

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed for Form Page 2.
Follow the sample format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME	POSITION TITLE
A.-N. Tony Kong	Professor

EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Alberta, Alberta, Canada	B.S.	1983	Pharmacy
State University of New York, Buffalo, NY	Ph.D.	1989	Pharmacokinetics
National Institutes of Health, Bethesda, MD	Post-Doc	1989	Drug Metabolism
National Institutes of Health, Bethesda, MD	Post-Doc	1990-1991	Signal Transduction

A. Positions and Honors.**Positions and Employment**

1983-1989	Graduate Research with Dr. William J. Jusko, State University of New York at Buffalo, Buffalo, NY. Ph.D. Thesis: Hepatic and Metabolic Determinants of Corticosteroid Disposition
1989	Post-Doctoral Fellow, Laboratory of Dr. Daniel W. Nebert, NICHD, NIH, Bethesda, MD
1990-91	Post-Doctoral Fellow, Laboratory of Drs. Lawrence E. Samelson, and Richard D. Klausner NICHD, NIH, Bethesda, MD
1991-1995	Research Assistant/Assistant Professor, Division of Clinical Pharmacology, Department of Medicine, Thomas Jefferson University, Philadelphia, PA
1995-2001	Associate Professor of Pharmaceutics, Department of Pharmaceutics and Pharmacodynamics College of Pharmacy, University of Illinois at Chicago, Chicago, IL
2001-present	Professor of Pharmaceutics, Department of Pharmaceutics, Ernest Mario School of Pharmacy Rutgers, The State University of New Jersey, Piscataway, NJ
2002-present	Director, Graduate Program in Pharmaceutical Science, Ernest Mario School of Pharmacy Rutgers, The State University of New Jersey, Piscataway, NJ

Other Experience and Professional Memberships

2003	Chair, NIH Special Emphasis Panel, Preclinical Toxicology and Pharmacology of Drugs Developed for Cancer, AIDS and AIDs-Related Illness (ZCA1 SRRB-3 C2), November 6, 2003.
2003	Co-Chair of the Symposium on "Proteomics and Chemo-Informatics in Drug Discovery and Development" for the American Association of Pharmaceutical Scientists (AAPS) 2003 Annual Meeting in Salt Lake City, UT, October 2003
2003-present	Ad Hoc Member, NIH Chemical-Dietary Prevention Study Section (CDP)
1999-2003	Member, NIH Metabolic Pathology Study Section (MEP)
1998-1999	Member (Ad Hoc), NIH Metabolic Pathology Study Section.
2001	Reviewer, RFA entitled "Flexible System to Advance Innovative Research for Cancer Drug Discovery by Small Business", NCI April 18-19, 2001.
2000	Member of the Site Visit Team for the review of Karmanos Cancer Institute, Wayne State University. 05/00
2000	Reviewer, NIH Special Emphasis Panel, ZRG1 SSS-Z(1), March 23-24
1999	Reviewer, RFA entitled "Flexible System to Advance Innovative Research for Cancer Drug Discovery by Small Business", NCI April 8-10
1999	Outside Opinion/Review, NIH Pharmacology Study Section, February, 1999.
1998	Member of the Site Visit Team for the review of the Laboratory of Nutrition and Molecular Regulation, NCI (P.I.: James M. Phang). 04/98
1997	Member of the NIH Review Committee for Program Project on "Chemoprevention of Lung and Esophageal Cancer" (P.I.: Stephen S. Hecht). 02/97 and 09/97
1998-present	Member, Merck Research Scholar Program Advisory Committee, American Association of Colleges of Pharmacy (AACP)
2001-present	Chair, Abstracts Screening, American Association of Pharmaceutical Scientists (AAPS)

