
BIOGRAPHICAL SKETCH

(Last updated: 2016-03-10)

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| NAME Heesun Cheong | ADDRESS National Cancer Center, Korea 323 Ilsan-ro, Ilsandong-Gu, Goyang Si, Gyeonggi-do |
| POSITION TITLE Senior Scientist | |

EDUCATION

| INSTITUTION AND LOCATION | DEGREE | YEAR(s) | FIELD OF STUDY |
|--|--------|-----------|----------------------------|
| Kyung-Hee University, Seoul, South Korea | B.S. | 1988-1992 | Biology |
| Yonsei University, Seoul, South Korea | M.S. | 1992-1994 | Biochemistry |
| University of Michigan, Ann Arbor, MI | Ph.D | 2002-2008 | Molecular and Cell biology |

1) Positions/Employment, Membership and Honors

RESEARCH EXPERIENCE

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|---|-----------------|
| <i>Graduate student</i> | 03/1992-02/1994 |
| Department of Biochemistry, Yonsei University, South Korea M.S. thesis: "Effect of Recombinant Human Tumor Necrosis Factor (TNF) on the Activity of Glycolytic Regulatory Enzymes in Transformed cells" <u>Advisor:</u> Dr. Soung-Soo Kim | |
| <i>Teaching & Research Assistant</i> | 03/1994-02/1995 |
| Department of Pharmacology, Yonsei University, South Korea | |
| <i>Research Scientist</i> | 03/1995-09/2000 |
| Research Institute, LG Chemical Ltd, South Korea | |
| <i>Research Assistant</i> | 10/2001-08/2002 |
| Department of Pharmaceutical Sciences, University of Michigan, Ann Arbor, MI | |
| <i>Graduate student</i> | 09/2002-08/2008 |
| Department of Molecular, Cellular, and Developmental Biology(MCDB), University of Michigan, Ann Arbor, MI Ph.D. thesis: Mechanistic Role of Atg1 Complexes for Autophagy in <i>Saccharomyces cerevisiae</i> <u>Advisor:</u> Dr. Daniel J. Klionsky | |
| <i>Postdoc fellow</i> | 09/2008-10/2008 |
| Department of Molecular Cellular, and Developmental Biology(MCDB), University of Michigan, Ann Arbor, MI <u>Advisor:</u> Dr. Daniel J. Klionsky | |

Postdoc fellow

12/2008-7/2013

Department of Cancer Biology, University of Pennsylvania, Philadelphia, PA
Department of Cancer Biology and Genetics, Memorial Sloan-Kettering Cancer Center, New York, NY
Advisor: Dr. Craig B. Thompson

Principal Research Scientist 9/2013-04/2014
CKD (ChongKeunDang) Research Institute, CKD pharmaceutical Corp., Yong-in, Korea

Senior Scientist 5/2014-present
National Cancer Center Korea(NCC), Goyang-Si., Korea

Assistant Professor 9/2015-present
Graduate School of Cancer Science and Policy (GSCSP), Goyang-Si., Korea

MEMBERSHIP

The New York Academy of Sciences, member in 2011, 2012

2) Publications

Klionsly, A. et al.(2016) Guidelines for the Use and Interpretation of Assays for Monitoring Autophagy" *Autophagy Autophagy*. 12(1):1-222

Cheong H. (2015) Integrating autophagy and metabolism in cancer. *Arch Pharm Res.* 38(3):358-71

Sung, S., Choi, J., and **Cheong, H.** (2015) Catabolic pathways regulated by mTORC1 are pivotal for survival and growth of cancer cells expressing mutant Ras. *Oncotarget* 6(38): 40405-40417 (Journal Cover*)

Cheong H., and Klionsky DJ. (2015) mTORC1 maintains metabolic balance. *Cell Res.* 25(10):1085-6.

