

BIOGRAPHICAL SKETCH

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WORK PLACE: Department of Endocrinology and Diabetes
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POSITION: Professor
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Education and Academic Degree

Attached High-School of University of Hiroshima
Science 3, College of Art and Science, The University of Tokyo
Faculty of Medicine, The University of Tokyo
Bachelor of Medicine (M.D.) (March 27, 1982)
Yamaguchi University Doctor of Medical Science (Ph.D.) (July 12, 1989)

Professional Experience

Resident: University of Tokyo Hospital (Hongo, Tokyo, Japan, 6/10/82 – 1/9/83)
Resident: University of Tokyo Hospital Branch (Mejiro, Tokyo, Japan, 1/10/83 – 3/30/83)
Resident: Yamaguchi University Hospital (Ube, Yamaguchi, Japan, 4/1/83 – 8/31/83)
Resident: Shuto General Hospital (Yanai, Yamaguchi, Japan, 9/1/83 – 5/31/84)
Staff: Yamaguchi University Hospital (Ube, Yamaguchi, Japan, 6/1/84 – 5/31/87)
Assistant: Internal Medicine, Yamaguchi University (Ube, Yamaguchi, Japan, 6/1/87 – 5/31/88)
Physician: Saiki Hospital (Nagato, Yamaguchi, Japan, 6/1/88 – 3/31/89)
Staff: Yamaguchi University Hospital (Ube, Yamaguchi, Japan, 4/1/89 – 5/31/90)
Visiting Scientist: Diabetes Division, University of Texas Health Science Center at San Antonio (UTHSCSA) (San Antonio, Texas, USA, 6/1/90 – 2/28/93)
Clinical Instructor: Diabetes Division, UTHSCSA (San Antonio, Texas, USA, 3/1/93 – 8/31/94)

Instructor: Diabetes Division, UTHSCSA (San Antonio, Texas, USA, 9/1/94 – 8/31/96)
Assistant Professor of Medicine: Diabetes Division, UTHSCSA (San Antonio, Texas, USA, 9/1/96 – 12/31/98)
Co-Director, Clinical Research Center, Texas Diabetes Institute (1996 – 1997)
Medical Research Director, Clinical Research Center, Texas Diabetes Institute (1997– 12/31/98)
Lecturer, Diabetes Division, Internal Medicine, Kawasaki Medical School, Kurashiki, Okayama, Japan (1/1/99 – 3/31/00)
Lecturer, Endocrine and Diabetes Division, Internal Medicine, Kawasaki Medical School, Kurashiki, Okayama, Japan (4/1/00 – 12/31/05)
Lecturer (part time), Kawasaki College of Allied Health Professions, Kurashiki, Okayama, Japan (6/2/00-12/31/05)
Director, Diabetes and Endocrine Department, Kameda Medical Center (1/1/06-3/31/09)
Professor, Department of Endocrinology and Diabetes, Saitama Medical Center, Saitama Medical University (4/1/09-present)
Lecturer (part time), and Metabolic Diseases, University of Tokyo (4/1/10-present)

Boards / License

Medical Examination of National Board (Japan) May 25, 1982, No.265768
Standard ECFMG Certificate (USA) 1991 No. 0-344-588-9
Board Certificate in Internal Medicine (Japan) December 20, 1991, No.69753
Board Certificate in Hematology (Japan) April 1, 1991, No.1359 (currently inactive)
Board Certificate in Diabetology (Japan) November 29, 1993, No.1505
Board Certificate in Endocrinology and Metabolism (Japan) April 1, 1994, No.1940033
Texas State Teaching Fellow Permit No. TF-93-19 (June 3, 1993 - June 3, 1994)
Texas State Faculty Temporary License No. 31226 (December 1, 1996 - 1999)
USMLE Step 1 and Step 2 passed (1997)
USMLE Step 3 passed (1998)
Certified Physician for Residency Training of Diabetology (Japan) December 5, 1999, No. 745
Assigned Physician for Residency Training of Internal Medicine (Japan) 2001
Certified Physician for Residency Training of Endocrinology (Japan) April 1, 2004, No. 3040134
Nutrition Support Team Coordinator (Japan) April 1, 2005, No. 04-168
Fellow of the Japanese Society of Internal Medicine, December 12 2005, No.9135

Professional Honors / Grants

1991 - 1993 Juvenile Diabetes Foundation Research Fellowship
1993 - 1994 American Diabetes Association Mentor Based Postdoctoral Fellowship (Mentor: Ralph A. DeFronzo, M.D.)
1994 - 1996 Fujisawa Corp. Research Grant "Identification of Specific Proteins in the Insulin Resistant Subjects"

