A Cavalcade of Distinguished NIST SED Stat Alumni

Ronald Boisvert

Chief, Applied and Computational Mathematics Division National Institute of Standards and Technology

75th Anniversary of Mathematics and Statistics at NIST June 2022



1. Churchill Eisenhart (1988)

- PhD, University College London, 1937
- NBS: 1946-1983
- Founder of the NBS Statistical Engineering Laboratory (now SED)
- Introduced modern statistical methods to NBS, particularly for experimental design
- American Statistical Association President
- ASA Wilks Memorial Medal, 1977



2. William J. Youden (1988)

- Ph.D. (Chemistry) Columbia University, 1924
- NBS/NIST: 1948-65
- Important contributions to statistical design and analysis of experiments
- Propagated need for correct statistical analysis techniques
 - Book *Experimentation and Measurement*, 1962
- Prizes established in his name by ASQC and ASA



3. Mary Natrella (1998)

- Mathematics, University of Pennsylvania, 1942
- NBS/NIST: 1950-87
- Expert in application of statistics to physical science experimentation and engineering testing.
- Principal author "Experimental Statistics" (NBS Handbook 91)
 - One of the most highly cited NBS publications
 - Became a standard text on applying statistical techniques in the physical sciences and engineering



4. Joan R. Rosenblatt (2002)

- Ph.D. (Statistics) University of North Carolina, 1956
- NBS/NIST: 1955-95
- Chief, Statistical Engineering Section
- Deputy Director, Center for Applied Mathematics
- Director, Computing and Applied Mathematics Laboratory
- Important contributions to nonparametric statistical theory, applications of statistical techniques in physical and engineering sciences, and reliability of complex systems



5. Joseph M. Cameron (2002)

- M.S. (Statistics), NC State University, 1947
- NBS: 1947-77
- Important contributions to experiment design and applications of statistical and computational methods in the physical and engineering sciences and in metrology



6. John Mandel (2002)

- Ph.D. (Chemistry) University of Eindhoven, 1965
- NBS/NIST: 1947-2000
- Lab-level Senior Statistical Consultant
- Development of theoretical and applied statistical methodology
- Landmark books on statistical design of interlaboratory testing and statistical analysis of experimental data



7. Harry Ku (2006)

- Ph.D. (Mathematical Statistics) GWU, 1968
- NBS: 1959-85
- Inspired leadership of the Statistical Engineering Division (1978-85)
- Successful efforts to introduce modern statistical analysis into measurement activities throughout NBS



8. Keith Eberhardt (2009)

- Ph.D. (Statistics) Johns Hopkins U., 1975
- NBS/NIST: 1978-2000
- Advanced statistical certification process for SRMs in analytical chemistry
- Major contributions to the successful execution of many highly consequential projects



9. M. Carroll Croarkin (2013)

- M.S. (Statistics) University of Maryland, 1974
- NBS/NIST: 1955-63, 1973-2000
- Groundbreaking technical contributions to
 - NBS/NIST calibration and measurement assurance programs
 - dissemination of advanced statistical methods for measurement assurance, uncertainty assessment
 - interlaboratory studies to industry through international standards
- Twice honored with Allen V. Astin Measurement Science Award

