

**CURRICULUM VITAE****NAME:** Chih-Hao Lee**ADDRESS:** Department of Molecular Metabolism  
Division of Biological Sciences,  
Harvard School of Public Health  
655 Huntington Ave., SPH I, Room 409  
Boston, MA 02115**EDUCATION:**

<u>Date</u>	<u>Discipline</u>	<u>Degree</u>	<u>Institution</u>
1999	Pharmacology	Ph.D.	University of Minnesota Minneapolis, MN
1989	Chemical Engineering	B.S.	National Tsing-Hua University, Taiwan, R.O.C

**POSTDOCTORAL TRAINING:**

<u>Dates</u>	<u>Field of Research</u>	<u>Place</u>	<u>Title</u>
1999-2004	Molecular Physiology	Howard Hughes Medical Institute, Salk Institute (Dr. Ronald Evans)	Research Associate

**ACADEMIC APPOINTMENTS:**

<u>Dates</u>	<u>Title</u>	<u>Department</u>	<u>Institution</u>
2015-	Professor	Molecular Metabolism (formerly Genetics & Complex Diseases)	Harvard School of Public Health, Division of Biological Sciences
2010-2015	Associate Professor	Genetics & Complex Diseases	Harvard School of Public Health, Division of Biological Sciences
2004-2010	Assistant Professor	Genetics & Complex Diseases	Harvard School of Public Health, Division of Biological Sciences

**HONORS AND DISTINCTIONS:**

2012 Armen H. Tashjian Jr. Award for Excellence in Endocrine Research  
2011 The Mentoring Award by the HSPH graduating class of 2011  
2006 The Scientist Development Grant awarded by the American Heart Association

- 2005 The William F. Milton Fund Award  
 1998 Bacaner Research Award, presented by Minnesota Medical Foundation for excellence in creative research

## **MAJOR COMMITTEE ASSIGNMENTS**

### National and International Committees

- 2022 American Diabetes Association 82<sup>nd</sup> Scientific Sessions Abstract reviewer  
 2021 NIH NIAID IDEaL U01 study section  
 2020 NIH NIEHS K99/R00 study section  
 2019-2018 NIH NIDDK special emphasis study section, Chair  
 2018 Reviewer for NIH Anonymization Project and NIDDK DP1  
 2016-2014 NIH NIDDK R13 Conference Grant review study section (member)  
 2014-2018 NIH NIDDK/MCE study section (member)  
 2013-2013 Research Grants Council, Hong Kong, grant reviewer  
 2013 Swiss National Science Foundation, grant reviewer  
 2012-2014 NIH NIDDK study section (INMP, IPOD, EMNR, ad hoc)  
 2009-2014 American Diabetes Association Study Section  
 2008-2007 Pennsylvania Department of Health Performance Review  
 2007 American Diabetes Association, mentor-based postdoctoral fellowship reviewer  
 2007-2010 American Heart Association Study Section  
 2006-2007 AFM-France (Association Francaise Contre Les Myopathies), grant reviewer

### Harvard/HSPH Committees

- 2022-2021-2021-2021-2020-2021 Dean's Fund for Scientific Advancement grant reviewer  
 2021-2021-2021-2021-2020-2021 Regeneron Prize competition internal review committee (Harvard University)  
 2021-2021-2021-2021-2020-2021 Program Director, NIH T32 Training Program in Molecular Metabolism  
 2021-2021-2021-2021-2020-2021 Member, Research Scientist review Committee, Harvard T.H. Chan School of Public Health  
 2020-2021 Member, Faculty Council, Harvard T.H. Chan School of Public Health  
 2019-2020 Search Committee for an Assistant/Associate Professor, Harvard T.H. Chan School of Public Health, Department of Molecular Metabolism  
 2018-2019 Chair, Search Committee for an Assistant/Associate Professor, Harvard T.H. Chan School of Public Health, Department of Genetics and Complex Diseases  
 2017-2017-2016-2016-2016-2018 Tenure Promotion Committees for several faculty members at and outside Harvard University  
 2016-2016-2016-2018 Lab Safety Committee, Harvard University  
 2016-2018 Standing Committee on Appointments, Reappointments, and Promotions, Harvard T.H. Chan School of Public Health  
 2016-2018 Search Committee for Assistant/Associate Professor, Harvard T.H. Chan School of Public Health, Department of Genetics and Complex Diseases & Department of Immunology and Infectious Diseases  
 2015-2015-2011-2015 Biological Sciences in Public Health (BPH) Faculty Advisory Board, Harvard T.H. Chan School of Public Health  
 2011-2015 Transdisciplinary Research on Energetics and Cancer Center Advisory Committee, Harvard T.H. Chan School of Public Health  
 2011 Faculty Council, Harvard T.H. Chan School of Public Health  
 2008-2008-2007-2010 Biological Sciences in Public Health (BPH) PhD program Admission Committee, Harvard T.H. Chan School of Public Health  
 2007-2010 School Committee on Educational Policy, Harvard T.H. Chan School of Public Health  
 2007 BPH Rotation Committee, Harvard T.H. Chan School of Public Health

