

主な研究課題・発表代表論文

病態制御内科学講座(旧内科学第三講座) Endocrinology, Metabolism, Hematological Sciences and Therapeutics

研究領域 生体シグナル解析医学

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主な研究課題

- ・ インスリン分泌調節機構の解明ならびに糖尿病における膵 β 細胞不全のメカニズムに関する研究
- ・ 遺伝子改変動物を用いた糖尿病発症機構及び治療についての研究
- ・ 体内時計による生体機能・代謝調節機構に関する研究
- ・ Wolfram症候群に関する基礎的、臨床的研究
- ・ 造血幹細胞移植に関する基礎的、臨床的研究
- ・ 造血器悪性腫瘍における細胞内シグナル伝達経路とその異常に関する研究

発表代表論文

1. Metabolic state switches between morning and evening in association with circadian clock in people without diabetes. Fujimoto R, Ohta Y, Masuda K, Taguchi A, Akiyama M, Yamamoto K, Nakabayashi H, Nagao Y, Matsumura T, Hiroshige S, Kajimura Y, Akashi M, Tanizawa Y. J Diabetes Investig. 13(9):1496-1505, 2022.
2. Soluble Interleukin-2 Receptor Index Predicts Outcomes After Cord Blood Transplantation. Kajimura Y, Nakamura Y, Tanaka Y, Tanaka M, Yamamoto K, Matsuguma M, Tokunaga Y, Yujiri T, Tanizawa Y. Soluble Interleukin-2 Receptor Index Predicts Outcomes After Cord Blood Transplantation. Transplant Proc. 53: 379-385, 2021.
3. Amo-Shiinoki K, Tanabe K, Hoshii Y, Matsui H, Harano R, Fukuda T, Takeuchi T, Bouchi R, Takagi T, Hatanaka M, Takeda K, Okuya S, Nishimura W, Kudo A, Tanaka S, Tanabe M, Akashi T, Yamada T, Ogawa Y, Ikeda E, Nagano H, Tanizawa Y. Islet cell dedifferentiation is a pathologic mechanism of long-standing progression of type 2 diabetes. JCI Insight 6: e143791, 2021.
4. Matsumura T, Ohta Y, Taguchi A, Hiroshige S, Kajimura Y, Fukuda N, Yamamoto K, Nakabayashi H, Fujimoto R, Yanai A, Shinoda K, Watanabe K, Mizukami Y, Kanki K, Shiota G, Tanizawa Y. Liver-specific dysregulation of clock-controlled output signal impairs energy metabolism in liver and muscle. Biochem Biophys Res Commun. 534: 415-421, 2021.

5. Suetomi R, Ohta Y et al. Adrenomedullin has a cytoprotective role against endoplasmic reticulum stress for pancreatic β -cells in autocrine and paracrine manners. *Journal of diabetes investigation* 11: 823 – 833, 2020.
6. Matsuguma M, Yujiri T et al. TERT and JAK2 polymorphisms define genetic predisposition to myeloproliferative neoplasms in Japanese patients. *International journal of hematology* 110: 690 – 698, 2019
7. M. Kondo, K. Tanabe M. et al. Activation of GLP-1 receptor signalling alleviates cellular stresses and improves beta cell function in a mouse model of Wolfram syndrome. *Diabetologia*. 61 : 2189-2201, 2018.
8. Ohta Y, Taguchi A et al. Clock Gene Dysregulation Induced by Chronic ER Stress Disrupts β -cell Function. *EbioMedicine* 18 : 146-56, 2017.
9. Nakamura Y, Tanaka Y et al. Soluble interleukin-2 receptor index predicts the development of acute graft-versus-host disease after allogeneic hematopoietic stem cell transplantation from unrelated donors. *Int J Hematol*. 103 : 436-443, 2016.
10. Sugiyama A, Yujiri T et al. Altered expression of circadian clock genes during peripheral blood stem cell mobilization induced by granulocyte colony-stimulating factor. *Chronobiol Int*. 32 (7) : 934-41, 2015.
11. Nakamura Y, Tanaka Y et al. Effect of early posttransplantation tacrolimus concentration on the development of acute graft-versus-host disease after cord blood transplantation. *Journal of Hematopoietic Cell Transplantation*.4 : 74-81, 2015.
12. Matsunaga, K. Tanabe K et al. Wolfram syndrome in the Japanese population; molecular analysis of WFS1 gene and characterization of clinical features. *PLoS One* 9 : e106906, 2014.
13. Hatanaka M, Tanabe K et al. Wolfram syndrome 1 gene (WFS1) product localizes to secretory granules and determines granule acidification in pancreatic β -cells. *Hum Mol Genet*. 20 : 1274-84, 2011.
14. Inoue H, Tanizawa Y et al. A Gene encoding a transmembrane protein is mutated in patients with diabetes mellitus and optic atrophy (Wolfram syndrome) . *Nature Genetics* 20 : 143-148, 1998.