

Cholsoon Jang, PhD

2020.5- Assistant Professor, Department of Biological Chemistry, UC Irvine, USA
Email: choljang@uci.edu

Education

Institution	Degree	Completion Date	Field of Study
Korea Adv. Inst. of Sci. Tech (KAIST)	BS	02/2004	Biology
KAIST	MS	02/2006	Genetics
Military service	-	02/2009	Bioengineering
Harvard University	PhD	11/2015	Biol. Biomed. Sci.
Princeton University	Postdoc	04/2020	Quantitative Biology

• Blue: Achievements as an independent PI

Honors

2021 - 2022	CFCCC Anti-Cancer Challenge Pilot Award
2021 - 2022	American Cancer Society Institutional Research Grant Award
2021 - 2022	Center for Cancer Systems Biology Pilot Award
2021 - 2022	Center for ALPD and Cirrhosis Pilot Award
2021	The Helmholtz Young Investigator in Diabetes (HeIDI) award nominee
2020	Damon Runyun-Rachleff Innovation Award finalist (top 12 among 95 applications)
2020 - 2023	Edward Mallinckrodt Jr Foundation Award
2020 - 2023	American Association for the Study of Liver Disease Pinnacle Research Award
2020 - 2021	UCI Microbiome Initiative Pilot Award
2020 - 2021	Center for Epigenetics and Metabolism Pilot Award
2017 - 2019	American Diabetes Association Postdoctoral Fellowship
2013 - 2015	American Heart Association Predoctoral Fellowship
2009 - 2013	LOTTE Scholarship (full stipend), LOTTE foundation, Korea
2004 - 2006	Excellent Graduate Scholarship (Tuition waiver and full stipend), KAIST, Korea
2000 - 2004	Excellent academic performance scholarship, KAIST, Korea

Seminars

2021	Invited Talk, American Diabetes Association 81st Virtual Scientific Sessions
2021	Invited Talk, American Society of Nephrology Kidney week
2021	Invited Talk, Helmholtz Diabetes Conference, Germany
2021	Invited Talk, Monash University Diabetes Center, Australia
2021	Invited Talk, Keystone Symposia, Fatty Liver Disease
2021	Invited Talk, Einstein-Mt. Sinai Diabetes Center
2021	Invited Talk, Baylor College of Medicine, Huffington Center on Aging

2021 Invited Talk, UCLA Metabolism Interest Group
2020 Invited Talk, KAIST, Dep. Biomedical Science and Engineering. Korea
2020 Invited Talk, USC Center for ALPD and Cirrhosis
2020 Invited Talk, Yonsei University College of Medicine, Korea
2020 Invited Talk, UCI Diabetes Center Executive Council
2020 Invited Talk, UCI Division of Gastroenterology
2020 Invited Talk, UCI Cancer Research Institute
2019 Invited Talk, Harvard School of Public Health
2019 Invited Talk, Stanford University, Betty Irene Moore Children's Heart Center
2019 Invited Talk, University of Massachusetts, Program in Molecular Medicine
2019 Invited Talk, Moffitt Cancer Center
2018 Invited Talk, Cell Symposia, Metabolites as signaling molecules
2018 Invited Talk, Keystone Symposia, Type II Diabetes
2017 Invited Talk, Cell Symposia, Metabolic disease therapies
2017 Invited Talk, Keystone Symposia, Diabetes

Professional Membership and Activities

2020- Editor, *Metabolites*
2020- Ad Hoc Reviewer (*Nature*, *Nature Medicine*, *Nature Metabolism*, *Cell Metabolism*, *Science Advances*, *Nature Communication*, *Gastroenterology*, *Circulation*, *eLife*, *FASEB*, *Nutrients*, *Metabolites*, *PLoS One*, *Scientific Reports*, *Molecular Metabolism*)
2020- Member, Center for ALPD and Cirrhosis
2020- Member, Center for Epigenetics and Metabolism
2020- Member, American Association for the Study of Liver Disease
2017- Member, American Diabetes Association
2012-2015 Member, American Heart Association

Selected Publications (#Correspondence)

Li X, Hui S, Mirek ET, Anthony TG, **Jang C[#]**, Rabinowitz JD[#]. Circulating metabolite homeostasis achieved through mass action. **Nature Metabolism** (in revision).