2006-2007 BPH Curriculum Committee, Harvard T.H. Chan School of Public Health

**EDITORIAL BOARDS:**

2022- Life Metabolism, Editorial Board  
2018-2020 Diabetes, Editorial Board  
2011-2015 Adipocyte Journal

**PROFESSIONAL MEMBERSHIP AND ACTIVITIES**

2013- Member, Boston Nutrition Obesity Research Center  
2013- Member, Harvard Digestive Diseases Center

**RESEARCH SUPPORT**

**Ongoing Research Support**

R01DK064750 (Lee) 2/05/17-11/30/21

NIH/NIDDK

Microglial Iron Metabolism and Its Regulation by Cannabinoids

Overall Goals: to examine the potential anti-inflammatory role of cannabinoid receptor-2 and its effects on microglial cell iron transport and metabolism.

Role: Co-PI

R01 HL118264 (Hu) 08/20/17-06/30/22

NIH/NIHLBI

Mediterranean Diet, metabolites and cardiovascular diseases

Overall Goals: to determine serum metabolites changes under Mediterranean diets and their correlations to cardiovascular diseases

Role: Co-Investigator

R01DK120560 (Bhupathiraju) 04/15/19-05/31/23

NIH/NIDDK

Saliva and Plasma Metabolomic Signatures of Diabetes Progression in a Hispanic Cohort

Overall Goals: to profile saliva and plasma metabolites and determine their correlations with diabetes progression.

Role: Co-Investigator

R01DK127601 (Hu) 03/15/21-01/31/25

NIH/NIDDK

Lifestyle Interventions, Metabolites, Microbiome, and Diabetes Risk

Overall Goals: to examine the effects of an intensive lifestyle intervention consisting of an energy-reduced Mediterranean diet, increased physical activity and weight loss on changes in body composition, plasma and stool metabolites, and risk of type 2 diabetes. It will also evaluate whether the benefits of the lifestyle intervention on diabetes risk differ by individuals' metabolic profile.

Role: Co-Investigator

**MAJOR RESEARCH INTERESTS:**

Energy Metabolism in metabolic homeostasis and inflammatory response; Metabolic biology and related diseases.

