

ALBERT M. CHEH, Ph.D.

EDUCATION

- 1974 Ph.D., Biochemistry, University of California, Berkeley
1967 B.A., Columbia University

PROFESSIONAL EXPERIENCE

- 1995- Professor of Chemistry, American University, Washington, DC
2000, 1993, 1987 Sabbatical Scientist, Lab of Bioorganic Chemistry, NIDDK, NIH
1986 Associate Professor of Chemistry, American University, Washington, DC
1980 Assistant Professor of Chemistry, American University, Washington, DC
1978 Research Scientist, Gray Freshwater Biol. Inst., U. of Minnesota
1977 NIH Postdoctoral Fellow, University of Minnesota
1974 Postdoctoral Res. Associate, Gray Freshwater Biol. Inst., U. of Minnesota

GRANTS, AWARDS AND HONORS

- 1997 NIH, DNA Sequence and PAH Adduct Stereoisomerism, \$93,222
1990 NIH, PAH Adduct Orientation in DNA, \$110,250
1986 EPA, Identification of Environmental Electrophiles, \$404,150
1985 NIH, Environmental Analysis by HPLC with ELISA Detection, \$65,054
1982 US Dept. Interior, Losses and Artifacts in the Sampling of Chlorinated Waters by XAD Adsorption, \$15,567
1978 Freshwater Biological Research Foundation, Production of Mutagens in Drinking Water, \$36,000

PUBLICATIONS

27. Chiapperino, D., Cai, M., Sayer, J. M., Yagi, H., Kroth, H., Masutani, C., Hanaoka, F., Jerina, D. M. and Cheh, A.M.* "Error-prone Translesion Synthesis with DNA Polymerase Eta on DNA Containing 7,8-Dihydroxy-9,10-Epoxy-7,8,9,10-Tetrahydrobenzo[a]pyrenyl dA Adducts" *J. Biol. Chem.* 280, 39684-39692 (2005).
26. Chiapperino, D., Kroth, H., Kramarczuk, I. H., Sayer, J. M., Masutani, C., Hanaoka, F., Jerina, D. M. and Cheh, A.M.* Preferential misincorporation of purine nucleotides by human DNA polymerase eta opposite benzo[a]pyrene 7,8-diol 9,10-epoxide deoxyguanosine adducts" *J. Biol. Chem.* **277**, 11765-11771 (2002).
25. Custer, L., Zajc, B., Sayer, J.M., Cullinane, C., Phillips, D.R., Cheh, A.M., Jerina, D.M., Bohr, V.A. and Mazur, S.J.* "Stereoscopic Differences in Repair by Human Cell Extracts of Synthesized Oligonucleotides Containing *trans*-Opened 7,8,9,10-Tetrahydrobenzo[a]pyrene 7,8-Diol 9,10-Epoxy N2-dG Adduct Stereoisomers Located within the Human K-ras Codon 12 Sequence" *Biochemistry* 38, 569-581 (1999).
24. Lu, C., Yagi, H., Jerina, D.M., and Cheh, A.M*. "Mutational Spectra of the Four Bay Region Diol Epoxides of Benzo[c]phenanthrene and the Drinking Water Mutagen, MX, Determined with an Improved Set of *E.coli lacZ*- Mutants, in *Applications of Molecular Biology in Environmental Chemistry*, R.A. Minear, A.M. Ford, L.L. Needham and N.J. Karch, eds. Lewis Publishers/CRC Press, Boca Raton, FL, pp. 35-44 (1995).
23. Cheh, A. M*, Yagi, H. and Jerina, D. M. "Effect of DNA Base Sequence on the Configuration of Deoxyadenosine Adducts Formed by the Fjord Region Compound, (+)-(1*R*,2*S*,3*R*,4*S*)-3,4-Dihydroxy-1,2-Epoxy-1,2,3,4-Tetrahydrobenzo[c]phenanthrene" *Biochemistry* 33 12911-12919 (1994).

22. Bigger, C. A. H., Cheh, A. M., Latif, F., Fishel, R., Canella, K., Stafford, G., Yagi, H., Jerina, D. M. and Dipple, A.* "DNA Strand Breaks Induced by Configurationally Isomeric Hydrocarbon Diol Epoxides", *Drug Metab. Revs.* 26, 287-299 (1994).
21. Lakshman, M. K., Xiao, W., Sayer, J. M., Cheh, A. M. and Jerina, D. M.* "Synthesis and Assignment of Absolute Configuration to the N⁶-Deoxyadenosine Adducts Resulting from Cis and Trans Ring-Opening of Phenanthrene 9,10-Oxide, *J. Org. Chem.* 59, 1755-1760 (1994).