Mathur L, Jung S, **Jang C[#]**, Lee G[#]. Quantitative analysis of m6A RNA modification by LC-MS/MS. **STAR Protocols** (In revision).

Jung SM*, Le J*, Doxsey WG, Haley JA, Guertin DA[#], **Jang C[#]**. Stable isotope tracing and metabolomics to study in vivo brown adipose tissue metabolic fluxes. **Methods in Molecular Biology** (Revision submitted).

Jung SM, Haley JA, Doxsey WG, Le J, Mazuecos LM, Li H, **Jang C[#]**, Guertin DA[#]. (2021) In vivo glucose utilization by cold-activated brown adipose tissue. **Cell Reports** (In press).

Park G, Jung S, Wellen KE, **Jang C[#]**. (2021) The interaction between the gut microbiota and dietary carbohydrates in nonalcoholic fatty liver disease. **Experimental & Molecular Medicine** 53:809-822.

Skenderian S, Park G, **Jang C[#]**. (2020) Organismal fructose metabolism in health and non-alcoholic fatty liver disease. **Biology (Basel)**. 9(11):405.

Jang C*, Wada S*, Yang S, Gosis B, Zeng X, et al. (2020). The small intestine shields the liver from fructose-induced steatosis. **Nature Metabolism** 2(7):586-593.

Murashige M*, **Jang C***, Neinast M, Edwards JJ, Cowan A, et al. (2020). Comprehensive quantification of fuel use by the failing and nonfailing human heart. **Science** 370:364-368. *co-first

Zhao S*, **Jang C***, Liu J, Uehara K, Gilbert M, et al. (2020) Dietary fructose feeds hepatic lipogenesis via microbiome-derived acetate. **Nature** 579:586-591. *co-first

Jang C, Hui S, Zeng X, Cowan AJ, Wang L, et al. (2019) Metabolite exchange between mammalian organs quantified in pigs. **Cell Metabolism** 30:596-606.

Neinast M*, **Jang C***, Hui S, Murashige DS, Chu Q, et al. (2019). Quantitative analysis of the whole-body metabolic fate of branched-chain amino acids. **Cell Metabolism** 29:417-429. *co-first

Jang C, Li C, Rabinowitz JD. (2018) Metabolomics and isotope tracing. **Cell** 173:822-837. (Primer)

Jang C, Hui S, Lu W, Cowan AJ, Morscher RJ, et al. (2018) The small intestine converts dietary fructose into glucose and organic acids. **Cell Metabolism** 27:351-361.

Jang C*, Oh SF*, Wada S, Rowe GC, Liu L, et al. (2016) A branched chain amino acid metabolite drives vascular fatty acid transport and insulin resistance. **Nature Medicine** 22:421-6. *co-first

Jang C and Arany Z. (2013) Metabolism: Sweet enticements to move. **Nature** 500:409-411. (News & views).

Jang C, Koh YJ, Lim NK, Kang HJ, Kim DH, et al. (2009) Angiotensin-2 exocytosis is stimulated by sphingosine-1-phosphate in human blood and lymphatic endothelial cells. **ATVB**. 29:401-407.

Jang C, Lee G, Chung J. (2008) LKB1 induces apical trafficking of Silnoon, a monocarboxylate transporter in *Drosophila melanogaster*. **Journal of Cell Biology** 183:11-17.

Complete List of Published Work

Pubmed: <https://www.ncbi.nlm.nih.gov/pubmed/?term=cholsoon+jang>

Research Support

Ongoing

AASLD Pinnacle Research Award Jang (PI)
07/01/20 - 06/30/23

Edward Mallinckrodt Jr Foundation Award Jang (PI)
10/01/20 - 09/30/23

Pilot Grant, Center for Epigenetics and Metabolism Jang (PI)
05/01/20 - 05/01/21

Pilot Grant, UCI Microbiome Initiative Jang (PI)
05/01/20 - 05/01/21

Pilot Grant, Center for Cancer Systems Biology Jang (PI)
04/01/21 - 04/01/22

American Cancer Society Institutional Research Grant Jang (PI)
05/01/21 - 05/01/22

Pending

R01AA029124, NIAAA Jang (PI)
04/01/21-03/31/26

1DP2OD031108-01, NIH Jang (PI)
08/15/21-06/30/26