**LECTURES BY INVITATION (SELECTED)**

(12/2022) VIB Conference, "Type 2 immunity in homeostasis and disease, Ghent, Belgium  
 (07/2022) SCBA meetings  
 03/2022 National Cheng Kung University, Taiwan  
 06/2021 ADA 81<sup>st</sup> Scientific Sections  
 01/2021 Joslin Diabetes center  
 09/2020 University of Nebraska-Lincoln  
 09/2020 Duke-NSU, Singapore  
 08/2020 NIH Workshop on Exerokines  
 11/2019 Salk Institute  
 05/2019 UC Berkeley  
 05/2019 Pfizer, Cambridge, MA  
 09/2018 Boston University, Boston  
 06/2018 78<sup>th</sup> ADA Scientific Sessions, Orlando, FL  
 05/2018 52<sup>nd</sup> ESCI Congress, Barcelona, Spain  
 05/2018 Academia Sinica and National Defense Medical Center, Taipei, Taiwan  
 04/2018 Wuhan University, Wuhan, China  
 11/2017 University of Michigan, Ann Arbor  
 10/2017 Emory University  
 06/2017 ADA scientific meeting, San Diego  
 04/2017 OHSU  
 11/2016 Georgia State University  
 11/2016 Texas A & M University  
 10/2016 U Penn CHOP mitochondria conference  
 09/2016 TsingHua University, Beijing, China  
 09/2016 Wuhan Medical College, Wuhan, China  
 08/2016 NIH/NIA workshop on Mitochondrial dynamics, mitophagy and aging  
 03/2016 U of Georgia, Department of Nutrition  
 02/2016 Keystone Symposia on Obesity and Adipose Tissue Biology  
 11/2015 Dalian Medical University, Tongji Medical College, Fudan University, China  
 07/2015 15<sup>th</sup> SCBA International Symposium, Taipei, Taiwan  
 06/2015 American Diabetes Association 75<sup>th</sup> Scientific Sessions, Boston  
 05/2015 Symposia on PREDIMED, Nutrition, Omics and System Epidemiology, Spain  
 11/2014 Harvard Medical School Chinese Scholars and Scientists Association  
 Symposium on Diabetes and Obesity  
 10/2014 UC Berkeley, Department of Nutritional Sciences and Toxicology  
 09/2014 Academia Sinica and National Cheng Kung University, Taiwan  
 07/2014 Federation of American Societies for Experimental Biology (FASEB) summer  
 conference on Lipid Droplets: Metabolic Consequence of the Storage of Neutral  
 Lipids  
 06/2014 Gordon Research Conferences on Lipid and Lipoprotein Metabolism  
 06/2014 Yale University, ICSNM  
 04/2014 Harvard Digestive Diseases Center annual symposium "Alimentary Tract Lipids in  
 Health and Diseases"  
 03/2014 Keystone Symposia on Innate Immunity, Metabolism and Vascular Injury  
 03/2014 City of Hope Annual Rachmiel Levine Diabetes and Obesity Symposium  
 12/2013 University of Minnesota  
 11/2013 Tufts Medical center, Boston Nutrition Obesity Research Center  
 09/2013 EMBO Nuclear Receptor Meeting, Italy  
 07/2013 Society of Chinese Bioscientists in America (SCBA) International Conference,  
 China

11/2012	American Heart Association Scientific Sessions 2012
11/2012	University of Southern California
09/2012	Case Western University
08/2012	University of Iowa
05/2012	HSPH, Armen H. Tashjian Jr. Award for Excellence in Endocrine Research
03/2012	Beth Israel Deaconess Medical Center
02/2012	University of Wisconsin
02/2012	Cornell University
10/2011	Joslin Diabetes Center
07/2011	SCBA International Conference, Guangzhou, China
05/2011	34 <sup>th</sup> Steenbock Symposium at the University of Wisconsin
12/2009	China Medical University, Taichung, Taiwan
08/2009	28 <sup>th</sup> Annual Summer Symposium in Molecular Biology, Penn State University.
04/2009	University of Virginia, Department of Pharmacology
01/2009	Brigham & Women's Hospital, Harvard Medical School.
11/2008	41 <sup>st</sup> Annual Meeting of the Society for Leukocyte Biology, Denver, Colorado
10/2008	29 <sup>th</sup> Annual Meeting of Japan Society for the Study of Obesity, Oita, Japan
02/2008	Annual Meeting of Diabetes Society of Taiwan, Taipei, Taiwan
12/2007	Vanderbilt University
03/2007	9 <sup>th</sup> Annual Postgraduate Nutrition Symposium "Obesity and Inflammation", Harvard Medical School, Division of Nutrition
02/2007	Seton Hall University, NJ
12/2006	Annual Meeting of Pharmaceutical Society of Taiwan, Taichung, Taiwan
12/2006	China Medical University, Taichung, Taiwan
11/2006	Nuclear Receptors: bench to bedside, Cold Spring Harbor, New York
03/2006	University of Minnesota, Minneapolis, MN
03/2005	World Obesity Federation (formerly IASO) Stock Conference, Istanbul, Turkey

