

CURRICULUM VITAE

Name: Catherine Chung-Yao Chang

Professional Experience: Principal Research Scientist (2014-present)
Biochemistry Department, Geisel School of Medicine at Dartmouth

Senior Research Associate (1997-2013)
Biochemistry Department, Dartmouth Medical School

Research Associate (1991-1997)
Biochemistry Department, Dartmouth Medical School

Research Assistant (1981-1991)
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Date of Birth: September 23, 1946

Place of Birth: Kweiyang City, Kweichow Province, China

Nationality: U.S.A.

Educational History: Ph.D. in Biochemistry, Showa University, Tokyo, Japan, 2011

M.L.S. from University of North Carolina at Chapel Hill, U.S.A. 1972.
Master degree in Library Science, (major in Information Science).

B.A. from Fu-Jen University, Taipei, Taiwan in 1969.
(Department of Foreign Languages and Literatures)

The First Girls' High School in Taipei, Taiwan in 1965.

Professional experience:

1. A session co-chair and invited speaker in a satellite meeting on "Cellular Cholesterol Ester Metabolism" of the 17th International Congress of Biochemistry and Molecular Biology at University of California, San Francisco on August 23, 1997.
2. Invited speaker in the 72nd Scientific Session of American Heart Association on "ACAT and Atherosclerosis" at Atlanta, GA on November 10, 1999.
3. An oral poster presenter at the 73rd Scientific Session of American Heart Association at New Orleans, LA on November 14, 2000.
4. One of two keynote speakers at the 13th Annual Mid-Atlantic Lipid Research Symposium at Atlantic City, NJ on March 1-2, 2001.
5. Invited speaker in the 75th Scientific Session of American Heart Association on "Genes for Fats" at Chicago, IL on November 18, 2002.
6. Invited speaker, FASEB Conference on "Lipid Droplets", Vermont, 2014.
7. One of two organizers for JLR thematic series on "ApoE and Lipid Homeostasis in Alzheimer's Disease, 2017
8. One of the Keynote Speakers, 12th International Conference on Alzheimer's Disease & Dementia, Valencia, Spain. 2018.

Publications:

1. Chang, T. Y., J. S. Limanek, and C. C. Chang. 1981. Evidence indicating that inactivation of 3-hydroxy-3-methylglutaryl coenzyme A reductase by low density lipoprotein or by 25-hydroxycholesterol requires mediator protein(s) with rapid turnover rate. *The Journal of biological chemistry* **256**: 6174-6180.
2. Chang, T. Y., J. S. Limanek, and C. C. Y. Chang. 1981. A simple and efficient procedure for the rapid homogenization of cultured animal cells grown in monolayer. *Anal. Biochem.* **116**: 298-302.
3. Chang, T. Y., and C. C. Chang. 1982. Revertants of a Chinese hamster ovary cell mutant resistant to suppression by an analogue of cholesterol: isolation and partial biochemical characterization. *Biochemistry* **21**: 5316-5323.
4. Chang, C. C., and T. Y. Chang. 1986. Cycloheximide sensitivity in regulation of acyl coenzyme A:cholesterol acyltransferase activity in Chinese hamster ovary cells. 2. Effect of sterol endogenously synthesized. *Biochemistry* **25**: 1700-1706.
5. Chang, C. C., G. M. Doolittle, and T. Y. Chang. 1986. Cycloheximide sensitivity in regulation of acyl coenzyme A:cholesterol acyltransferase activity in Chinese hamster ovary cells. 1. Effect of exogenous sterols. *Biochemistry* **25**: 1693-1699.
6. Cadigan, K. M., C. C. Chang, and T. Y. Chang. 1989. Isolation of Chinese hamster ovary cell lines expressing human acyl-coenzyme A/cholesterol acyltransferase activity. *The Journal of cell biology* **108**: 2201-2210.

