deliberate resource planning looks like, and of course, how we're protecting existing APS customers from cost shifts.

NOVEMBER 5 PROGRAM

Fiber Optic Communications: From Cable Construction to Network Troubleshooting

John Templin