## **PUBLICATIONS:**

### Peer-Reviewed Journals

1. Wei L-N, **Lee C-H**, Chang S-L, Chu Y-S. Pathogenesis in transgenic mice expressing bovine cellular retinoic acid-binding protein. *Development Growth & Differentiation* 1992; 34:479.
2. Wei L-N, **Lee C-H**. Demethylation in the 5'-flanking region of mouse cellular retinoic acid binding protein-I gene is associated with its high level of expression in mouse embryos and facilitates its induction by retinoic acid in P19 embryonal carcinoma cells. *Developmental Dynamics* 1994; 201:1-10.
3. Wei L-N, **Lee C-H**, Chinpaisal C, Copeland NG, Gilbert DJ, Jenkins NA, Hsu Y-C. Studies of cloning, chromosomal mapping, and embryonic expression of the mouse RAB geranylgeranyl transferase beta subunit. *Cell Growth & Differentiation* 1995; 6:607-14.
4. Wei L-N, **Lee C-H**, Chang L. Retinoic acid induction of mouse cellular retinoic acid-binding protein-I gene expression is enhanced by sphinganine. *Mol Cell Endocrinol* 1995; 111:207-11.
5. **Lee C-H**, Copeland NG, Gilbert DJ, Jenkins NA, Wei L-N. Genomic structure, promoter identification, and chromosomal mapping of a mouse nuclear orphan receptor expressed in embryos and adult testes. *Genomics* 1995; 30 (46-52).
6. **Lee C-H**, Chang L, Wei L-N. Molecular cloning and characterization of a mouse nuclear orphan receptor expressed in embryos and testes. *Mol Repro Devel* 1996; 44 (305-314).
7. Chinpaisal C, **Lee C-H**, Wei L-N. Studies of the mouse RAB geranylgeranyl transferase beta subunit-gene structure, expression and regulation. *Gene* 1997; 184:237-43.

