Mumford, Judy

BIOGRAPHICAL SKETCH

Name	**Position Title**
Judy L. Mumford	Research Health Scientist

EDUCATION/TRAINING

Institution and Location	Degree	Year(s)	Field of Study
National Taiwan University, Taipei, Taiwan	B.S.	1965	Agricultural Chemistry
University of Kentucky, Lexington, Kentucky	M.S.	1967	Animal Nutrition
University of Texas Health Science Center, School of Public Health, Houston, Texas	Ph.D.	1982	Human Ecology

PROFESSIONAL EXPERIENCE

1995 - Present	Research Health Scientist, Epidemiology and Biomarker Branch, HSD, NHEERL, EPA, RTP, NC
1979 - 1995	Research Health Scientist, Genetic Bioassay Branch, GTD, HERL, EPA, RTP, NC
1978 - 1979	Scientist, Northrop Services, Inc. - Environmental Sciences, Research Triangle Park, NC
1976 - 1977	Statistics Research Assistant, University of Texas, School of Public Health, Houston, TX
1971 - 1975	Research Assistant, Department of Medicine, Baylor College of Medicine, Houston, TX
1970 - 1971	Research Assistant, Department of Biochemistry, Baylor College of Medicine, Houston, TX

PROFESSIONAL SOCIETIES

American Association for Cancer Research
Environmental Mutagen Society
Genotoxicity and Environmental Mutagen Society
Chinese Agricultural Chemistry Society

SELECTED AWARD AND HONORS

Science and Technological Achievement Awards, Level I, for a *Science* Journal Article, 1987
Special Act Award for HERL-NHEXAS Team, 1992
Science and Technological Achievement Awards, Level II, 1994
Outstanding Performance Award, 1994
On-The-Spot Award, 1999
QSI Award, 2001
Science and Technological Achievement Awards, Level III, 2005

SELECTED COMMITTEES AND CHAIRING APPOINTMENTS

Member, Electric Power Research Institute Advisory Committee on Biological Activity of Plume Coal Fly Ash, 1984-1988.
Member of Task Group, International Programme on Chemical Safety Environmental Health Criteria for Polycyclic Aromatic Hydrocarbons, United Nations Environmental Program, International Labor Organization, WHO, 1995
Member of Working group on Environmental Pollution and Health Effects in China, World Resources Institute, Washington, D.C., 1996
Faculty Member for IARC's International Course on Molecular Biomarkers in Environmental Cancer Epidemiology, Shanghai, China, 1996
Chairperson, Indoor Air Session, Symposium on the Application of Short-term Bioassay in the Analysis of Complex Environmental Mixtures, 1986
Chairperson, Session on Molecular Dosimetry and Carcinogen Metabolism in Humans, Eighty-fourth Annual Meeting, American Association for Cancer Research, 1993

Chairperson, Pan-Asia-Pacific Conference on Fluoride and Arsenic Research, Shenyang, China, August 16-20, 1999
Chairperson, International Conference in Apoptosis, Athens, Greece, May 25-28, 2001
Guest lecturer for University of North Carolina, School of Public Health, Environmental Epidemiology Course 277, 2001-2002.
Member, Steering Committee for Arsenic Repository Registry, 2000-2002
Member, Steering Committee for North Carolina Health Department Biomonitoring Program, 2002 - 2003

SELECTED INVITED LECTURES, SYMPOSIA, WORKGROUPS

Biomonitoring and Susceptibility Markers in Human Cancer: Application in Molecular Epidemiology and Risk Assessment, Kona, Hawaii, 1991
Workshop on Cancer Hazard in Silesia, Gliwice, Poland, 1992
Annual Taiwan Thoracic Society Meeting, Taipei, Taiwan, 1992
Molecular Biomarkers in Environmental Cancer Epidemiology, Shanghai, China, 1996
The 5th Annual NHEERL Open House, Research Triangle Park, 1996
The XVIII International Congress of Genetics, Beijing, China, 1998
Fourth International Conference on Arsenic Exposure and Health Effects, San Diego, June 18-22, 2000
Asian Clinical Oncology Conference, Taipei, Taiwan, April 5-8, 2001
Guest Lecturer teaching Environmental Epidemiology Course 277, University of North Carolina, Fall, 2001-2002.
University of California, Davis, California, April 11, 2002
Asian American Heritage Celebration keynote address, May 30, 2002
Fifth International Conference on Arsenic Exposure and Health Effects, San Diego, July 14-18, 2002
Research Triangle Institute, Research Triangle Park, North Carolina, September 20, 2002
Annual Meeting for Genotoxicity and Environmental Mutagen Society, Research Triangle Park, North Carolina, April 24, 2003

