

Tomoki Sato

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1) CV

WORK EXPERIENCE

April 2021 – Present

Assistant professor, University of Shizuoka, School of Food and Nutritional Sciences.

July 2019 – March 2021

Assistant Specialist, University of California, Irvine, Paolo Sassone-Corsi lab.

July 2018 - June 2019

Junior Specialist II, University of California, Irvine, Paolo Sassone-Corsi lab.

July 2017 - June 2018

Junior Specialist I, University of California, Irvine, Paolo Sassone-Corsi lab.

EDUCATION

Doctor of science in Nutritional Science, March 2018

University of Shizuoka, Graduate Division of Nutritional and Environmental Sciences, Shizuoka, Japan

Dissertation title: Mechanisms of lipogenic gene expression in postprandial liver

- Measured lipogenesis using radio isotopes
- Measured gene expression in lipogenesis and glycolysis in liver

Advisors: Prof. S. Miura and Dr. A. Morita

Other projects in Ph. D. program:

Studies on the regulation of gluconeogenesis in postprandial liver

- Determined quantity of acetyl-CoA by LC/MS
- Measured pyruvate carboxylase activity

Searched for low-invasive pathogenesis markers for steatosis

- Analyzed fatty acid composition of various lipids in liver

Master of Science in Nutritional Science, March 2015

University of Shizuoka, Graduate Division of Nutritional and Environmental Sciences, Shizuoka, Japan

Thesis title: The role of glycerol-3-phosphate dehydrogenase (GPD) 1 in glucose and lipid metabolism

- Evaluated the role of GPD1 in the ethanol induced steatosis
- Evaluated the role of GPD1 in exercise capacity
- Evaluated the relationship between glycerol synthesis via GPD1 and obesity
- Evaluated the role of GPD1 in maintaining blood glucose level in fasting state

Advisors: Prof. S. Miura and Dr. A. Morita

Bachelor of Science in Nutritional Science, March 2013

University of Shizuoka, School of Food and Nutritional Sciences, Shizuoka, Japan

Thesis project: Ethanol-induced glucose metabolism modulation in liver

Advisors: Prof. S. Miura and Dr. A. Morita

PUBLICATIONS

T. Sato, and GM. Greco. (2021): Expanding the link between circadian rhythms and redox metabolism of epigenetic control. *Free Radical Biology and Medicine* S0891-5849(21)00022-8.

T. Sato, N. Sayama, M. Inoue, A. Morita, S. Miura. (2020) The enhancement of fat oxidation during the active phase and suppression of body weight gain in glycerol-3-phosphate dehydrogenase 1 deficient mice. *Biosci Biotech Biochem* 84(11), 2367-2373.

T. Sato, Y. Watanabe, Y. Nishimura, M. Inoue, A. Morita, S. Miura. (2019) Acute fructose intake suppresses fasting-induced hepatic gluconeogenesis through the AKT-FoxO1 pathway. *Biochem Biophys Res Commun*, 18, 100638.

M. Inoue, N. Senoo, T. Sato, Y. Nishimura, T. Nakagawa, N. Miyoshi, T. Goda, A. Morita, S. Miura. (2017) Effects of the dietary carbohydrate-fat ratio on plasma phosphatidylcholine profiles in human and mouse. *J Nutr Biochem* 50, 83-94.

T. Sato, Y. Yoshida, A. Morita, N. Mori, S. Miura. (2016) Glycerol-3-phosphate dehydrogenase 1 deficiency induces compensatory amino acid metabolism during fasting in mice. *Metabolism* 65, 1646-1656.

T. Sato, A. Morita, N. Mori, and S. Miura. (2015) Glycerol 3-phosphate dehydrogenase 1 deficiency enhances exercise capacity due to increased lipid oxidation during strenuous exercise. *Biochem Biophys Res Commun* 457, 653-658.

T. Sato, A. Morita, N. Mori, and S. Miura. (2014) The role of glycerol-3-phosphate dehydrogenase 1 in the progression of fatty liver after acute ethanol administration in mice. *Biochem Biophys Res Commun* 444, 525-530.

ORAL PRESENTATIONS

T. Sato, A. Morita, N. Mori, and S. Miura. The roles of GPD1 in exercise capacity. Asian Congress of Nutrition. Yokohama, Japan, May 2015.

T. Sato, A. Morita, N. Mori, and S. Miura. The role of glycerol-3-phosphate dehydrogenase 1 in the progression of fatty liver after acute ethanol administration in mice. Japan Society of Nutritional and Food Science. Hokkaido, Japan, June 2014.

POSTER PRESENTATIONS

T. Sato, Y. Yoshida, A. Morita, N. Mori, S. Miura. Glycerol-3-phosphate dehydrogenase 1 deficiency induces compensatory amino acid metabolism during fasting in mice. 21th Shizuoka Forum on Health and Longevity. Shizuoka, Japan, November 2016.

T. Sato, A. Morita, N. Mori, and S. Miura. Glycerol 3-phosphate dehydrogenase 1 deficiency enhances exercise capacity due to increased lipid oxidation during strenuous exercise. Cell Symposia on Exercise Metabolism.

Amsterdam, The Netherlands, July 2015.

T. Sato, A. Morita, N. Mori, and S. Miura. Role of glycerol-3-phosphate dehydrogenase 1 in the progression of acute ethanol-induced fatty liver in mice. 18th Shizuoka Forum on Health and Longevity. Shizuoka, Japan, November 2013.

FELLOWSHIPS

Japan Society for the Promotion of Science, Research Fellowship for Young Scientists, 2015-2018

Japan Society for the Promotion of Science, Overseas Research Fellowship, 2018-2020

AWARDS

University of Shizuoka, President Award, 2018

21th Shizuoka Forum on Health and Longevity, Poster Presentation Award, 2016

20th Shizuoka Forum on Health and Longevity, Poster Presentation Award, 2015

The 12nd Asian Congress of Nutrition, Young Investigator Award, 2015

University of Shizuoka, Academic Excellence Award, 2015

18th Shizuoka Forum on Health and Longevity, Poster Presentation Award, 2013

University of Shizuoka, Best Graduation Thesis Presentation Award, 2013

MEMBERSHIPS

Japan Society of Nutrition and Food Science