8. **Lee C-H**, Chang L, Wei L-N. Distinct expression patterns and biological activities of two isoforms of the mouse orphan receptor TR2. *J Endocrinol* 1997; 152:245-55.
9. Wei L-N, Chang L, **Lee C-H**. Studies of over-expressing cellular retinoic acid binding protein-I in cultured cells and transgenic mice. *Transgenics* 1997; 2 (201-209).
10. Wei L-N, Chang L, Filipcik P, **Lee C-H**. Studies of cellular retinoic acid-binding protein I gene activities in mouse embryos and embryonic cells using transgenic approaches. *Transgenics* 1997; 2:191-9.
11. Wei L-N, **Lee C-H**, Filipcik P, Chang L. Regulation of the mouse cellular retinoic acid-binding protein-I gene by thyroid hormone and retinoids in transgenic mouse embryos and P19 cells. *J Endocrinol* 1997; 155:35-46.
12. Chinpaisal C, Chang L, Hu X, **Lee C-H**, Wen W-N, Wei L-N. The orphan nuclear receptor TR2 suppresses a DR4 hormone response element of the mouse CRABP-I gene promoter. *Biochemistry* 1997; 36:14088-95.
13. Yu Z, **Lee C-H**, Chinpaisal C, Wei L-N. A constitutive nuclear localization signal from the second finger of orphan receptor TR2. *J Endocrinol* 1998; 159:53-60.
14. Chinpaisal C, **Lee C-H**, Wei L-N. Mechanisms of the mouse orphan receptor TR2-11 mediated gene suppression. *J Biol Chem* 1998; 273:18077-85.
15. **Lee C-H**, Chinpaisal C, Wei L-N. A novel nuclear receptor heterodimerization pathway mediated by nuclear orphan receptors TR2 and TR4. *J Biol Chem* 1998; 273:25209-15.
16. **Lee C-H**, Chinpaisal C, Wei L-N. Cloning and characterization of mouse RIP140, a co-repressor for nuclear orphan receptor TR2. *Mol Cell Biol* 1998; 18:6745-55.
17. **Lee C-H**, Wei L-N. Characterization of an inverted repeat with a zero spacer (IR0)-type retinoic acid response element from the mouse nuclear orphan receptor TR2-11 gene. *Biochemistry* 1999; 38:8820-5.
18. **Lee C-H**, Wei L-N. Characterization of receptor-interacting protein 140 in retinoid receptor activities. *J Biol Chem* 1999; 274:31320-6.
19. **Lee C-H**, Wei L-N. Characterization of the mouse nuclear orphan receptor TR2-11 gene promoter and its potential role in retinoic acid-induced P19 apoptosis. *Biochem Pharmacol* 2000; 60:127-36.
20. Chawla A, Boisvert WA, **Lee C-H\***, Laffitte BA, Barak Y, Joseph SB, Liao D, Nagy L, Edwards PA, Curtiss LK, Evans RM, Tontonoz P. A PPAR gamma-LXR-ABCA1 pathway in macrophages is involved in cholesterol efflux and atherogenesis. *Mol Cell* 2001; 7:161-71. **(equal first authorship)**
21. Kao H-Y, **Lee C-H**, Komarov A, Han CC, Evans RM. Isolation and characterization of mammalian HDAC10, a novel histone deacetylase. *J Biol Chem* 2002; 277:187-93.
22. Chawla A, **Lee C-H\***, Barak Y, He W, Rosenfeld J, Liao D, Han J, Kang H, Evans RM. PPARdelta is a very low-density lipoprotein sensor in macrophages. *Proc Natl Acad Sci USA* 2003; 100:1268-73. **(equal first authorship)**
23. Wang YX, **Lee C-H**, Tjep S, Yu RT, Ham J, Kang H, Evans RM. Peroxisome-proliferator-activated receptor delta activates fat metabolism to prevent obesity. *Cell* 2003; 113:159-70.
24. **Lee C-H**, Chawla A, Urbiztondo N, Liao D, Curtiss LK, Boisvert WA, Evans RM. Transcriptional Repression of Atherogenic Inflammation: Modulation by PPARdelta. *Science* 2003; 302:453-7.
25. Koo S-H, Satoh H, Herzig S, **Lee C-H**, Hedrick S, Kulkarni R, Evans RM, Olefsky J, Montminy M. PGC-1 promotes insulin resistance in liver through PPAR alpha-dependent induction of TRB-3. *Nature Medicine* 2004; 10:530-4.
26. Sonoda J, Chong LW, Downes M, Barish GD, Coulter S, Liddle C, **Lee CH**, Evans RM. Pregnane X receptor prevents hepatorenal toxicity from cholesterol metabolites. *Proc Natl Acad Sci USA*. 2005;102:2198-2203.

