

# JAE MYOUNG SUH

## CAMPUS ADDRESS:

Jae Myoung Suh, Ph.D.  
Associate Professor  
Graduate School of Medical Science and Engineering  
KAIST  
291 Daehak-ro  
Yuseong-gu, Daejon  
Republic of Korea  
[jmsuh@kaist.ac.kr](mailto:jmsuh@kaist.ac.kr)

Office) 042-350-4247  
Lab) 042-350-4283  
Mobile) 010-4886-7146

## EDUCATION:

Ph.D., Genetics and Development, University of Texas Southwestern Medical Center (2006)  
*Advisor: Jonathan M. Graff, M.D., Ph.D.*  
M.S., Biology, Yonsei University, Seoul, Korea (1996)  
*Advisor: In Kwon Chung, Ph.D.*  
B.S., Biology, Yonsei University, Seoul, Korea (1994)

## EMPLOYMENT AND EXPERIENCES:

KAIST, Graduate School of Medical Science and Engineering, Assistant, Associate Professor (2014- )  
Salk Institute for Biological Studies, Research Associate (2009-2014)  
*Advisor: Ronald M. Evans, Ph.D.*  
University of Texas Southwestern Medical Center, Post-doctoral fellow (2007-2008)  
University of Texas Southwestern Medical Center, Graduate Research Assistant (1999-2006)  
Yonsei University, Research Assistant (1998-1999)  
Republic of Korea Army, Sergeant (compulsory service) (1996-1998)  
Yonsei University, Research Assistant (1996)  
Yonsei University, Graduate Teaching Assistant (1994-1996)  
Rockefeller University, Summer Undergraduate Research Fellow (1992)

## PUBLICATIONS:

1. Choi, S., Kang, J.G., Tran, Y.T.H., Jeong, S.H., Park, K.Y., Shin, H., Kim, Y.H., Park, M., Nahmgoong, H., Seol, T., Jeon, H., Kim, Y., Park, S., Kim, H.J., Kim, M.S., Li, X., Bou Sleiman, M., Lee, E., Choi, J., Eisenbarth, D., Lee, S.H., Cho, S., Moore, D.D., Auwerx, J., Kim, I.Y., Kim, J.B., Park, J.E., Lim, D.S. \*, Suh, J.M.\* (2024) Hippo-YAP/TAZ signaling coordinates adipose plasticity and energy balance by uncoupling leptin expression from fat mass. *Nature Metabolism*, 6, 847–860
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3. Kim, H.H., Shim, R., Kim, H.N., Yang, K., Ryu, T., Kim, K., Choi, S.E., Kim, M.J., Woo, C., Chung, K.P.S., Hong, S.H., Shin, H., Suh, J.M., Jung, Y., Hwang, G.S., Kim, W., Kim, S.H., Eun, H.S., Seong, J.K., Jeong, W.I. (2023) xCT-mediated glutamate excretion in white adipocytes stimulates interferon- $\gamma$  production by natural killer cells in obesity. *Cell Reports*, 42, 112636
4. Park, A., Kim, K.E., Park, I., Lee, S.H., Park, K.Y., Jung, M., Li, X., Bou Sleiman, M., Lee, S.J., Kim, D.S., Kim, J., Lim, D.S., Woo, E.J., Lee, E.W., Han, B.S., Oh, K.J., Lee, S.C., Auwerx, J., Mun, J.Y., Rhee, H.W., Kim, W.K.\* , Bae, K.H.\* , Suh, J.M.\* (2023) Mitochondrial matrix protein Letmd1 maintains thermogenic capacity of brown adipose tissue. *Nature Communications*, 14, 3746
5. Chanda, D., Thoudam, T., Sinam, I.S., Lim, C.W., Kim, W., Wang, J., Lee, K.M., Ma, J., Saxena, R., Choi, J., Oh, C.J., Lee, H., Jeon, Y.H., Cho, S.J., Jung, H.Y., Park, K.G., Choi, H.S., Suh, J.M., Auwerx, J., Ji, B., Liangpunsakul, S., Jeon, J.H., Lee, I.K. (2023) Upregulation of ERR $\gamma$ -VDAC1 axis underlies the molecular pathogenesis of pancreatitis. *Proceedings of the National Academy of Sciences USA*, 120 (20), e2219644120
6. Choi, J.B., Seol, D.W., Do, H.S., Yang, H.Y., Kim, T.M., Byun, Y.G., Park, J.M., Choi, J., Hong, S.P., Chung, W.S., Suh, J.M., Koh, G.Y., Lee, B.H., Wee, G., & Han, Y.M. (2023). Fasudil alleviates the vascular endothelial dysfunction and several phenotypes of Fabry disease. *Molecular therapy*, S1525-0016(23)00066-7
7. Kim, J., Park, K.Y., Choi, S., Ko, U., Lim, D.S., Suh, J.M.\*, Shin, J.H.\* (2022) Ceiling culture chip reveals dynamic lipid droplet transport during adipocyte dedifferentiation via actin remodeling. *Lab on a Chip*, 22, 3920-3932
8. Pagire, S.H., Pagire, H.S., Park, K.Y., Bae, E.J., Kim, K.E., Kim, M., Yoon, J., Parameswaran, S., Choi, J.H., Park, S., Jeon, J.H., Song, J.S., Bae, M.A., Lee, I.K., Kim, H., Suh, J.M.\*, & Ahn, J.H\*. (2022). Identification of New Non-BBB Permeable Tryptophan Hydroxylase Inhibitors for Treating Obesity and Fatty Liver Disease. *Molecules*, 27, 3417
9. Choi, J., Oh, T.G., Jung, H., Park, K., Shin, H., Jo, T., Chanda, D., Hong, S., Kim, J., Jung, M., Shoji, T., Matsushima, A., Kang, D., Kim, P., Mun, J.Y., Cho, S.J., Lee, I., Bapat, S.P., Zheng, Y., Liddle, C., Yu, R.T., Atkins, A., Downes, M., Yoshihara\*, E., Evans, R.M.\* , Suh, J.M.\* (2022) Estrogen-Related Receptor  $\gamma$  maintains pancreatic acinar cell function and identity by regulating cellular metabolism. *Gastroenterology*, 163, 239- 256
10. Bapat, P.S., Whitty, C., Mowery, C., Liang, Y., Zhang, L., Vogel, I., Zhou, C., Nguyen, V.Q., Li, Z., Chang, C., Chang, C., Choi, E.J., Fassett, M., Cohen, J.N., Crotty Alexander, L.E., Suh, J.M., Liddle, C., Atkins, A.R., Yu, R.T., Downes, M., Liu, S., Lee, I-K., Ansel, K.M., Gallo, R., Ye, C.J., Evans, R.M.\* , Zheng, Y.\* , Marson, A.\* (2022) Obesity alters pathology and treatment response in inflammatory disease. *Nature*, 604, 337-342
11. Choi, W.G., Choi, W., Oh, T.J., Cha, N.H., Hwang, I., Lee, Y.K., Lee, S., Shin, H., Kim, K.H., Choi, W.I., Lim, A., Ryu, D., Suh, J.M., Park, S.Y., Choi, S.H.\* , Kim, H.\* (2021)