2001	Chair of the Symposium on "The Success and Challenges of Bioinformatics and Pharmacogenomics in Drug Discovery and Development" for the American Association of Pharmaceutical Scientists (AAPS) 2001 Annual Meeting in Denver, CO, October 2001
2001	Co-Chair of the Continuing Education (CE) Course on "Stress kinases, NF-kB, and caspases pathways in chemical-induced cell survival and death" for the Society of Toxicology (SOT) 2001 Annual Meeting in San Francisco, CA, March 2001.
2000	Chair of the Symposium on "Regulation of phase I and II drug metabolizing enzymes: Pharmacological and biological consequences" for the American Association of Pharmaceutical Scientists (AAPS) 2000 Annual Meeting in Indianapolis, IN, November 2000
1999	Outside Opinion/Review, NIH Pharmacology Study Section, February
1999	Chair of the Symposium on "Cell Cycle Check-Points and Chemical-Induced Stress Response: Survival Versus Cell Death" at the Society of Toxicology (SOT) Annual Meeting in New Orleans, LA, March
1994	Chair of the Symposium on Pharmacogenetics and Molecular Biology of Phase II Drug Metabolizing Enzymes at the American Society for Clinical Pharmacology and Therapeutics (ASCPT) Annual Meeting in New Orleans, LA
1998	Member of the Program Committee for Molecular Biology Specialty Section, Society of Toxicology
1997-present	Editorial Board of Archives of Pharmacal Research
2001-present	Editorial Board of Pharamceutical Research

Journals Reviewer: Cancer Research, Pharmaceutical Research, Oncogene, Biochemical Pharmacology, Drug Metabolism and Disposition, Chemical Research Toxicology, Molecular Pharmacology, J. Biol. Chem.

Honors

1981-1982	Medical Research Council (MRC) Scholarship, University of Alberta, Canada
1979-1983	B.Sc. Pharmacy, Dean's List, Graduated with First Class Standing, University of Alberta, Canada.
1989-1991	Intramural Research Training Award (IRTA) Fellowship, NIH
1993-1993	Pharmaceutical Research & Manufacturers of America Foundation Research Starter Grant
1994	Young Investigator Award in Pharmacokinetics, Pharmacodynamics and Drug Metabolism from the American Association of Pharmaceutical Scientists (AAPS), Sponsored by Burroughs Wellcome Fund
1996, 1998	Teacher of the Year Award Selected by the Pharmacy First Professional Year Class.

B. Selected peer-reviewed publications (in chronological order).

(From a total of 65 publications)

- Kong, A.-N.**, Ludwig, E., Slaughter, R., DiStefano, P., DeMasi, J., Middleton, E. and Jusko, W.J. Pharmacokinetics and pharmacodynamic modeling of direct suppression effects of methylprednisolone on serum cortisol and blood histamine in man. *Clin. Pharmacol. Ther.* 46: 616-628, 1989.
- Kong, A.-N.** and Jusko, W.J. Disposition of methylprednisolone and its sodium succinate prodrug in vivo and in perfused liver of rats: Nonlinear and Sequential First-Pass Metabolism. *J. Pharm. Sci.* 80: 409-415, 1991.
- Petersen, D.D., **Kong, A.-N.T.**, Jorge, L.F., Nebert, D.W. and Arias, T.D. Debrisoquine polymorphism: Novel CYP2D6 gene BamHI RFLP in the Ngawbe Guaymi Indian of Panama. *Pharmacogenetics* 1: 136-142, 1991.
- Kong, A.-N.T.**, Ma, M., Tao, D., and Yang, L. Molecular cloning of two cDNAs encoding the mouse bilirubin/phenol family of UDP-glucuronosyltransferases (ugtBr/p). *Pharm. Res.* 10: 461-465, 1993.
- Kong, A.-N.T.**, and Fei, P. Molecular cloning of three sulfotransferase cDNAs from mouse liver. (2nd International Workshop on the Sulfation of Xenobiotics and Endogenous Compounds, June 3-6, 1993, Ardmore, OK) *Chemico-Biological Interactions* 92:161-168, 1994.
- Yu, R., Jiao J., Duh, J.-L., Tan, T.-H., and **Kong, A.-N.T.** Activation of mitogen-activated protein kinases by green tea polyphenols: potential signaling pathways in the regulation of antioxidant-responsive element-mediated phase II enzyme gene expression. *Carcinogenesis* 18: 451-456, 1997.
- Yu, R., Tan, T.-H., and **Kong, A.-N.T.** Phenolic antioxidants, butylated hydroxyanisole (BHA) and its metabolite *tert*-butylhydroquinone (BHQ) differentially regulate mitogen-activated protein kinases. *J. Biol. Chem.* 272:28962-70,1997.
- Chen, Y.-C., Wang, W., **Kong, A.-N.T.**, and Tan, T.-H. Molecular mechanisms of c-Jun N-terminal kinase (JNK)-mediated apoptosis induced by anticarcinogenic isothiocyanates. *J. Biol. Chem.* 273: 1769-1781, 1998.
- Yu, R., Mandlekar, S., Harvey, K.J., Ucker, D.S, and **Kong, A.-N.T.** Chemopreventive isothiocyanates induce apoptosis and caspase-3-like protease activity. (Advance In Brief) *Cancer Res.* 58: 402-408, 1998.
- Lei, W., Yu, R., Mandlekar, S., and **Kong, A.-N.T.** Induction of apoptosis and activation of ICE/Ced-3 protease (caspase-3) and c-Jun N-terminal kinase 1 by benzo[a]pyrene. *Cancer Res.* 58: 2102-2106, 1998.
- Shtil, A.A., Mandlekar, S., Yu, R., Walter, R.J., Hagen, K., Tan, T.-H., Roninson, I.B., and **Kong, A.-N.T.** Differential regulation of mitogen-activated protein kinases by microtubule-binding agents in human breast cancer cells. *Oncogene.* 18: 377-384, 1999.