SELECTED PUBLICATIONS

Mumford, J.L. , D. Tian, Q. Lan, M. Younes, F. Hu, M. L. Ostrowski, X. He, and Z. Feng (1998) p53 Protein accumulates frequently in lung adenocarcinoma associated with exposure to indoor coal smoke: studies in lung tumors and sputum. Submission to Cancer Epidemiology, Biomarker and Prevention

Mumford, J.L., D. Tian, Q. Lan, M. Younes, F. Hu, M. L. Ostrowski, X. He, and Z. Feng (1999) Detection of p53 Protein accumulation in sputum and lung adenocarcinoma associated with exposure to indoor coal smoke to unvented coal smoke in China, Anticancer Research, 19, 951-958.

Feng, Z., D. Tian, and **J. L. Mumford** (1999) A sensitive immunofluorescence assay for detection of p53 protein accumulation in sputum, Anticancer Research 19,3847-3852.

Ma, H.Z., Y. J. Xia, K.G. Wu, T.Z. Sun, **J.L. Mumford** (1999) Human Exposure to Arsenic and Health Effects in Bayingnormen, Inner Mongolia in: W. R. Chappell, C.O. Abernathy, and R. Calderon (Eds.) Arsenic Exposure and Health Effects, Elsevier, Amsterdam, pp.127-131.

Lan, Q., X. He, D.J. Costa, D. Tian, N. Rothman, G. Hu, and **J. Mumford** (2000) GSTM1 and GSTT1 genotypes and lung cancer risk associated with exposure to indoor coal emissions: a case-control study in Xuan Wei, China, Cancer Epidemiology, Biomarker and Prevention 9, 605-608.

Feng, Z., Y. Xia, D. Tian, K. Wu, M. Schmitt, R. Kwok and **J.L. Mumford** (2001) DNA Damage in buccal epithelial cells from individuals chronically exposed to arsenic via drinking water in Inner Mongolia, China, Anticancer Research 21, 51-58.

Lan, Q., Z. Feng, D. Tian, X.He, N. Rothman, L.Tian, X. Lu, M.B. Terry, and **J. Mumford** (2001) p53 gene expression in relation to indoor exposure to unvented coal smoke in Xuan Wei, China, Journal of Occupational Environmental Medicine 43, 226-230.

Tian, D., H. Ma, Z. Feng, Y. Xia, X. C. Le, Z. Ni, J. Allen, B.Collins, D. Schreinemachers and **J.L. Mumford** (2001) Analyses of micronuclei in exfoliated epithelial cells from individuals chronically exposed to arsenic via drinking water in Inner Mongolia, China, J. Toxicology and Environmental Health 64, 473-484.

DeMarini, D.M., S. Landi, D. Tian, N. Hanley, X. Li, F. Hu, B. C. Roop, M. J. Mass, P. Keohavong, W. Gao, M. Olivier, P.Hainaut, and **J. L. Mumford** (2001) Lung tumor *KRAS* and *TP53* mutations in non-smokers reflect exposure to PAH-rich coal combustion emissions, Cancer Research 61, 6679-6681.

Zhang T-C., M.T. Schmitt, **J. L. Mumford** (2003) Effects of Arsenite on Telomere and Telomerase in HL-60 and HaCaT Cells. Carcinogenesis 24, 1811-1817.

Schmitt, M.T., D. Schreinemachers, K. Wu, Z. Ning, B. Zhao, X.C. Le, and **J. Mumford** (2005). Human nails

as a
biomarker of arsenic exposure from well water in Inner Mongolian: comparing atomic fluorescence spectrometry and neutron activation analysis, Biomarker, 10, 95-104.
Mo J., Y. Xia, J.J. Wade, M. Schmitt, X.C. Le, R. Dang and **J.L. Mumford** (in press). *OGG1* expression and arsenic
exposure, nail selenium, and skin hyperkeratosis in Inner Mongolia, Environ. Health Persp.