

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed on Form Page 2.
Photocopy this page or follow this format for each person.

NAME	POSITION TITLE
Henry J. Thompson	Professor

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Rutgers University, New Brunswick, NJ	Ph.D.	1975	Nutrition
	M.Phil.	1974	Nutrition
	M.S.	1974	Nutrition
	B.S.	1972	Environmental Sciences

RESEARCH AND PROFESSIONAL EXPERIENCE: Concluding with present position, list, in chronological order, previous employment, experience, and honors. Include present membership on any Federal Government public advisory committee. List, in chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. If the list of publications in the last three years exceeds two pages, select the most pertinent publications. **DO NOT EXCEED FOUR PAGES.**

Experience

Professor, Cancer Prevention Laboratory, Colorado State University 2002-Present
Senior Scientist, AMC Cancer Research, 1988-2002
Chair, Center for Nutrition in the Prevention of Cancer, AMC Cancer Research Center, 1998-2002
Director, Division of Laboratory Research, AMC Cancer Research Center, 1993-1997
Deputy Director, Laboratory Research Program, AMC Cancer Research Center, 1989-1993.
Chief, Laboratory of Nutrition Research, AMC Cancer Research Center, 1988-1989.
University of New Hampshire, Professor of Nutrition, 1985-1988.
University of New Hampshire, Director, Human Nutrition Center, 1983-1988
University of New Hampshire, Associate Professor of Nutrition, 1979-1985
University of New Hampshire, Chairman, Department of Home Economics, 1979-1982.
ITT Research Institute, Research Nutritionist, 1978-1979.
Associate Nutritionist, 1976-1978
Mayo Clinic, Post Doctoral Research Fellow, 1975-1976.
Rutgers University, Research Intern, 1973-1975.

Professional Activities

Member, Metabolic Pathology Study Section, National Institutes of Health, 1992-1994.
Member, Chemical Pathology Study Section, National Institutes of Health, 1984-1988.
Member, ACS Nutrition and Cancer Study Section, 1995-1999
Member, AICR Review Group 1 2000-Present
Member, Department of Defense Breast Cancer Review Groups 1999, 2000
Member of the American Society of Nutritional Sciences.
Member of the American Association for Cancer Research.

Full-Length Publications (Selected from a list in excess of 130 publications)

1. Gottschall, E.B., Wolfe, P., Haegele, A.D., Zhu, Z., Rose, C.S., Sells, T., and Thompson, H.J. (2004) Increased urinary 8-isoprostaglandin F(2)alpha is associated with lower plasma selenium levels and lower vegetable and fruit intake in an asbestos-exposed cohort at risk for lung cancer. *Chest*, **125**, 83S.
2. Jiang, W., Zhu, Z., McGinley, J.N., and Thompson, H.J. (2004) Adrenalectomy does not block the inhibition of mammary carcinogenesis by dietary energy restriction in rats. *J Nutr*, **134**, 1152-1156.
3. Thompson, H.J., McGinley, J.N., Spoelstra, N.S., Jiang, W., Zhu, Z., and Wolfe, P. (2004) Effect of Dietary Energy Restriction on Vascular Density during Mammary Carcinogenesis. *Cancer Res*, **64**, 5643-5650.
4. Thompson, H.J., McGinley, J.N., Wolfe, P., Spoelstra, N.S., and Knott, K.K. (2004) Targeting angiogenesis for mammary cancer prevention: factors to consider in experimental design and analysis. *Cancer Epidemiol Biomarkers Prev*, **13**, 1173-1184.