27. **Lee C-H**, Kang K, Mehl IR, Nofsinger R, Alaynick W, Chong L-W, Rosenfeld JM and Evans RM. PPAR delta promotes VLDL-derived fatty acid catabolism in the macrophage. *Proc Natl Acad Sci USA* 2006; 103:2434-2439.
28. **Lee C-H**, Olson P, Hevener A, Mehl I, Chong L-W, Olefsky JM, Gonzalez FJ, Ham J, Kang H, Peters JM and Evans RM. PPAR delta regulates glucose metabolism and insulin sensitivity. *Proc Natl Acad Sci USA* 2006; 103:3444-3449.
29. Kharroubi I, **Lee C-H**, Hekerman P, Darville MI, Evans RM, Eizirik DL and Cnop M. BCL-6: the missing link for anti-inflammatory PPAR $\delta$  signalling in pancreatic beta cells. *Diabetologia* 2006; 49:2350-8.
30. Sonoda J, Laganieri J, Mehl IR, Barish GD, Chong L-W, Li X, Scheffler IE, Mock DC, Bataille AR, Robert F, **Lee C-H**, Giguere V and Evans RM. Nuclear Receptor ERR $\alpha$  and coactivator PGC-1 $\beta$  are effectors of IFN $\gamma$  induced host defence. *Genes And Development* 2007; 21:1909-1920.
31. Takata Y, Liu J, Yin F, Collins AR, Lyon CJ, **Lee C-H**, Atkins AR, Downes M, Barish GD, Evans RM, Hsueh WA, Tangirala RK. PPARdelta-mediated anti-inflammatory mechanisms inhibit angiotensin II-accelerated atherosclerosis. *Proc Natl Acad Sci U S A*. 2008; 105:4277-4282.
32. Barish GD, Atkins AR, Downes M, Olson P, Chong LW, Nelson M, Zou Y, Hwang H, Kang H, Curtiss L, Evans RM, **Lee C-H**. PPARdelta regulates multiple proinflammatory pathways to suppress atherosclerosis. *Proc Natl Acad Sci U S A*. 2008; 105:4271-4276.
33. Kang K, Reilly SM, Karabacak V, Gangl MR, Fitzgerald K, Hatano B, **Lee C-H**. Adipocyte-derived Th2 cytokines and myeloid PPAR delta regulate macrophage polarization and insulin sensitivity. *Cell Metab*. 2008; 7:485-495.
34. Qi L, Kang K, Zhang C, van Dam RM, Kraft P, Hunter D, **Lee C-H**, Hu FB. FTO Gene Variant Is Associated with Obesity: Longitudinal Analyses in Two Cohort Studies and Functional Test. *Diabetes*. 2008, 57:3145-3151. PMID: 18647953
35. Nofsinger RR, Li P, Hong SH, Jonker JW, Barish GD, Ying H, Cheng SY, Leblanc M, Xu W, Pei L, Kang YJ, Nelson M, Downes M, Yu RT, Olefsky JM, **Lee C-H**, Evans RM. SMRT repression of nuclear receptors controls the adipogenic set point and metabolic homeostasis. *Proc Natl Acad Sci U S A*. 2008, 105:20021-20026. PMID: 19066220
36. Krishnamoorthy S, Recchiuti A, Chiang N, Yacoubian S, **Lee C-H**, Yang R, Petasis NA, Serhan CN. Resolvin D1 binds human phagocytes with evidence for proresolving receptors. *Proc Natl Acad Sci U S A*. 2010, 107:1660-1665. PMID: 20080636
37. Qi L, Cornelis MC, Kraft P, Stanya KJ, Kao WHL, Pankow JS, Dupuis J, Florez JC, Fox CS, Paré G, Sun Q, Girman CJ, Laurie CC, Mirel DB, Manolio TA, Chasman DI, Boerwinkle E, Ridker PM, Hunter DJ, Meigs JB, **Lee CH**, Meta-Analysis of Glucose and Insulin-related traits Consortium (MAGIC), Diabetes Genetics Replication and Meta-analysis (DIAGRAM) Consortium, van Dam RM, and Hu FB. Genetic variants at 2q24 are associated with susceptibility to type 2 diabetes. *Hum Mol Genet*. Epub ahead of print May 6, 2010. PMID: 20418489
38. Reilly SM, Bhargava P, Liu S, Gangl MR, Gorgun C, Nofsinger RR, Evans RM, Qi L, Hu FB, **Lee CH**. Nuclear receptor co-repressor SMRT regulates mitochondrial oxidative metabolism and mediates aging related metabolic deterioration. 2010. *Cell Metab*, 2010; 12:643-653. PMID: 21109196.
39. Liu, S, Hatano B, Zhao M, Yen CC, Kang K, Reilly SM, Gangl MR, Gorgun C, Balschi JA, Ntambi JM, **Lee CH**. Role of PPAR delta in hepatic metabolic regulation. *J Biol Chem* 2011; 286:1237-1247. PMID: 21059653.
40. Yecies JL, Zhang HH, Menon S, Liu S, Yecies D, Lipovsky AI, Gorgun C, Kwiatkowski DJ, Hotamisligil GS, **Lee CH**, Manning BD. Akt stimulates hepatic SREBP-1c and lipogenesis through parallel mTORC1-dependent and independent pathways. *Cell Metab*, 2011. 14:21-32. PMID: 21723501.