12. Yu, R., Lei, W., Mandlekar, S., Jiao, J.-J., Weber, M.J., Der, C.J., and **Kong, A.-N.T.** Role of a mitogen-activated protein kinase pathway in the induction of Phase II detoxifying enzymes by chemicals. *J. Biol. Chem.* 274:2754-27561, 1999
13. Chung, T.D.K., Yu, J.J., **Kong, A.-N.T.**, and Spiotto, M.T. Endogenous interleukin-6 activates phosphatidylinositol-3 kinase and inhibits apoptosis in the androgen-independent human prostate cancer cell line PC-3. *Prostate* 42: 1-7, 2000.
14. Yu, R., Mandlekar, S., Lei, W., Tan, T.-H., and **Kong, A.-N.T.** p38 mitogen-activated protein kinase negatively regulates antioxidant response element-mediated gene expression. *J. Biol. Chem.* 275: 2322-2327, 2000.
15. **Kong, A.-N.T.**, Yu, R., Chen, C., Mandlekar, S., and Primiano, T. Signal transduction events elicited by natural products: Role of MAPK and caspase pathways in homeostatic response and induction of apoptosis. (Invited Review) *Arch. Pharm. Res.* 23:1-16, 2000.
16. Yu, R., Mandlekar, S., Tan, T.-H., and **Kong, A.-N.T.** Protein kinase C-independent activation of c-Jun N-terminal kinase, p38, and apoptosis by chelerythine. *J. Biol. Chem.* 275: 9612-9615, 2000.
17. Yu, R., Mandlekar, S., Ruben, S., Ni, J., and **Kong, A.-N.T.** TRAIL-mediated apoptosis in androgen-independent prostate cancer cells. *Cancer Res.* 60: 2384-2389, 2000.
18. Yu, R., Mandlekar, S., and **Kong, A.-N.T.** Molecular mechanisms of butylated hydroxyanisole-induced toxicity: induction of apoptosis through direct release of cytochrome c. *Mol. Pharmacol.* 58:431-437, 2000
19. Mandlekar, S., Yu, R., Tan, T.-H., and **Kong, A.-N.T.** Activation of caspase-3 and c-Jun N-terminal kinase-1 (JNK1) signaling pathways in tamoxifen-induced apoptosis in human breast cancer cells. *Cancer Res.* 5995-6000, 2000.
20. Mandlekar, S., Hebbar, V., Christov, K., and **Kong, A.-N.T.** Pharmacodynamics of tamoxifen and its 4-hydroxy and N-desmethyl metabolites: Activation of caspases and induction of apoptosis in rat mammary carcinoma and in human breast cancer cell lines. *Cancer Res.* 60: 6601-6606, 2000.
21. Chen, C., Yu, R., Owuor, E.D., and **Kong, A.-N.T.** Activation of antioxidant-response element (ARE), mitogen-activated protein kinases (MAPKs) and caspases by major green tea polyphenol components during cell survival and death. *Arh. Pharm. Res.* 23:605-621, 2000
22. Yu, R., Chen, C., Mo, Y., Hebbar, V., Owour, E.D., and **Kong, A.-N.T.** Activation of mitogen-activated protein kinase pathways induces antioxidant response element-mediated gene expression via Nrf2-dependent mechanism. *J. Biol. Chem.* 275: 39907-39913, December 22, 2000.
23. Primiano, T., Yu, R., and **Kong, A.-N. T.** Signal transduction events elicited by natural products that function as cancer chemopreventive agents (Invited Review). *Pharmaceutical Biol.* 39: 83-107, 2001
24. Fasanmade, A. A., Owour, E., Ee, R.P., Qato, D., Heller, M., and **Kong, A.-N. T.** Quinacrine induces cytochrome c-dependent apoptotic signaling in human cervical carcinoma cells. *Arch. Pharm. Res.* 24: 126-135, 2001.
25. **Kong, A.-N.T.**, Yu, R., Mandlekar, S., Owour, E., Hebbar, V., Chen, C., Hu, R., and Ee, R. Signal transduction events elicited by cancer prevention compounds (Invited review). *Mutation Research* 480-481: 231-241, 2001.
26. Yu, R., Hebbar, V., Kim, D., Mandlekar, S., Pezzuto, J., and **Kong, A.-N.T.** Resveratrol inhibits phorbol ester and UV-induced AP-1 activation by interfering with tyrosine kinase and mitogen-activated protein kinase pathways. *Molecular Pharmacology* 61: 217-224, 2001.
27. **Kong, A.-N.T.**, Owour, E., Yu, R., Hebbar, V., Chen, C., Hu, R., and Mandlekar, S. Induction of xenobiotic enzymes by the MAP kinase pathway and the antioxidant or electrophile response element (ARE/EpRE) (Invited review) *Drug Metabolism Reviews* 33: 255-271, 2001.
28. Mandlekar, S. and **Kong, A.-N.T.** Mechanisms of tamoxifen-induced apoptosis. *Apoptosis.* 6:469-477, 2001.
29. Owour, E. and **Kong, A.-N.T.** Antioxidants and Oxidants Regulated Signal Transduction Pathways. (Symposium on Cell Signaling, transcription and translation as therapeutic targets, January 30-February 2, 2002, Kirchberg, Luxembourg) (Invited Review). *Biochemical Pharmacology* 64: 765-770, 2002.
30. Rushmore, T.H. and **Kong, A.-N.T.** Pharmacogenomics, Regulation and Signaling Pathways for Phase I and II Drug Metabolizing Enzymes (Invited Review) *Current Drug Metabolism* 3: 481-490, 2002.
31. Hebbar, V. and **Kong, A.-N.T.** Signal transduction pathways involved in the regulation of drug metabolizing enzymes in *Cell and Molecular Biology of Stress* (Storey, K.B. and Storey, J.M., eds.), Vol. 3: Sensing, Signaling and Cell Adaptation. Elsevier Press, Amsterdam, 2002, p. 221-231 (Book Chapter).
32. Chen, Y.-R., Han, J., Kori, R., **Kong, A.-N.T.** and Tan, T.-H. Phenylethyl isothiocyanate induces apoptotic signaling via suppressing phosphatase activity against c-Jun N-terminal kinase. *J. Biol. Chem.* 277:39334-39342, 2002.
33. Misra, P., Owuor, E.D., Li, W., Yu, S., Qi, C., Meyer, K., Zhu, Y.-J., Rao, M.S., **Kong, A.-N.T.** and Reddy, J.K. Phosphorylation of transcriptional coactivator peroxisome proliferator-activated receptor (PPAR)-binding protein (PBP). STIMULATION OF TRANSCRIPTIONAL REGULATION BY MITOGEN-ACTIVATED PROTEIN KINASE. *J. Biol. Chem.* 277(50):48745-54, Dec 13; 2002.
34. Chin, K.-V. and **Kong, A.-N.T.** Applications of DNA microarray in pharmacogenomics and toxicogenomics. (10th Annual Meeting of the American Association of Pharmaceutical Scientists (AAPS), October, 2001, Denver, CO). (Invited Review) *Pharm. Res.* 19: 1773-8, December 2002.
35. Jiang, Z., Chen, C., Yang, B., Hebbar, V., and **Kong, A.-N.T.** Differential responses from seven mammalian cell lines to the treatments of detoxifying enzyme inducers. *Life Sciences* 72(20): 2243-2253, 2003.