5. Thompson,H.J., Zhu,Z., and Jiang,W. (2004) Identification of the apoptosis activation cascade induced in mammary carcinomas by energy restriction. *Cancer Res*, **64**, 1541-1545.
6. Wolfe,P., Murphy,J., McGinley,J., Zhu,Z., Jiang,W., Gottschall,E.B., and Thompson,H.J. (2004) Using nuclear morphometry to discriminate the tumorigenic potential of cells: a comparison of statistical methods. *Cancer Epidemiol Biomarkers Prev*, **13**, 976-988.
7. Hong,C.C., Thompson,H.J., Jiang,C., Hammond,G.L., Tritchler,D., Yaffe,M., and Boyd,N.F. (2003) Val158Met Polymorphism in catechol-O-methyltransferase gene associated with risk factors for breast cancer. *Cancer Epidemiol Biomarkers Prev*, **12**, 838-847.
8. Jiang,W., Zhu,Z., and Thompson,H.J. (2003) Effect of energy restriction on cell cycle machinery in 1-methyl-1-nitrosourea-induced mammary carcinomas in rats. *Cancer Res*, **63**, 1228-1234.
9. Thompson,H.J., Zhu,Z., and Jiang,W. (2003) Dietary energy restriction in breast cancer prevention. *J Mammary.Gland.Biol Neoplasia.*, **8**, 133-142.
10. Zhu,Z., Jiang,W., and Thompson,H.J. (2003) Mechanisms by which energy restriction inhibits rat mammary carcinogenesis: in vivo effects of corticosterone on cell cycle machinery in mammary carcinomas. *Carcinogenesis*, **24**, 1225-1231.
11. Jiang,W., Zhu,Z., Bhatia,N., Agarwal,R., and Thompson,H.J. (2002) Mechanisms of energy restriction: effects of corticosterone on cell growth, cell cycle machinery, and apoptosis. *Cancer Res*, **62**, 5280-5287.
12. McGinley,J.N., Knott,K.K., and Thompson,H.J. (2002) Semi-automated method of quantifying vasculature of 1-methyl-1-nitrosourea-induced rat mammary carcinomas using immunohistochemical detection. *J Histochem.Cytochem.*, **50**, 213-222.
13. Thompson,H.J., McGinley,J.N., Knott,K.K., Spoelstra,N.S., and Wolfe,P. (2002) Vascular density profile of rat mammary carcinomas induced by 1-methyl-1-nitrosourea: implications for the investigation of angiogenesis. *Carcinogenesis*, **23**, 847-854.
14. Thompson,H.J., Zhu,Z., and Jiang,W. (2002) Protection against cancer by energy restriction: all experimental approaches are not equal. *J Nutr*, **132**, 1047-1049.
15. Zhu,Z., Jiang,W., and Thompson,H.J. (2002) An experimental paradigm for studying the cellular and molecular mechanisms of cancer inhibition by energy restriction. *Mol.Carcinog.*, **35**, 51-56.
16. Zhu,Z., Jiang,W., Ganther,H.E., and Thompson,H.J. (2002) Mechanisms of cell cycle arrest by methylseleninic acid. *Cancer Res*, **62**, 156-164.
17. Block,E., Birringer,M., Jiang,W., Nakahodo,T., Thompson,H.J., Toscano,P.J., Uzar,H., Zhang,X., and Zhu,Z. (2001) Allium chemistry: synthesis, natural occurrence, biological activity, and chemistry of Se-alk(en)ylselenocysteines and their gamma-glutamyl derivatives and oxidation products. *J Agric.Food Chem.*, **49**, 458-470.
18. Ip,C., Dong,Y., Thompson,H.J., Bauman,D.E., and Ip,M.M. (2001) Control of rat mammary epithelium proliferation by conjugated linoleic acid. *Nutr Cancer*, **39**, 233-238.
19. Jiang,W., Zhu,Z., Ganther,H.E., Ip,C., and Thompson,H.J. (2001) Molecular mechanisms associated with Se-allylselenocysteine regulation of cell proliferation and apoptosis. *Cancer Lett.*, **162**, 167-173.
20. Knott,K.K., McGinley,J.N., Lubet,R.A., Steele,V.E., and Thompson,H.J. (2001) Effect of the aromatase inhibitor vorozole on estrogen and progesterone receptor content of rat mammary carcinomas induced by 1-methyl-1-nitrosourea. *Breast Cancer Res Treat.*, **70**, 171-183.
21. Medina,D., Thompson,H., Ganther,H., and Ip,C. (2001) Se-methylselenocysteine: a new compound for chemoprevention of breast cancer. *Nutr Cancer*, **40**, 12-17.
22. Raich,P.C., Lu,J., Thompson,H.J., and Combs,G.F., Jr. (2001) Selenium in cancer prevention: clinical issues and implications. *Cancer Invest*, **19**, 540-553.
23. Haegele,A.D., Gillette,C., O'Neill,C., Wolfe,P., Heimendinger,J., Sedlacek,S., and Thompson,H.J. (2000) Plasma xanthophyll carotenoids correlate inversely with indices of oxidative DNA damage and lipid peroxidation. *Cancer Epidemiol Biomarkers Prev*, **9**, 421-425.
24. Ip,C., Thompson,H.J., Zhu,Z., and Ganther,H.E. (2000) In vitro and in vivo studies of methylseleninic acid: evidence that a monomethylated selenium metabolite is critical for cancer chemoprevention. *Cancer Res*, **60**, 2882-2886.
25. Ip,C., Thompson,H.J., and Ganther,H.E. (2000) Selenium modulation of cell proliferation and cell cycle biomarkers in normal and premalignant cells of the rat mammary gland. *Cancer Epidemiol Biomarkers Prev*, **9**, 49-54.
26. McGinley,J.N., Knott,K.K., and Thompson,H.J. (2000) Effect of fixation and epitope retrieval on BrdU indices in mammary carcinomas. *J Histochem.Cytochem.*, **48**, 355-362.