41. Cho SH, Ahn A.K, Bhargava P, **Lee CH**, Eischen C.M, McGuinness O, Boothby M. Glycolytic rate and lymphomagenesis depend on PARP14, an ADP ribosyltransferase of the B aggressive lymphoma (BAL) family. *Proc Natl Acad Sci USA* 2011; 108:15972-15977.
42. Zhang Y, Li Y, Niepel MW, Kawano, Han S, Liu S, **Lee CH**, Cohen DE. Targeted deletion of thioesterase superfamily member 1 promotes energy expenditure and protect against obesity and insulin resistance. *Proc Natl Acad Sci USA* 2012. 109:5417-5422. PMID: 22427358.
43. Ji Y, Sun S, Xu A, Bhargava P, Yang L, Lam KS, Gao B, **Lee CH**, Kersten S, Qi L. Activation of natural killer T cells promotes M2 macrophage polarization in adipose tissue and improves systemic glucose tolerance via IL-4/STAT6 protein signaling axis in obesity. *J Bio Chem* 2012. 287:13561-71.
44. Ito K, Carracedo A, Weiss D, Arai F, Ala U, Avigan DE, Schafer ZT, Evans RM, Suda T, **Lee CH**, Pandolfi PP. A PML-PPAR delta pathway for fatty acid oxidation regulates hematopoietic stem cell maintenance. *Nat Med* 2012. 18:1350-1358.
45. Bhargava P, Li C, Stanya KJ, Jacobi D, Liu S, Dai L, Liu S, Gangl MR, Harn DA, **Lee CH**. Immunomodulatory glycan LNFPIII alleviates hepatosteatosis and insulin resistance through direct and indirect control of metabolic pathways. *Nat Med*. 2012. 18:1665-72.
46. Stanya KJ, Jacobi D, Liu S, Bhargava P, Dai L, Gangl MR, Inouye K, Barlow JL, Ji Y, Mizgerd JP, Qi L, Shi H, McKenzie, **Lee CH**. Direct control of hepatic glucose production by IL-13. *J Clin Invest* 2013, 123:261-271.
47. Caradonna, KL, Engel JC, Jacobi D, **Lee CH**, Burleigh BA. Host metabolism regulates intracellular growth of *Trypanosoma cruzi*. *Cell Host Microbe*. 2013, 13:108-117.
48. Kim J, Jia X, Buckett PD, Liu S, **Lee CH**, Wessling-Resnick W. Iron loading impairs lipoprotein lipase activity and promotes hypertriglyceridemia. *FASEB J*. 2013. 27:1657-1663. PMID:23241313.
49. Jia X, Kim J, Veuthey T, **Lee CH**, Wessling-Resnick W. Glucose metabolism in the Belgrade rat, a model of iron-loading anemia. *Am J physiol Gastrointest Liver Physiol* 2013. 304: G1095-1102. PMID:23599042.
50. DeSantis DA, Lee P, Doerner SK, Ko CW, Kawasoe JH, Hill-Baskin AE, Ernest SR, Bhargava P, Hur KY, Cresci GA, Pritchard MT, **Lee CH**, Nagy LE, Nadeau JH, Croniger CM. Genetic resistance to liver fibrosis on A/J mouse chromosome 17. *Alcohol Clin Exp Res* 2013; 37: 1668-1679. PMID: 23763294; PMCID: PMC3796136.
51. Liu S, Brown JD, Stanya KJ, Homan E, Leidl M, Inouye K, Bhargava P, Gangl MR, Dai L, Hatano B, Hotamisligil GS, Saghatelian A, Plutzky J, **Lee CH**. A diurnal serum lipid integrates hepatic lipogenesis and peripheral fatty acid utilization. *Nature* 2013; 502:550-553. PMID: 24153306. PMC4141623.
52. Lin HY, Huang BR, Yeh WL, **Lee CH**, Huang SS, Lai CH, Lin H, Lu DY. Antineuroinflammatory effectors of lycopene via activation of adenosine monophosphate-activated protein kinase- $\alpha$ 1/heme oxygenase-1 pathways. *Neurobiol Aging* 2014; 35: 191-202. PMID: 23906616.
53. Lee YZ, Yang CW, Chang HY, Chen IS, Chang HS, **Lee CH**, Lee JC, Kumar RC, Qiu YQ, Chao YS, Lee SJ. Discovery of selective inhibitors of glutaminase-2, which inhibit mTORC1, activate autophagy and inhibit proliferation in cancer cells. *Oncotarget* 2014; 5:6087-6101.
54. Huang BR, Chang PC, Yeh WL, **Lee CH**, Tsai CF, Lin C, Lin HY, Liu YS, Wu CY, Ko PY, Huang SS, Hsu HC, Lu DY. Anti-neuroinflammatory effects of the calcium channel blocker nifedipine on microglial cells: implications for neuroprotection. *PLoS One* 2014; 12: e91167.
55. Qiu YQ, Yang CW, Lee YZ, Yang RB, **Lee CH**, Hsu HY, Chang CC, Lee SJ. Targeting a ribonucleoprotein complex containing the caprin-1 protein and the c-Myc mRNA



