

# David Roche, Ph.D.

<b>Clinical Interests</b>	Dr. Roche's research interests include: statistical analysis of gene expression, proteomics, and metabolomics data; radiation biology: effects of low and moderate dose radiation on human skin; biomedical statistics; wound healing; and formal models in international relations.
<b>Title</b>	Distinguished Professor, PhD
<b>Specialty</b>	<a href="#">Cancer</a> , Public Health Sciences- Division of Biostatistics
<b>Department</b>	Public Health Sciences
<b>Division</b>	Public Health Sciences
<b>Center/Program Affiliation</b>	<a href="#">Genome Center</a> <a href="#">UC Davis Comprehensive Cancer Center</a>
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<b>Education</b>	Ph.D., University of Illinois at Chicago, Chicago, Illinois, 1972 A.B., Shimer College, Chicago, IL, 1966 M.A., University of Illinois at Chicago, Chicago, Illinois
<b>Professional Memberships</b>	Elected Member, International Statistical Institute, 1997
<b>Honors and Awards</b>	Fellow, American Association for the Advancement of Science, 2007
<b>Select Recent Publications</b>	Huguette Albrecht, Blythe Durbin-Johnson, Reem Yunis, Karen M. Kalanetra, Shiquan Wu, Rachel Chen, Thomas S. Stevenson, and David M. Roche. Transcriptional response of ex vivo human skin to ionizing radiation: comparison between low and high dose effects. <i>Radiation Research</i> . 2012; 177:69-83. Monika Ray, Reem Yunis, Xiucui Chen, and David Roche. Comparison of Low and High Dose Ionising Radiation using Topological Analysis of Gene Coexpression Networks. <i>BMC Genomics</i> , 2012; 13:190. Donald A. Barkauskas and David M. Roche. A General-Purpose Baseline Estimation Algorithm for Spectroscopic Data. <i>Analytica Chimica Acta</i> . 2010; 657:191-197. Frederick S. Kaplan, Michael A. Zasloff, Joseph A. Kitterman, Eileen M. Shore, Charles C. Hong, and David M. Roche. Early Mortality and Cardiorespiratory Failure in Patients With Fibrodysplasia Ossificans Progressiva. <i>Journal of Bone and Joint Surgery</i> . 2010; 92:686-691.

## David Rocke, Ph.D.

Donald A. Barkauskas, Hyun Joo An, Scott Kronewitter, Maria Lorna de Leoz, Susanne Miyamoto, Gary S. Leiserowitz, Carlito B. Lebrilla, and David M. Rocke. Detecting Glycan Cancer Biomarkers using MALDI FT-ICR mass spectrometry data. *Bioinformatics*. 2009; 25:251-257.

Geoffrey Jones and David M. Rocke. Multivariate Survival Analysis with Doubly-Censored Data: Application to the Assessment of Accutane Treatment for Fibrodysplasia Ossificans Progressiva. *Statistics in Medicine*. 2002; 21:2547-2562.

Blythe Durbin, Johanna Hardin, Douglas Hawkins, and David M. Rocke. A Variance-Stabilizing Transformation for Gene-Expression Microarray Data. *Bioinformatics*. 2002; 18:S105-S110.

Danh Nguyen and David M. Rocke. Multi-Class Cancer Classification via Partial Least Squares with Gene Expression Profiles. *Bioinformatics*. 2002; 18:1216-1226.

David M. Rocke and Blythe Durbin. A Model for Measurement Errors for Gene Expression Arrays. *Journal of Computational Biology*. 2001; 8:557-569.

David M. Rocke and Geoffrey Jones. Optimal Design for ELISA and other forms of Immunoassay. *Technometrics*. 1997; 39:162-170.

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