27. Singh, M., McGinley, J.N., and Thompson, H.J. (2000) A comparison of the histopathology of premalignant and malignant mammary gland lesions induced in sexually immature rats with those occurring in the human. *Lab Invest*, **80**, 221-231.
28. Thompson, H.J. and Singh, M. (2000) Rat models of premalignant breast disease. *J Mammary.Gland.Biol Neoplasia.*, **5**, 409-420.
29. Thompson, H.J., Singh, M., and McGinley, J. (2000) Classification of premalignant and malignant lesions developing in the rat mammary gland after injection of sexually immature rats with 1-methyl-1-nitrosourea. *J Mammary.Gland.Biol Neoplasia.*, **5**, 201-210.
30. Zhu, Z., Jiang, W., Ganther, H.E., Ip, C., and Thompson, H.J. (2000) Activity of Se-allylselenocysteine in the presence of methionine gamma-lyase on cell growth, DNA integrity, apoptosis, and cell-cycle regulatory molecules. *Mol.Carcinog.*, **29**, 191-197.
31. Zhu, Z., Jiang, W., Ganther, H.E., Ip, C., and Thompson, H.J. (2000) In vitro effects of Se-allylselenocysteine and Se-propylselenocysteine on cell growth, DNA integrity, and apoptosis. *Biochem.Pharmacol.*, **60**, 1467-1473.
32. Banni, S., Angioni, E., Casu, V., Melis, M.P., Carta, G., Corongiu, F.P., Thompson, H., and Ip, C. (1999) Decrease in linoleic acid metabolites as a potential mechanism in cancer risk reduction by conjugated linoleic acid. *Carcinogenesis*, **20**, 1019-1024.
33. Ip, C., Zhu, Z., Thompson, H.J., Lisk, D., and Ganther, H.E. (1999) Chemoprevention of mammary cancer with Se-allylselenocysteine and other selenoamino acids in the rat. *Anticancer Res*, **19**, 2875-2880.
34. Ip, C., Banni, S., Angioni, E., Carta, G., McGinley, J., Thompson, H.J., Barbano, D., and Bauman, D. (1999) Conjugated linoleic acid-enriched butter fat alters mammary gland morphogenesis and reduces cancer risk in rats. *J Nutr*, **129**, 2135-2142.
35. Sinha, R., Kiley, S.C., Lu, J.X., Thompson, H.J., Moraes, R., Jaken, S., and Medina, D. (1999) Effects of methylselenocysteine on PKC activity, cdk2 phosphorylation and gadd gene expression in synchronized mouse mammary epithelial tumor cells. *Cancer Lett.*, **146**, 135-145.
36. Thompson, H.J., Jiang, W., and Zhu, Z. (1999) Mechanisms by which energy restriction inhibits carcinogenesis. *Adv.Exp.Med Biol*, **470**, 77-84.
37. Thompson, H.J., Heimendinger, J., Haegele, A., Sedlacek, S.M., Gillette, C., O'Neill, C., Wolfe, P., and Conry, C. (1999) Effect of increased vegetable and fruit consumption on markers of oxidative cellular damage. *Carcinogenesis*, **20**, 2261-2266.
38. Thompson, H.J. (1999) The management of post-operative nausea and vomiting. *J Adv.Nurs.*, **29**, 1130-1136.
39. Zhu, Z., Jiang, W., and Thompson, H.J. (1999) Effect of energy restriction on tissue size regulation during chemically induced mammary carcinogenesis. *Carcinogenesis*, **20**, 1721-1726.
