

## Biographical Information

Effective 29 April 2018

W. Jeffrey Hurst retired as Principal Scientist at the Hershey Company Technical Center in early 2017. His research emphases were in separation science using standard, micro and nanotechniques, laboratory automation, the evaluation of new and emerging analytical technologies, the development and evaluations of methods for the determination for food allergens and the application of nontraditional analytical methods to food analysis. He was a member of the Scientific and Regulatory Affairs directorate and one of his foci was GMO including the development and installation of a GMO analysis and food fraud including EMA. He was the founding editor and editor in chief of Laboratory Robotics and Automation, an international journal with a focus on all facets of automation in the laboratory until it ceased publication. He is the founding editor of the Wiley-Interscience book series on laboratory automation serves on the editorial board of the Journal of Liquid Chromatography and was founding editor of Seminars in Food Analysis. He was a contributing editor for Scientific Computing and Instrumentation and prepared a monthly column on some aspect of instrument and laboratory operations. He is a member of the American Chemical Society (ACS), a Professional Member of the Institute of Food Technologies, American Society of Mass Spectrometry (ASMS), a Fellow of the American Institute of Chemists (FAIC), a member of the Society of Ancient Medicine and a Diplomate of the American Association for Integrative Medicine (DAAIM). He is a member of the Board of Directors of SMPAC, Southern Maya Project for Archaeology and a member of the FAMSI Botanical Working Group. He has served a co-leader of the Chemical Measurement Subgroup in the ACS/AIChE/CMA Chemical Industry Technology Roadmap and was Co-PI on an NSF grant exploring the use of cacao in the American Southwest. He also has served on graduate examination committees at McGill University, Montreal, Quebec, Canada, Duquesne University and the University of Cordoba, SPAIN. Until 2013, he served as adjunct Professor of Comparative Medicine at Hershey Medical Center. In 1986 he was awarded a Pioneer in Laboratory Automation award by the International Symposium on Laboratory Robotics and in 2000 was named a Fellow of AOAC International. He is senior author of Laboratory Robotics, A Guide to Planning Programming and Applications, editor of Automation in the Laboratory, English language editor of Analytical Techniques for Food and Agricultural Products, editor of Electronic Noses and Sensor Array Based Systems and is editor of Analysis of Functional Foods and Nutraceuticals. Recently he has co-written and co-edited two books on cocoa titled "Chocolate as Medicine" and "Chocolate and Health" with a total of 11 books he has edited or written. He is an author on over 200 papers and presentations with papers in Nature and Proceedings of the National Academy of Science. He has developed in excess of 175 methods using chromatography, spectroscopy, spectrometry, immunoassay and assorted analytical techniques on food, environmental and biological samples. He also serves on the Analytical Methods Review Committee of the American Herbal Pharmacopoeia (AHP). He has participated in a peer review panel of the Institute for Regulatory Sciences on Chemical Analysis Automation and also participated on NSF Review Panels for Educational

Chemical Instrumentation. He also serves as a reviewer for numerous journals including J. Chromatography, Journal of Liquid Chromatography, Journal of Ag and Food Chem., Journal of Food Science, Analytical Chemistry and Annals of Internal Medicine . Finally, he is on the editorial board of the Journal of Liquid Chromatography, Current Pharmaceutical Analysis, the Journal of Chemistry and the World Journal of Gastrointestinal Therapeutics. He was named to the External Advisory Board of the NIH Botanical Center of the University of Illinois-Chicago .

Publications and Presentations available upon request

#### Military Service

1969	Commissioned 2 <sup>nd</sup> Lt. USAFR From Detachment 650 Ohio University
1969-1971	Active Duty Goose ABA, Canada Disaster Preparedness Officer 95 <sup>th</sup> Strategic Wing (SAC)
1971-1972	Active Duty Kirtland AFB, NM Radiation Protection Officer 4900 <sup>th</sup> Test Group (Flight Test) (AFSC)
1973-1973	Active Duty Communications Maint. Officer Course Keesler AFB, MS
1973-1976	211 <sup>th</sup> Electronics Installation Squadron Ohio ANG Zanesville MAP, OH
1977-1980	220 <sup>th</sup> Electronics Installation Squadron PaAng FIG, PA
1980-1982	Chemical Research Officer Air Force Materials Laboratory WPAFB, OH
1984-1986	Chemical Research Officer Air Force Lubricants Laboratory Kelly AFB, TX

1991            Honorably Retired, Major

#### Military Education

Graduate of  
Disaster Preparedness Officers School  
Communication Electronics Maint Officer  
Squadron Officers School (SOS)  
Leadership for Company Grade Officers  
Advanced Topics in Communication Electronics

#### Community Service

Vice President of Mt Gretna Arts Council  
Chair, Scholarship Committee  
Chair, Publications Committee, MG Area Historical Society  
Secretary, Mt Gretna Community Library  
Initiated and Sponsor Hurst Diversity Library at Lebanon Valley College

## Activities, Accomplishments and Strengths

### Technologies Implemented/Utilized at THC

- HPLC
- GC-MS
- LC-MS
- FTIR
- MRI
- ELISA (food allergy testing)
- Immunochromatography
- Designed Laboratory and Implemented GMO Testing within Hershey
- Metabolomics

### Professional organizations

- ACS
- IFT
- ASMS
- AAIM
- ISCHOM
  - Treasurer
- OA, AOAC
- AIC

### Strengths

- Technical Competence
- Leadership
- Teamwork
- Networking
- Communication
- Commitment

### Publications and Presentations

Available upon request

### Patents

Three

