

Tetsuya Hosooka, MD, PhD

Education

1994: M.D. in Tokushima University School of Medicine.

2002: Ph.D. in Kobe University Graduate School of Medicine.

Employment

2021-Present: Associate Professor, Department of Nutrition and Life Sciences, School of Food and Nutritional Sciences, and Graduate School of Integrated Pharmaceutical and Nutritional Sciences, University of Shizuoka.

2021-Present: Visiting Associate Professor, Division of Diabetes and Endocrinology, Kobe University Graduate School of Medicine.

2019-2021: Associate Professor, Division of Development of Advanced Therapy for Metabolic Disease, Kobe University Graduate School of Medicine.

2010-2019: Assistant Professor, Division of Diabetes and Endocrinology, Kobe University Graduate School of Medicine.

2008-2010: Postdoctoral Fellow, Division of Endocrinology, Diabetes, and Metabolism, Department of Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School.

2007: COE Postdoctoral Fellow, Division of Diabetes and Endocrinology, Kobe University Graduate School of Medicine.

2002-2007: Postdoctoral Fellow, Division of Diabetes and Endocrinology, Kobe University Graduate School of Medicine.

1994-1998: Resident, Kobe Medical Center, Kobe Rosai Hospital, and Suma Red Cross Hospital.

Publications (2014-Present)

1. Imamori M*, Hosooka T*† (*co-first author, †corresponding author), Imi Y, Hosokawa Y, Yamaguchi K, Itoh Y, Ogawa W. Thrombospondin-1 promotes liver fibrosis by enhancing TGF- β action in hepatic stellate cells. *Biochem Biophys Res Commun.* 693: 149369, 2024.
2. EMPA-KIDNEY Collaborative Group. Effects of empagliflozin on progression of chronic kidney disease: a prespecified secondary analysis

- from the emp-a-kidney trial. *Lancet Diabetes Endocrinol.* 12: 39-50, 2024.
3. EMPA-KIDNEY Collaborative Group. Impact of primary kidney disease on the effects of empagliflozin in patients with chronic kidney disease: secondary analyses of the EMPA-KIDNEY trial. *Lancet Diabetes Endocrinol.* 12: 51-60, 2024.
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 5. Ikuta K, Hayashi S, Kikuchi K, Fujita M, Anjiki K, Onoi Y, Tachibana S, Suda Y, Wada K, Kuroda Y, Nakano N, Maeda T, Matsumoto T, Hosooka T, Ogawa W, Kuroda R. Osteoarthritis Cartilage. S1063-4584(23)00893-2, 2023.
 6. Imi Y, Amano R, Kasahara N, Obana Y, Hosooka T (corresponding author). Nicotinamide mononucleotide induces lipolysis by regulating ATGL expression via the SIRT1-AMPK axis in adipocytes. *Biochem Biophys Rep.* 34: 101476, 2023.
 7. Hosokawa Y, Hosooka T (corresponding author), Imamori M, Yamaguchi K, Itoh Y, Ogawa W. Adipose tissue insulin resistance exacerbates liver inflammation and fibrosis in a diet-induced NASH model. *Hepatol Commun,* 7: e0161, 2023.
 8. Imi Y, Amano R, Kasahara N, Obana Y, Hosooka T (corresponding author). Nicotinamide mononucleotide induces lipolysis by regulating ATGL expression via the SIRT1-AMPK axis in adipocytes. *Biochem Biophys Rep.* 34: 101476, 2023.
 9. Kanagaki S, Tsutsui Y, Kobayashi N, Komine T, Ito M, Akasaka Y, Nagasawa M, Ide T, Omae N, Nakao K, Rembutsu M, Iwago M, Yonezawa A, Hosokawa Y, Hosooka T, Ogawa W, Murakami K. Activation of AMP-activated protein kinase (AMPK) by a small-molecule compound that inhibits AMPK interaction with prohibitins. *iScience,* 26: 106293, 2023.