7. Shi, S. P., C. C. Chang, G. W. Gould, and T. Y. Chang. 1989. Comparison of phosphatidylethanolamine and phosphatidylcholine vesicles produced by treating cholate-phospholipid micelles with cholestyramine. *Biochimica et biophysica acta* **982**: 187-195.
8. Chang, C. C., H. Y. Huh, K. M. Cadigan, and T. Y. Chang. 1993. Molecular cloning and functional expression of human acyl-coenzyme A:cholesterol acyltransferase cDNA in mutant Chinese hamster ovary cells. *The Journal of biological chemistry* **268**: 20747-20755.
9. Chang, C. C., W. W. Noll, N. Natile-McMenemy, E. A. Lindsay, A. Baldini, W. Chang, and T. Y. Chang. 1994. Localization of acyl coenzyme A:cholesterol acyltransferase gene to human chromosome 1q25. *Somat Cell Mol Genet* **20**: 71-74.
10. Chang, T. Y., C. C. Chang, and K. M. Cadigan. 1994. The structure of acyl coenzyme A-cholesterol acyltransferase and its potential relevance to atherosclerosis. *Trends in cardiovascular medicine* **4**: 223-230.
11. Chang, T. Y., C. C. Y. Chang, and K. M. Cadigan. 1994. Structure of ACAT and its potential relevance to atherosclerosis. *Trends Cardiovasc. Med.* **4**: 223-230.
12. Hasan, M. T., C. C. Chang, and T. Y. Chang. 1994. Somatic cell genetic and biochemical characterization of cell lines resulting from human genomic DNA transfections of Chinese hamster ovary cell mutants defective in sterol-dependent activation of sterol synthesis and LDL receptor expression. *Somat Cell Mol Genet* **20**: 183-194.
13. Chang, C. C., J. Chen, M. A. Thomas, D. Cheng, V. A. Del Priore, R. S. Newton, M. E. Pape, and T. Y. Chang. 1995. Regulation and immunolocalization of acyl-coenzyme A:cholesterol acyltransferase in mammalian cells as studied with specific antibodies. *The Journal of biological chemistry* **270**: 29532-29540.
14. Cheng, D., C. C. Chang, X. Qu, and T. Y. Chang. 1995. Activation of acyl-coenzyme A:cholesterol acyltransferase by cholesterol or by oxysterol in a cell-free system. *The Journal of biological chemistry* **270**: 685-695.
15. Uelmen, P. J., K. Oka, M. Sullivan, C. C. Chang, T. Y. Chang, and L. Chan. 1995. Tissue-specific expression and cholesterol regulation of acylcoenzyme A:cholesterol acyltransferase (ACAT) in mice. Molecular cloning of mouse ACAT cDNA, chromosomal localization, and regulation of ACAT in vivo and in vitro. *The Journal of biological chemistry* **270**: 26192-26201.
16. Matsuda, H., H. Hakamata, A. Miyazaki, M. Sakai, C. C. Chang, T. Y. Chang, S. Kobori, M. Shichiri, and S. Horiuchi. 1996. Activation of acyl-coenzyme A:cholesterol acyltransferase activity by cholesterol is not due to altered mRNA levels in HepG2 cells. *Biochimica et biophysica acta* **1301**: 76-84.
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18. Chang, T. Y., C. C. Chang, and D. Cheng. 1997. Acyl-coenzyme A:cholesterol acyltransferase. *Annu Rev Biochem* **66**: 613-638.
19. Chang, T. Y., M. T. Hasan, J. Chin, C. C. Chang, D. M. Spillane, and J. Chen. 1997. Chinese hamster ovary cell mutants affecting cholesterol metabolism. *Curr Opin Lipidol* **8**: 65-71.
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21. Chang, C. C., C. Y. Lee, E. T. Chang, J. C. Cruz, M. C. Levesque, and T. Y. Chang. 1998. Recombinant acyl-CoA:cholesterol acyltransferase-1 (ACAT-1) purified to essential homogeneity utilizes cholesterol in mixed micelles or in vesicles in a highly cooperative manner. *The Journal of biological chemistry* **273**: 35132-35141.

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27. Chang, C. C., S. Lin, N. Sakashita, and T. Y. Chang. 2000. Distinct intracellular locations of ACAT-1 and ACAT-2 in differentiated Caco-2 cells (Abstract). *In* AHA Scientific Sessions, New Orleans.
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- residue 526 and the role of Pro347 near the fifth transmembrane domain. *FEBS J* **281**: 1773-1783.
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