

## **ENGINEERING** THE "FOUNTAIN OF YOUTH"

A technical, scientific, entrepreneurial perspective on human longevity **Dinner and Expert Panel Event** 



Larry Ring, Ph.D. **Principal Engineer** AMGEN



Peter Grandsard, Ph.D. **Executive Director** Research Amgen



Director

Sciences

Amgen



Bradford Gibson, Ph.D. Steven Hawkins, Ph.D. Professor **Discovery Attribute Exercise Science** California Lutheran Univ.



Dhruvajyoti Roy, Ph.D. Scientist and IEEE Senior member

November 9, 2017 6:30 pm - 8:30 pm Hub 101 31416 Agoura Road, Pavilion Westlake Village, CA, 91361 \$20 ticket purchased on line with 50% discount for IEEE members, all accompanying guests, and students \$30 at the door

## **Panel Members**

**Dr. Larry Ring,** Principal Engineer at Amgen. Dr. Ring describes his professional life as follows: "I began my career in Medical Device Engineering many years ago straight out of UCLA. It has been my intent and privilege to work on products that help to heal people ever since. Implanted infusion pumps, orthodontic braces, fiber optic arterial sensors, and spinal catheters are among the products I developed that made it onto the market. Non-medical products in my past included magneto-optical missile detection sensors and anoxic display cases for the Royal Egyptian mummies. Along the way I worked for large and small organizations and ran my own startup company for 15 years. My proudest accomplishments were helping to raise and home school two fine young children now attending California Universities and serving the community as a volunteer firefighter for more than 10 years."

**Dr. Peter Grandsard** is currently an Executive Director of Research at Amgen responsible for the characterization of pre-clinical-stage therapeutic candidates. Trained as a chemical engineer (BE/ME) and as an analytical chemist (Ph.D.), Dr. Grandsard started designing and implementing the new R&AT laboratory for automation and instrumentation. Later he led that team of engineers, physicists, biologists, and chemists, to increase therapeutics discovery and development efficiency. For the past 10 years, he leads a diverse organization (DAS, Discovery Analytical Sciences) whose task it is to analyze therapeutic candidates and reagents, biologics or synthetics alike, in order to understand their structures, their physical-chemical properties, and their protein target binding properties.

**Dr. Bradford Gibson** (Moderator) is currently Director of the Attribute Discovery Sciences at Amgen. His work taps into the immense knowledge he built when Professor at the Buck Institute for Research on Aging where he was the Director of the Buck Institute Chemistry and Mass Spectrometry Core. Dr. Gibson's work is focused on understanding the biological and chemical processes that are common to both age-related diseases and aging.

**Dr. Steven Hawkins** joined the Exercise Science Department at CLU in the Fall of 2007. He teaches Exercise Physiology, Advanced Exercise Physiology, and Statistics. His research focus is skeletal health and musculoskeletal aspects of aging. This has included projects on bone and muscle changes in response to acute and chronic exercise, aging athletes, and bone differences among various ethnic groups. Dr. Hawkins received his PhD in Exercise Physiology & Gerontology from the University of Southern California in 1999. He is a Fellow of the American College of Sports Medicine.

**Dr. Dhruvajyoti Roy** is a scientist and IEEE senior member. His research focus is cancer diagnostics and single molecule detection. His multi-disciplinary research bridging biology, chemistry and medical diagnostics showed potential for early diagnostics. He designed and developed an atomic force microscopy (AFM) based methodology for ultra-sensitive detection of biomarkers. He worked as a Lead Scientist at Cynvenio Biosystems where he focused on LiquidBiopsy technology for the isolation and molecular characterization of tumor cells from a standard blood draw. Dr. Roy received the 2017 IEEE Buenaventura

Section Outstanding Scientist Award for the development of biomedical technology in the field of Atomic Force Microscopy Detection and Cancer Diagnostics.