Han Y, Choi YH, Lee SH, Jin YH, **Cheong H**, and Lee KY. (2015) Yin Yang 1 is a multi-functional regulator of adipocyte differentiation in 3T3-L1 cells. *Mol Cell Endocrinol.* 413:217-27

Choi YH, Han Y, Lee SH, **Cheong H**, Chun KH, Yeo CY, Lee KY. (2015) Src enhances osteogenic differentiation through phosphorylation of Osterix. *Mol Cell Endocrinol.* 407:85-97

Cheong H. (2015) Integrating autophagy and metabolism in cancer. *Arch Pharm Res.* 38(3):358-71

Miller-Fleming L*, **Cheong H***, Antas P, Klionsky DJ.(2014) Detection of *Saccharomyces cerevisiae* Atg13 by western blot. *Autophagy* 10(3):514-517

Cheong, H., Wu, J., Gonzales, L., Guttentag, S., Thompson, C.B., and Lindsten, T.(2014) Analysis of a lung defect in autophagy-deficient mouse strains. *Autophagy* 10(1):45-56

Mao, K., Chew, L.H., Inoue-Aono, Y., **Cheong, H.**, Nair, U., Popelka, H., Yip, CK., and Klionsky D.J. (2013) Atg29 phosphorylation regulates coordination of the Atg17-Atg31-Atg29 complex with the Atg11 scaffold during autophagy initiation. *Proc Natl Acad Sci USA.* 110(31): E2875-2884

Cheong, H., Lu, C., Lindsten, T., and Thompson, C.B. (2012) Therapeutic targets in cancer cell metabolism and autophagy. *Nat Biotechnol* **30**(7) 671-678

Klionsly D...**Cheong, H** et.al. (2012) Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy* **8**(4): 445-544

Cheong, H., Lindsten, T., and Thompson, C.B. (2012) Autophagy and ammonia. *Autophagy* **8**(1):122-123

Cheong, H., Lindsten, T., Wu, J., Lu, C., and Thompson, C.B. (2011) Ammonia-induced autophagy is independent of ULK1/ULK2 kinases. *Proc Natl Acad Sci USA*. **108**(27): 11121–11126

Cheong, H., and Klionsky, D.J. (2008) Biochemical methods to monitor autophagy-related processes in yeast. *Methods Enzymol* **451**:1-26.

Cao, Y., **Cheong, H.**, Song, H., and Klionsky, D.J. (2008) *In vivo* reconstitution of autophagy in *Saccharomyces cerevisiae*. *J Cell Biol*. **182**(4):703-713.

Cheong, H. and Klionsky, D.J. (2008) Dual role of Atg1 in regulation of autophagy-specific PAS assembly in *Saccharomyces cerevisiae*. *Autophagy* **4**(5):724-726.

Cheong, H., Nair, U., Geng, J., and Klionsky, D.J. (2008) The Atg1 kinase complex is involved in the regulation of protein recruitment to initiate sequestering vesicle formation for nonspecific autophagy in *Saccharomyces cerevisiae*. *Mol Biol Cell*. **19**(2):668-681.

Cheong, H., Yorimitsu, T., Reggiori, F., Legakis, J.E., Wang, C.W., and Klionsky, D.J. (2005) Atg17 regulates the magnitude of the autophagic response. *Mol Biol Cell* **16**(7): 3438-3453.

Kim, Y.H, Park, B.R., **Cheong, H.S.**, Kwan, O.H., Kim, D.Q., and Kim, S.S. (1999) Comparison of TNF-mediated glucose catabolism between the TNF-sensitive and –resistant cell lines. *J Biochem Mol Biol* **32**(2): 140-146

Moon, J.S., **Cheong, H.S.**, Kim, D.K., Kim, K.H., and Lee, B.C. (1995) Relationship of the change in biogenic amines to Nitric Oxide (NO) and oxygen free radicals during cerebral ischemia/reperfusion *Kor J Neurosci*. **13** (4): 773-787

Cheong, H.S and Kim, S.S (1994) Simple purification human recombinant TNF by conventional chromatography. *Kor Biochem J*. **27**(4): 330-334.

3) Presentation

Cheong, H. Ammonia-induced autophagy is independent of ULK1/ULK2. **76**th symposium: Metabolism & Disease, Cold Spring Harbor Laboratory Meeting. June 1-6, 2011