40. Zhu, Z., Jiang, W., and Thompson, H.J. (1999) Effect of energy restriction on the expression of cyclin D1 and p27 during premalignant and malignant stages of chemically induced mammary carcinogenesis. *Mol.Carcinog.*, **24**, 241-245.
41. Dahiya, R., Lee, C., Zhu, Z., and Thompson, H.J. (1998) Microsatellite instability in an animal model of mammary carcinogenesis. *Int.J Oncol.*, **13**, 23-28.
42. Haegele, A.D., Wolfe, P., and Thompson, H.J. (1998) X-radiation induces 8-hydroxy-2'-deoxyguanosine formation in vivo in rat mammary gland DNA. *Carcinogenesis*, **19**, 1319-1321.
43. Ip, C., Thompson, H.J., and Ganther, H.E. (1998) Cytostasis and cancer chemoprevention: investigating the action of triphenylselenonium chloride in in vivo models of mammary carcinogenesis. *Anticancer Res*, **18**, 9-12.
44. Lu, J., Jiang, C., Mitrenga, T., Cutter, G., and Thompson, H.J. (1998) Pathogenic characterization of 1-methyl-1-nitrosourea-induced mammary carcinomas in the rat. *Carcinogenesis*, **19**, 223-227.
45. Thompson, H.J., McGinley, J.N., Wolfe, P., Singh, M., Steele, V.E., and Kelloff, G.J. (1998) Temporal sequence of mammary intraductal proliferations, ductal carcinomas in situ and adenocarcinomas induced by 1-methyl-1-nitrosourea in rats. *Carcinogenesis*, **19**, 2181-2185.
46. Thompson, H.J., McGinley, J., Rothhammer, K., and Singh, M. (1998) Ovarian hormone dependence of pre-malignant and malignant mammary gland lesions induced in pre-pubertal rats by 1-methyl-1-nitrosourea. *Carcinogenesis*, **19**, 383-386.
47. Zhu, Z., Jiang, W., and Thompson, H.J. (1998) Effect of corticosterone administration on mammary gland development and p27 expression and their relationship to the effects of energy restriction on mammary carcinogenesis. *Carcinogenesis*, **19**, 2101-2106.

Relevant Research Activities (Current or Recently Completed)

Energy Restriction and Mammary Carcinogenesis (NIH-R01 CA 52626), H. Thompson, P.I. The goal of this project is to determine how induction of the energy restricted state by caloric restriction inhibits the process of mammary carcinogenesis.

Exercise, Mammary Cancer Prevention and Mechanisms (NIH-R01 CA 100693), H. Thompson, P.I. The goal of this project is to determine how exercise inhibits the process of mammary carcinogenesis.

Selenium and Breast cancer prevention (DOD BC004026) H. Thompson, P.I. The goal of this project is to determine if selenium decreases oxidative markers for cancer risk in women at high risk for breast cancer. Effects of selenium on breast cytology derived from nipple aspirate fluid also will be determined.

Selenium and Lung Cancer Risk (NIH-R01 CA 84059) H. Thompson, P.I.

The goal of this recently completed project is determine if selenium 1) decreases cytological atypia detected in sputum , and 2) decreases oxidative markers for cancer risk in a cohort of asbestos-exposed subjects.