Acknowledgements

The following individuals are acknowledged for their contributions to the workshop.

ICCVAM Organizing Committee for the International Workshop on *In Vitro* Methods for Assessing Acute Systemic Toxicity

**Consumer Product Safety Commission (CPSC)**  
Kailash Gupta, D.V.M., Ph.D.

**Department of Defense (DOD)**  
John Frazier, Ph.D., (Organizing Committee co-chair)

**Department of Transportation (DOT)**  
George Cushmac, Ph.D.

**Environmental Protection Agency (EPA)**  
Richard Hill, M.D., Ph.D. (ICCVAM Co-Chair)  
Angela Auletta, Ph.D.  
Elizabeth Margosches, Ph.D.  
Karen Hamernik, Ph.D.  
Philip Sayre, Ph.D. (Organizing Committee co-chair)  
Maurice Zeeman, Ph.D.

**Food and Drug Administration (FDA)**  
Leonard Schechtman, Ph.D.  
Melvin Stratmeyer, Ph.D.

**National Institute of Environmental Health Sciences (NIEHS)**  
Jerrold Heindel, Ph.D.  
William Stokes, D.V.M. (ICCVAM Co-Chair)  
Errol Zeiger, Ph.D., J.D.

**National Institute for Occupational Safety and Health (NIOSH)**  
Kenneth Weber, Ph.D.

**National Library of Medicine (NLM)**  
Vera Hudson, M.S.L.S.

**Occupational Safety and Health Administration (OSHA)**  
Surender Ahir, Ph.D.

**Integrated Laboratory Systems (ILS), Inc.**  
Bradley Blackard, M.S.P.H.  
Sue Brenzel  
Ashlee Duncan, M.S.  
Thomas Goldworthy, Ph.D.  
Christina Inhof, M.S.P.H.  
Linda Litchfield  
Barry Margolin, Ph.D.  
Judy Strickland, Ph.D., D.A.B.T.  
Michael Paris  
Barbara Shane, Ph.D., D.A.B.T.  
Raymond Tice, Ph.D.

**National Institute of Environmental Health Sciences (NIEHS)**  
Loretta Frye  
Debbie McCarley  
William S. Stokes, D.V.M., D.A.C.L.A.M. (Director)
Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM)

Agency for Toxic Substances and Disease Registry (ATSDR)
*William Cibulas, Ph.D.

Consumer Product Safety Commission (CPSC)
*Marilyn L. Wind, Ph.D.
Susan Aitken, Ph.D.
Kailash C. Gupta, D.V.M., Ph.D.

Department of Defense (DOD)
*Harry Salem, Ph.D., U.S. Army Edgewood Chemical Biological Center
John M. Frazier, Ph.D., U.S. Air Force, Wright-Patterson AFB

Department of Energy (DOE)
*Marvin Frazier, Ph.D.

Department of Interior (DOI)
*Barnett A. Rattner, Ph.D.

Department of Transportation (DOT)
*James K. O’Steen
George Cushmac, Ph.D.

Environmental Protection Agency (EPA)
*Richard N. Hill, M.D., Ph.D. (Co-Chair)
Office of Pollution Prevention and Toxics
+Angela Auletta, Ph.D
Philip Sayre, Ph.D.
Office of Pesticides Programs
+Karen Hamernik, Ph.D.
Amy Rispin, Ph.D.
Office of Research and Development
+Harold Zenick, Ph.D.
Suzanne McMaster
OECD Test Guidelines Program
Maurice Zeeman, Ph.D.

Food and Drug Administration (FDA)
*Leonard M. Schechtman, Ph.D.
Suzanne C. Fitzpatrick, Ph.D., D.A.B.T.

Center for Drug Evaluation and Research
+Joseph DeGeorge, Ph.D.
Joseph F. Contrera, Ph.D.

Center for Devices and Radiological Health
+Mel E. Stratmeyer, Ph.D.
Raju G. Kammula, D.V.M., Ph.D., D.A.B.T.

Center for Biologics Evaluation and Research
+Patrick G. Swann

Center for Food Safety and Nutrition
+David G. Hattan, Ph.D.
Victor P. Frattali

Center for Veterinary Medicine
+Devaraya Jagannath, Ph.D.
Louis T. Mulligan, D.V.M.

National Center for Toxicological Research
+William T. Allaben, Ph.D.
Office of Regulatory Affairs
+Atin Dutta, Ph.D.

National Cancer Institute (NCI)
*David Longfellow, Ph.D.
Yung-Pin Liu, Ph.D.

National Institute of Environmental Health Sciences (NIEHS)
*William S. Stokes, D.V.M., D.A.C.L.A.M. (Co-Chair)
John R. Bucher, Ph.D., D.A.B.T.
Rajendra S. Chhabra, Ph.D., D.A.B.T

National Institute for Occupational Safety and Health (NIOSH)
*Doug Sharpnack, D.V.M., D.A.C.V.P.
+Paul Nicolaysen, V.M.D.

National Institutes of Health (NIH)
*Margaret D. Snyder, Ph.D.

National Library of Medicine (NLM)
*Vera Hudson, M.S.L.S.

Occupational Safety and Health Administration (OSHA)
*Surender Ahir, Ph.D.

* Principal Agency Representatives
+ Principal Program Representatives 6/01
Dr. Björn Ekwall is acknowledged for his extraordinary contributions to alternative test method development and his dedication to the implementation of alternative tests for regulatory purposes. Results from his work in the area of in vitro cytotoxicity served as a major impetus for organization of the International Workshop on In Vitro Methods for Assessing Acute Toxicity.

Born in Uppsala in 1940, he attended Uppsala University Medical School and obtained his MD in 1969. After a short time as a General Practitioner, he became a lecturer at the Department of Anatomy, Uppsala University, where he earned his Ph.D. in toxicology. He was a postdoctoral fellow for 6 months at Materials Science Toxicology Laboratories, Memphis, TN, 1981-1982, and a Consultant at the Toxicology Laboratory of the Swedish Food Administration, 1982-1983. Between 1989 and 1996 he was an Associate Professor at the Division of Toxicology, Department of Pharmaceutical Biosciences, Uppsala University.

Dr. Ekwall introduced the concept of testing compounds in systems such as cell cultures and extrapolating the results to human toxicity. He felt that one could break down toxicity in complex biological systems to basic elements that could then be analyzed by using in vitro methods. To advance these ideas, he founded a small non-profit research institute, the Cytotoxicology Laboratory, Uppsala (CTLU) in 1983. He also established the Scandinavian Society for Cell Toxicology whose mission is to gather scientists for meetings and show that chemical effects on cells should translate to in vivo effects. These organizations coordinated a large international evaluation study, the Multicenter Evaluation of In Vitro Cytotoxicity Tests (MEIC), that began in 1989 to scrutinize the relevance of in vitro cytotoxicity tests for human acute toxicity of chemicals, and to select batteries of in vitro assays for practical testing of chemicals as alternatives to animal acute toxicity tests. Sixty-five different test methods were employed for testing 50 chemicals. Dr. Ekwall continued to work with the MEIC project until his untimely death on August 19, 2000.

Dr. Ekwall published 69 articles/book chapters on in vitro toxicology, plus 30 abstracts published in journals and another 30 abstracts published in conference proceedings. He received many international awards and was a member of many scientific societies and associations.