- suppresses tumor growth in mice: an identification of a novel oncotarget. 2015; 6:2148-2163.
56. Jacobi D, Liu S, Burkewitz K, Kory N, Knudsen NH, Alexander RK, Unluturk U, Li X, Kong X, Hyde AL, Gangl MR, Mair WB, **Lee CH**. Hepatic Bmal1 regulates rhythmic mitochondrial dynamics and promotes metabolic fitness. *Cell Metab* 2015; 22:709-720.
  57. Zhou Y, Yu X, Chen H, Sjöberg S, Roux J, Zhang L, Ivoulsou AH, Bensaid F, Liu CL, Liu J, Tordjman J, Clement K, **Lee CH**, Hotamisligil GS, Libby P, Shi GP. Leptin deficiency shifts mast cells toward anti-inflammatory actions and protects mice from obesity and diabetes by polarizing M2 macrophages. *Cell Metab* 2015; 22:1045-1058. PMID:26481668. PMCID:PMC4670585.
  58. McCarthy RC, Lu DY, Alkhateeb A, Gardeck A, **Lee CH**, Wessling-Resnick M. Characterization of a novel adult murine immortalized microglial cell line and its activation by amyloid-beta. *J Neuroinflamm*. 2016; 13: 21.
  59. Brace LE, Vose SC, Stanya K, Gathungu RM, Marur VR, Longchamp A, Treviño-Villarreal JH, Mejia P, Vargas D, Inouye K, Bronson RT, **Lee C-H**, Neilan E, Kristal BS, Mitchell JR. Increased oxidative phosphorylation in response to acute and chronic DNA damage. *NPJ Aging Mech Dis* 2016; 2:16022. PMID: 28721274. PMCID: PMC5514997
  60. Jiang Z, Knudsen NH, Wang G, Qiu W, Naing ZZ, Bai Y, Ai X, **Lee CH**, Xhou X. Genetic control of fatty acid  $\beta$ -oxidation in chronic obstructive pulmonary disease. *Am J Respir Cell Mol Biol*. 2017; 56: 738-748. PMID:28199134.
  61. Wang DD, Toledo E, Hruby A, Rosner BA, Willett WC, Sun Q, Razquin C, Zheng Y, Ruiz-Canela M, Guasch-Ferre M, Corella D, Gomez-Gracis E, Fiol M, Estruch R, Ros E, Lapetra J, Fito M, Aros F, Serra-Majem L, **Lee CH**, Clish CB, Liang L, Salas-Salvado J, Martinez-Gonzalez MA, Hu FB. Plasma ceramides, mediterranean diet, and incident cardiovascular disease in the PREMIED trial. *Circulation* 2017, 135: 2028-2040. PMID: 28280233
  62. Dai L, Bhargava P, Stanya KJ, Alexander RK, Liou Y-H, Jacobi D, Knudsen NH, Hyde A, Gangl MR, Liu S, **Lee CH**. Macrophage alternative activation confers protection against lipotoxicity-induced cell death. *Molecular Metabolism* 2017, 6:1186.
  63. Longchamp A, Mirabella T, Arduini A, MacArthur MR, Das A, Treviño-Villarreal, JH, Hine C, Ben-Sahra I, Knudsen NH, Brace LE, Reynolds J, Mejia P, Tao M, Sharma G, Wang R, Corpataux JM, Haefliger JA, Ahn KH, **Lee CH**, Manning BD, Sinclair DA, Chen CS, Ozaki CK, Mitchell JR. Amino Acid Restriction Triggers Angiogenesis via GCN2/ATF4 Regulation of VEGF and H(2)S Production. *Cell* 2018; 173(1):117-129. E14 PMID: 29570992. PMCID: PMC5901681.
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