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12. Kim, K.E., Park, I., Kim, J., Kang, M.G., Choi, W.G., Shin, H., Kim, J.S.\* , Rhee, H.W.\* , Suh, J.M.\* (2021) Dynamic tracking and identification of tissue-specific secretory proteins in the circulation of live mice. *Nature Communications*, 12, 5204
  13. Kang, S.G., Choi, M.J., Jung, S.B., Chung, H.K., Chang, J.Y., Kim, J.T., Kang, Y.E., Lee, J.H., Hong, H.J., Jun, S.M., Ro, H.J., Suh, J.M., Kim, H., Auwerx, J., Yi, H.S., Shong, M., (2021) Differential roles of GDF15 and FGF21 in systemic metabolic adaptation to the mitochondrial integrated stress response. *iScience*, 24, 102181
  14. Yeom, E., Shin, H., Yoo, W., Jun E., Kim, S., Hong, S.H., Kwon, D.W., Ryu, T.H., Suh, J.M.\* , Kim, S.C.\* , Lee, K.S.\* , Yu, K.\* (2021) Tumor-Derived Dilp8/INSL3 induces cancer anorexia by regulating feeding neuropeptides via Lgr3/8 in the brain. *Nature Cell Biology*, 23, 172-183
  15. Son, M.J., Oh, K.J., Park, A., Kwon, M.G., Suh, J.M., Kim, I.C., Kim, S., Lee, S.C., Kim, W.K.\* , Bae, K.H.\* (2020) GATA3 induces the upregulation of UCP-1 by directly binding to PGC-1 $\alpha$  during adipose tissue browning. *Metabolism*, 109, 154280
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\* corresponding author, # co-first author

#### PATENTS:

1. "Coenzyme Q derivative screening platform using RTN4IP1-KO cells and mice". 10-2022-0130555. October 12, 2022. Hyun Woo Rhee, **Jae Myoung Suh**, Kyu-Sun Lee, Kwang Eun Kim, Isaac Park, Ae-Kyeong Kim.
2. "Method of identifying intracellular secretory protein or tissue-specific secretory protein". US20220298513A1. February 28, 2022. Hyun Woo Rhee, Isaac Park, **Jae Myoung Suh**, Kwang Eun Kim.
3. "Composition containing Insulin like peptide 3 and uses thereof". 1020210073680. June 7, 2021. **Jae Myoung Suh**, Kweon Yu, Kyu-Sun Lee, Song Cheol Kim, Eun Byul Yeom, Eunsung Jun, Hyemi Shin.
4. "Novel tryptophan hydroxylase inhibitor and pharmaceutical composition including same". PCT/KR2018/009796. August 24, 2018. Jin Hee Ahn, Hail Kim, **Jae Myoung Suh**, In-Kyu Lee, Kwang-eun Kim, Kun-young Park, Eun Jung Bae, Ko Eun Shong, Suvarna Haus-habbau Pagire, Ajin Lim, Jae-Han Jeon, Haushabhu Shivaji Pagire, Haiying Zhang, Myung-Hwa Kim, Jung-In Pyo.
5. "Analogs of fexaramine and methods of making and using". US2015020552. September 17, 2015. Ronald M. Evans, Michael Downes, Annette Atkins, Sungsoon Fang, **Jae Myoung Suh**, Thomas J. Baiga, Ruth T. Yu, John F.W. Keana.
6. "Methods for treating metabolic disorders using FGF". US20140171361. December 9, 2014. Johan W. Jonker, Michael Downes, Ronald M. Evans, **Jae Myoung Suh**.
7. "Fibroblast Growth Factor 1 protein fragments and methods of use". US20140155316 A1. June 5, 2014. Moosa Mohammadi, Regina M. Goetz, Ronald M. Evans, Michael Downes, **Jae Myoung Suh**.
8. "Chimeric fibroblast growth factor 21 proteins and methods of use". US2013044589. February 6, 2014. Moosa Mohammadi, Regina M. Goetz, Ronald M. Evans, Michael Downes, **Jae Myoung Suh**.
9. "Chimeric fibroblast growth factor 19 proteins and methods of use". US2013044594. January 23, 2014. Michael Downes, **Jae Myoung Suh**, Ronald M. Evans, Moosa Mohammadi, Regina M. Goetz.