10. The EMPA-KIDNEY Collaborative Group; Herrington WG, Staplin N, Wanner C, Green JB, Hauske SJ, Emberson JR, Preiss D, Judge P, Mayne KJ, Ng SYA, Sammons E, Zhu D, Hill M, Stevens W, Wallendszus K, Brenner S, Cheung AK, Liu ZH, Li J, Hooi LS, Liu W, Kadowaki T, Nangaku M, Levin A, Cherney D, Maggioni AP, Pontremoli R, Deo R, Goto S, Rossello X, Tuttle KR, Steubl D, Petrini M, Massey D, Eilbracht J, Brueckmann M, Landray MJ, Baigent C, Haynes R. Empagliflozin in Patients with Chronic Kidney Disease. *N Engl J Med.* 388: 117-127, 2023.
11. Imi Y, Ogawa W, Hosooka T (corresponding author). Insulin resistance in adipose tissue and metabolic diseases. *Diabetol Int.* 14: 119-124, 2023.
12. Hirata Y, Nomura K, Kato D, Tachibana Y, Niikura T, Uchiyama K, Hosooka T, Fukui T, Oe K, Kuroda R, Hara Y, Adachi T, Shibasaki K, Wake H, Ogawa W. A Piezo1–KLF15–IL-6 axis mediates immobilization-induced muscle atrophy. *J Clin Invest.* 132: 1-13, 2022.
13. Yoshida N, Yamashita T, Osone T, Hosooka T, Shinohara M, Kitahama S, Sasaki K, Sasaki D, Yoneshiro T, Suzuki T, Emoto T, Saito Y, Ozawa G, Hirota Y, Kitaoura Y, Shimomura Y, Okamatsu-Ogura Y, Saito M, Kondo A, Kajimura S, Inagaki T, Ogawa W, Yamada T, Hirata KI. *Bacteroides* spp. promotes branched-chain amino acid catabolism in brown fat and inhibits obesity. *iScience,* 24: 103342, 2021.
14. Yoshino K, Hosooka T (co-first and corresponding author), Shinohara M, Aokia C, Hosokawa Y, Imamori M, Ogawa W. Canagliflozin ameliorates hepatic fat deposition in obese diabetic mice: Role of prostaglandin E2. *Biochemical and Biophysical Research Communications.* 557: 62-68, 2021.
15. Kuramoto N, Nomura K, Kohno D, Kitamura T, Karsenty G, Hosooka T, Ogawa W. Role of PDK1 in skeletal muscle hypertrophy induced by mechanical load. *Sci Rep.* 11: 3447, 2021.
16. Nabatame Y, Hosooka T (co-first author), Aoki C, Hosokawa Y, Imamori M, Tamori Y, Okamatsu-Ogura Y, Yoneshiro T, Kajimura S, Saito M, Ogawa W. Kruppel-like factor 15 regulates fuel switching between glucose and fatty acids in brown adipocytes. *J Diabetes Investig.* 12: 1144-1151,

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18. Hirata Y, Nomura K, Senga Y, Okada Y, Kobayashi K, Okamoto S, Minokoshi Y, Imamura M, Takeda S, Hosooka T, Ogawa W. Hyperglycemia induces skeletal muscle atrophy via a WWP1/KLF15 axis. *JCI Insight.* 4: e124952, 2019.
19. Mizusaki N, Nomura K, Hosooka T, Shiomi M, Ogawa K, Tsunoda T, Tamori Y, Ogawa W. The Novel Lipid-Lowering Drug D-47 Ameliorates Hepatic Steatosis and Promotes Brown/Beige-Like Change of White Adipose Tissue in db/db Mice. *Kobe J Med Sci.* 65: E36-E43, 2019.
20. Okada K, Hosooka T, Shinohara M, Ogawa W. Modulation of lipid mediator profile may contribute to amelioration of chronic inflammation in adipose tissue of obese mice by pioglitazone. *Biochem Biophys Res Commun.* 505: 29-35, 2018.
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22. Hosooka T, Ogawa W. A novel role for the cell cycle regulatory complex cyclin D1-CDK4 in gluconeogenesis. *J Diabetes Invest.* 7: 27-8, 2016.
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 27. Ijuin T, Hatano N, Hosooka T, Takenawa T. Regulation of insulin signaling in skeletal muscle by PIP3 phosphatase, SKIP, and endoplasmic reticulum molecular chaperone glucose-regulated protein 78. *Biochim Biophys Acta.* 1853: 3192-201, 2015.
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 29. Takenaka N, Izawa R, Wu J, Kitagawa K, Nihata Y, Hosooka T, Noguchi T, Ogawa W, Aiba A, Satoh T. A critical role of the small GTPase Rac1 in Akt2-mediated GLUT4 translocation in mouse skeletal muscle. *FEBS J.* 281: 1493-504, 2014.