

# ENGINEERS CLUB OF THE WEST VALLEY

OCTOBER 2011 NEWSLETTER

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

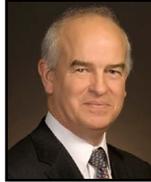
The Engineers Club is a social organization which meets regularly for lunch with a speaker on a technical topic. Spouses are invited and many attend regularly. Short field trips are occasionally scheduled. Membership is open to anyone who has worked in or had close ties to the engineering or scientific fields. Meetings are held at 11:30am on the first Friday of each month, October through June, at Briarwood Country Club, 135th and Meeker in Sun City West, Arizona.

Visitors are always welcome -- Reservations are required -- Just call (623)544-0942 to let us know you are coming.

## OCTOBER 7 PROGRAM

### Little Green Bugs Fueling the Future

Dr. Gary W. Dirks, Director of LightWorks  
Arizona State University



As the nation and the world look for alternatives to crude oil for production of hydrocarbon fuels, microorganisms – algae and cyanobacteria – have come to the foreground as candidates for clean, secure feedstocks. Dr. Dirks will review the security context for continued reliance on crude oil, and the factors driving interest in alternatives. And he will provide an overview of the most promising candidates to replace crude oil and focus on photosynthetic algae and bacteria – “little green bugs” – as a promising option.

Dr. Gary Dirks is director of LightWorks, an Arizona State University initiative that capitalizes on ASU's strengths in solar energy and other light-inspired research. Before joining ASU, Dr. Dirks was president of BP Asia-Pacific and BP China, where he brought an innovative approach to business, particularly projects that supported sustainable development and energy security. In December 2008, he was recognized by the People's Daily as one of the 10 most influential multinational company leaders of the last 30 years of China's economic development.

## NOVEMBER 4 PROGRAM

### Aid in Africa that is Sustainable Rather than Short Term

Dr. Jan D. Snyder, ASU



Sixty years of western aid to Africa has (to a great extent) created a socially pathological sense of entitlement amongst the general population. Exceptions exist but they are not plentiful and most well-intentioned efforts start out with a recipe for failure even before personnel arrive. These plans for support are based on an inflexible, overly-defined plan for what will be done to alleviate a problem as they see it.

Jan and his wife, Clarice, have traveled in Africa since the 1960's and have spent much time there in an effort to learn from those who are most affected by poverty that is often times extreme. For the past six years, they have been involved under the auspices of their nonprofit corporation, Sustainable Resources, Ltd., and have worked to provide a form of aid to the people of Malawi, and now Kenya, that has resulted in long-lasting and sustainable effects. With the collaboration of students and staff in the ASU Fulton Schools of Engineering, they have gradually provided forms of assistance that have resulted in long-term, positive outcomes. Dr. Snyder will discuss some of these issues in his presentation.

## NOTES FROM...

### President Don Block



### A Different Medical Methodology

I hope you enjoyed your summer wherever it was spent. Most importantly I hope you took some time to think about what you want from the Engineers' Club in the future. Hopefully you also have some ideas on how to achieve these objectives. Becoming a member of the Board is the best way to do that. This Club can only continue to exist if its members continue to step up and help. Now is the time!

During the summer I had several discussions with a friend in Silicon Valley; namely, B. Mitchell Loebel, Executive Director, The Med Tech Startup Connection. He and his colleagues have latched onto an idea that could “change the world”. Investigative research work has occurred monitoring how brain signals to the nerves in the body affect bodily functions. For example Professor Jaleel Miyan at the University of Manchester, and his staff, conducted an experiment on an animal subject wherein the nerve signal into the bone marrow was interrupted and the symptoms of Leukemia (such as high white cell and blast cell counts) were subsequently observed. Often the pharmaceutical industry would typically interpret those cells as “defective” and seek to kill them. Perhaps, instead, the maturation process of the cells in the bone marrow was improper. In fact, when the nerve signals into the bone marrow were restored, the Leukemia symptoms receded.

Closed loop control of nerve signals has the potential of eliminating the major epidemics plaguing humanity today! Engineers know something about **sampling rates**, i.e., how often a system's state is queried so that errors in that state can be corrected. The human body is a vast maze of real time feedback control systems, but for most people current medical practice samples the state of our bodies usually less frequently than every 6 months. And that is understandable given that doctors are expensive specialists. What's needed is real time monitoring and correction done by automation. Perhaps future doctoring can be relegated to “tuning” implanted automatic systems ... a far less expensive proposition and a much less burdensome task for the medical profession at large.

