

BIOSKETCH 2008
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Dr. Kost studied Engineering at Stanford University (BS, 1967) and received the Master's degree in Engineering-Economic Systems (EEP) prior to entering the Medical Scientist MD-PhD training program at the University of California (UC). He received his PhD in Bioengineering [NIH Bioengineering Traineeship] from UC San Diego and his MD from UC San Francisco.

Dr. Kost's clinical residency included training in Internal Medicine and Neurology at UCLA, and Laboratory Medicine at the University of Washington, Seattle, where he was Chief Resident and a postdoctoral researcher with Dr. Jim Bassingwaighe, Bioengineering Department, prior to becoming boarded in Clinical Pathology by the American Board of Pathology.

At UC Davis for over 25 years, Dr. Kost is Director of Point-of-Care Testing and Clinical Chemistry for the UCD Health System, and a tenured Professor and Chair of the Quality Program in the Department of Pathology and Laboratory Medicine. In 1995, he founded the Point-of-Care Testing Center for Teaching and Research (POCT•CTR) in the School of Medicine. He was elected to the National Academy of Clinical Biochemistry (NACB) in 2001 and has served on its Board of Directors.

Dr. Kost is the Editor of *Principles and Practice of Point-of-Care Testing*, published by Lippincott, Williams, and Wilkins (LWW) in 2002, and a founding member of the Editorial Board of the companion journal, *Point of Care: The Journal of Near-Patient Testing and Technology*, now in its seventh year of successful production by LWW. He serves on several editorial boards, including *Critical Care Medicine*.

After promoting point-of-care testing (POCT) widely in the United States and Europe in the 1980's and 1990's, Dr. Kost lectured in Asia for several years, culminating in 2003-2004 with the receipt of a Fulbright Scholar Award in Demography-Economics-Medicine at Chulalongkorn University, Bangkok, and subsequently, received UC Pacific Rim and Outreach/ International Program grants to develop national resources in POCT and optimal health care delivery systems for Thailand and other Southeast Asian countries.

Fulbright Scholar collaborations in Southeast Asian produced two foreign language monographs, *POCT for Thailand*, in the Thai language, and *Gambaran Tentang Point-of-Care Testing-Sasaran, Pedoman, Prinsip Dan Jaminan Mutu (Overview of POCT: Goals, Guidelines, Principles, and the Assurance of Quality)*, in Bahasa Indonesia, both published in 2006.

As Affiliate Faculty at Chulalongkorn University, Dr. Kost's research team there has performed health care field surveys of the tsunami provinces, hill tribe villages, the Golden Triangle, and underserved Isaarn in Thailand; pediatric hospitals in Cambodia; and public hospitals in Vietnam, in order to optimize POCT in small-world networks for low resource settings. The most recent field survey focused on optimizing cardiac biomarker testing, POCT deployment, and regional acute patient care in the vicinity of the Mekong River along the Lao-Thai border in Northern Isaarn in December 2007.

Currently, the POCT•CTR focuses on the accuracy of POCT, revealed by locally-smoothed median absolute differences curves, a math-statistical method introduced for clinical POCT evaluation in 2007, critical-emergency-disaster care as a NIBIB POC Technologies Center in collaboration with Lawrence Livermore National Laboratory (LLNL), and rapid pathogen detection in sepsis using multiplex PCR to perform nucleic acid testing in whole blood, a clinical study published this year in *Critical Care Medicine*, with Richard Louie, PhD, UC Davis-LLNL Center Fellow, as first author.

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