36. Hu, R., Chen, C., Kim, B.R., Chen, C., Hebbar, V. and **Kong, A.-N.T.** The roles of JNK and apoptotic signaling pathways in PEITC-mediated responses in human HT-29 colon adenocarcinoma cells. *Carcinogenesis* 24: 1361-1367, 2003.
37. Chen, C., Shen, G., Hebbar, V., Hu, R., Owuor, E.D., and **Kong, A.-N.T.** Epigallocatechin-3-gallate-induced stress signals in HT-29 human colon adenocarcinoma cells. *Carcinogenesis* 24:1369-1378, 2003.
38. Keum, Y., Owuor, E.D., Kim, B.-R., Hu, R. and **Kong, A.-N.T.** Involvement of Nrf2 and JNK in the activation of antioxidant responsive element (ARE) by phenethyl isothiocyanate (PEITC) chemopreventive agent. *Pharmaceutical Research* 2003 (in press).
39. Kim, B.-R., Hu, R., Keum, Y.-S., Hebbar, V., Shen, G. and **Kong, A.-N.T.** Effects of glutathione on antioxidant response element-mediated gene expression and apoptosis elicited by sulforaphane. *Cancer Research* 2003 (in press).
40. Hu, R., and **Kong, A.-N.T.** Activation of MAP kinase, apoptosis and nutrigenomic of gene expression elicited by dietary components. *Nutrition*, 2003 (Invited review) (in press).
41. Wong, Y.F., Selvanayagam, E., Wei, N., Porter, J., Vittal, R., Hu, R., Lin, Y., Liao, J., Shih, J.W., Cheung, T.H., Lo, K.W., Yim, S.F., Yip, S.K., Ngong, D.T., Chan, L.K. Chan, C.S., **Kong, A.-N.T.**, Kutlina, E., McKinnon, R.D., Denhardt, D.T., Chin, K.-V., and Chung, K.H. Expression genomics of cervical cancer: Molecular classification and prediction of radiotherapy response by DNA microarray. *Clinical Cancer Research* 2003 (in press).
42. Jeong, W.-S., Kim, I.-W., Hu, R., and Kong, A.-N.T. Modulatory properties of various natural chemopreventive agents on the activation of NF-kappaB signaling pathway. *Pharmaceutical Research* 2003 (acceptable with revision).
43. Hu, R., Hebbar, V., Kim, B.R., Chen, C., Winnik, B., Buckley, B., Soteropoulos, P., Toliás, P., Hart, R.P., and Kong, A.-N.T. In vivo pharmacokinetics and regulation of gene expression profiles by isothiocyanate sulforaphane in the rat. *Carcinogenesis* 2003 (acceptable with revision).