A website reference is— [www.TechStartupConnection.Org](http://www.TechStartupConnection.Org)

## DECEMBER 2

Shifting to improved self  
diagnostic testing at home

Dr. Jeffrey T. La Belle, ASU.

## JANUARY 6

To be announced  
later

**2011 OFFICERS**

President	Don Block	546-0557
Vice President		
Secretary	Jodie Lawrosky	238-5256
Treasurer	Bob Latvalla	546-7801

**COMMITTEE CHAIRPERSONS**

Programs	Daryl Lund	271-7337
Membership	Bob Kessler	910-7054
Reservations	Dave Whitehouse	544-0942
Luncheons	Tom Watkins	584-5811
Scholarship	Bill Blackman	214-6550
Scholarship	Don Johnson	975-1657
Scholarship	Don Porter	556-1754
Scholarship	Gerry Montag (Advisor)	546-7963
Member at Large	Les Sherry	975-9081
Newsletter	Bill Harrison	546-4943
Event Support	Ralph Palmer	815-8143
Web Site	David Campbell	518-4871
Publicity	Maurice Hoyt	533-4213
Field Trips	Fred Scheske	556-2892
Past President	Hal Clemett	546-4941

**BOARD EMAIL ADDRESS: [board@engineersaz.com](mailto:board@engineersaz.com)**

**MEMBER SPOTLIGHT**

*An occasional series of articles by Fred Scheske focusing on the engineering careers of Club members.*

**William (Bill) Harrison** is a man with a historical lineage. Born in 1927 in Chardon, Ohio, his family history includes U.S. Presidents William and Benjamin Harrison. Early life taught Bill how to farm and maintain equipment. His father and uncle were Chardon city engineers, running the electric utility, water department and sewage treatment facilities and provided road maintenance. Bill had an early education in engineering. Music was a major part of his life then, playing trumpet in a local orchestra that traveled about northeastern Ohio.

Before the end of WWII, Bill enlisted in the US Navy. After a two year tour of duty, Bill entered Fenn College in Cleveland, earning a bachelor's degree in Electrical Engineering. Hired by GE in 1950, he was assigned to a Test Training Program where he worked on a variety of projects around GE's U.S. facilities. Upon completion of those training assignments, Bill assumed the role of Field Engineer in GE's Cleveland District Office. Bill met Gloria while on assignment in Philadelphia and they were married in 1953.

Bill worked on the installation and startup of a wide variety of GE equipment including the Cyclotron for NASA, electronic controlled machine tools, large steam turbine generators and computer controlled steel mill operating systems. During this time frame he also worked temporary assignments in France, Germany and Japan. He was transferred to other locations which included New York and Virginia. Along the way he did graduate work at Virginia Polytechnic Institute. During his final years he was assigned as the manager of sales and service for the far east region of the world and spent considerable time in Taiwan. Bill retired after 38 years service with GE.

His many life accomplishments include: becoming a registered professional engineer in Ohio and Virginia, earning a private pilot's license, performing volunteer duties in a variety of school and public service organizations and being an active member in the Methodist Church. Bill has served our engineers club as president and board member.

**WELCOME BACK****TREASURER'S REPORT 8-31-2011**

General Fund Balance:	\$6,376.30
Scholarship Fund Balance:	\$2,201.42

**LUNCHEON MENUS**

**October 7: Pork Cutlet Grilled Golden, Mashed Potatoes, Chef's Vegetable and Fudge Nut Brownie with Whipped Cream. (Entrée Option: Fruit Plate)**

**November 4: Turkey Medallions with Cranberry Sauce, Served with Apple Walnut Stuffing, Green Beans Almondine and Apple Turnover with Vanilla Ice Cream (Entrée Option: Fruit Plate)**

**RESERVATION POLICY**

**The cost of the monthly luncheon is \$17.00 per person.** The reservation deadline is 6PM Monday before the meeting. Late reservations cannot be guaranteed the regular meal. Call Dave Whitehouse if you cannot keep your reservation. **The full luncheon cost is due for "no-shows" and cancellations after 6PM on the Wednesday before the meeting.**

**RESERVATIONS Dave Whitehouse (623)544-0942**

**WELCOME NEW MEMBERS**

Mia Ferrell, Bryan Giesler, and Dave Campbell

**Club Membership is 146**



Dr. Jan Snyder greeting friends in Africa