



American Chemical Society

Central Pennsylvania Local Section

ACS Business Dinner Meeting and Talk

Wednesday, March 27th, 2013, 6:00 p.m.

Dinner at 6:00 p.m., Talk at 7:15 p.m.

Seven Mountains Wine Cellars

324 Decker Valley Road, Spring Mills, PA 16875

Rapid Testing: Is It the Future of Forensic DNA?

Mitchell M. Holland, Ph.D.

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Abstract: Point of arrest DNA analysis and next generation DNA sequencing are emerging as future advanced technologies in forensic science. Police precincts will soon have the ability to take samples directly from arrestees, perform forensic DNA tests, and search local databases in an attempt to solve cold cases. Complete genome sequences at a cost of less than \$5000 are currently a reality, so how soon will it be before the analysis of much of the human genome is captured in a forensic investigation? Each of these approaches will make it easier to solve crime, but each method also has legal considerations that will need to be addressed, including whether an individual's civil liberties are being violated. This presentation will provide an overview of the technologies and highlight some of the legal considerations that are being addressed at the Supreme Court level.

Biographical Sketch:

Dr. Mitchell M. Holland got his Bachelor of Science in Chemistry from Hobart College in Geneva, New York (1984), Ph.D. in Biochemistry at the University of Maryland College Park (1989). He had been Postdoctoral Fellow in Human Genetics at the Johns Hopkins University School of Medicine in Baltimore, Maryland (1990). Dr. Holland is the Fellow in the American Academy of Forensic Sciences, he has been an adjunct faculty member at a number of colleges and universities, served on the Editorial Board of the Journal of Forensic Sciences and the International Journal of Legal Medicine from 1992-2000. He helped develop the Forensic Science program at Penn State in 2005. From 200-2005, Dr. Holland was the Senior Vice President, Operations and Laboratory Director of The Bode Technology Group (Bode) - part of the victim identification project associated with the terrorist attacks on the World Trade Centers. He held various positions at the Armed Forces DNA Identification Laboratory (AFDIL) in Rockville, Maryland from 1991-2000, including Scientific Laboratory Director from 1993-2000 - part of the teams that helped identify the remains of 1st Lt Michael Blassie (the Vietnam Unknown Soldier) and Tsar Nicholas Romanov. He has given 100's of lectures and/or presentations on forensic DNA analysis (dozens at professional conferences and seminars) and published 42 peer reviewed journal articles, book chapters and other manuscripts.

Place: Seven Mountains Wine Cellars

located on Decker Valley Road, just one mile off of US Route 322 between Lewistown and State College, PA

GPS Address: 324 Decker Valley Road, Spring Mills, PA 16875

Time: ACS business meeting and dinner will start at 6:00 p.m. and the Talk will start at around 7:15 p.m.

Dinner: Buffet style: Honeybaked Ham sandwiches, water, wine. Wine tasting is included in the price. Cash bar for wine by bottle or glass will be available.

Cost: ACS members and guests \$10, graduate students \$5, undergraduate students and high school teachers free; payable by check or cash at the dinner.

RSVP: Send an e-mail to Peter Baran at baran@juniata.edu no later than **noon, Monday, March 25**, 2013.