Other Support

KONG, A.-N.T.

ACTIVE

R01 CA94828-03 Kong (PI) 4/1/2001 – 3/ 31/2006

Induction of Phase 2 Genes by Chemopreventive Agent BHA

The major goal of this project is to investigate the activation of MAPK by phenolic chemopreventive agents such as BHA, the activation and phosphorylation of transcription factor Nrf2 by MAPK pathways in BHA-induced phase 2 gene induction.

Role: Principal Investigator

R01 CA92515-02 Kong (PI) 4//2002 – 3/31/2007

Molecular Mechanisms of Phenolic Agent-induced Apoptosis

The major goal of this project is to investigate the signaling mechanisms involved in phenolic compounds including green tea polyphenols induced apoptotic cell death.

Role: Principal Investigator

R01 CA73674-05 Kong (PI) 1/1/1999– 3/31/ 2008

Chemopreventive Mechanisms of Isothiocyanates

The major goal of this project is to elucidate the mechanisms of inhibition of carcinogenesis by naturally occurring isothiocyanates by testing the hypothesis that isothiocyanate prevents carcinogenesis by inhibiting cellular proliferation and enhancing apoptosis.

Role: Principal Investigator

R01 GM065448-01A1 Knipp (PI); Kong (Co-Investigator) 5/1/03 – 3/31/2008

Characterization of human GI oligopeptide transporters

The major goal of this project is to investigate the functional roles of human gastrointestinal oligopeptide transporters.

Role: Co-investigator

Completed Research Support

N01 CN-85064-05, WS# 48 Levine (PI)

9/30/1999 – 12/ 31/2000

Preclinical Toxicology of Chemopreventive Agents

The goal of this project is to examine phase 1 and 2 genes induction by chemopreventive compound resveratrol in rat liver. The PI on this contract is Dr. Barry Levine, with Dr. A.-N. T. Kong serving as Co-Investigator.

Role: Co-Investigator