- 1996 American Diabetes Association Travel Grant
 2001-2002 Grant-in-Aid for Scientific Research (C)(2) Japan Society for the
 Promotion of Science, Ministry of Education, Culture, Sports, Science,
 and Technology , Japan
 “Pathophysiological Analysis of Leptin Resistance in Type 2 Diabetes
 Mellitus”

Professional Societies

- 1982 - present Member, Japanese Society of Clinical Hematology
 1983 - present Member, Japan Diabetes Society
 1983 - present Member, Japan Endocrine Society
 1983 - present Member, Japanese Society of Hematology
 1985 - present Member, Japan Association of Medical Informatics
 1989 - present Member, Japanese Society of Internal Medicine
 1990 - present Member, American Diabetes Association
 1992 - present Life Member, International Diabetes Federation
 1992 - present Member, European Association for the Study of Diabetes
 1999 - present Member, Japan Atherosclerosis Society
 1999 - present Member, Japanese Society of Clinical Nutrition

- Regional Councilor of Japanese Society of Internal Medicine (2000-present)
 Delegate member to a council of Japan Endocrine Society (June 14, 2000-present)
 Councilor of Japan Society of Clinical Nutrition (2001-present)
 Councilor of Japan Diabetes Society (May, 2003-present)
 Editorial Board Member of Journal of Japan Diabetes Society (May, 2005 – Dec,
 2005)

Journal Referee

- 1994 - 1996 Reviewer of *American Journal of Physiology*
 1995 - 1997 Reviewer of *Life Science*
 1997 – 1998, 2004, 2005, 2008, 2010
 Reviewer of *Diabetes Research and Clinical Practice*
 2000, 2003, 2004, 2010
 Reviewer of *Diabetes Care*
 2004, 2005
 Reviewer of *Diabetologia*
 2004 Reviewer of *International Journal of Experimental Diabetes Research*
 2004 Reviewer of *Clinical Endocrinology*
 2005 Reviewer of *EOP*
 2006, 2007, 2010
 Reviewer of *Japanese Journal of Diabetes [Japanese]*
 2007, 2010
 Reviewer of *Journal of Diabetes and Its Complications*
 2007-2010 Reviewer of *Nutrition, Metabolism & Cardiovascular Diseases*
 2007, 2009

2008 Reviewer of *Endocrine Journal*
2008 Reviewer of *Internal Medicine*
2010 Reviewer of *Endocrinology*
2010 Reviewer of *Diabetology International*
2010 Reviewer of *Acta Diabetologica*

2007- Editorial Board Member of
Nutrition, Metabolism & Cardiovascular Diseases

Other

Permanent Resident of the USA (from 1996 – 2004)

Bibliography

1. Books / Chapters

1. Matsuda M: Why Biguanides were not used for a certain period of time. E. R. Kawamori, Fuji Medical, Osaka, Japan pp 29-36, 2005. [Japanese]
2. Matsuda M, Kaku K: Therapeutic Guide Line of Diabetes Mellitus Ed. K. Shirota and K. Node, Medical View, Tokyo, Japan pp 240-245, 2004. [Japanese]
3. Matsuda M: Self Monitor of Blood Glucose. In Kaku K (Ed) Insulin Q&A Japan Medical Publisher, Tokyo, Japan pp.67-74, 2004. [Japanese]
4. Matsuda M: Recent advances in the pathophysiology and diagnosis in Diabetology. In Yazaki Y (Ed) Progress in Molecular Diabetology – from basic to clinical science - Kanehara Shuppan, Tokyo, Japan, pp.102~108, 2002. [Japanese]
5. Matsuda M, Kaku K: Lactic Acidosis. In Hinohara S, Imura Y (Eds) Diabetes and Its Complications, Recent Lecutres for Nurses, Nakayama Shoten, Tokyo, Japan pp.312~318, 2001. [Japanese]
6. Matsuda M: Comparison of Repaglinide and glibenclamide for one year. In Iwamoto Y (Ed) DATA UPDATE in Diabetes mellitus, Sentan Igakusha, Tokyo pp.146~147, 2001. [Japanese]
7. Matsuda M: Combination therapy of metformin and repaglinide. In Iwamoto Y (Ed) DATA UPDATE in Diabetes mellitus, Sentan Igakusha, Tokyo pp.144~145, 2001. [Japanese]
8. Saito M, Eto M, Okada M, Kawasaki F, Takeuchi Y, Matsuda M, Kaku K: Role of remnant-like particles (RLPs) from diabetic patients on cholesteryl ester synthesis. In Shichiri M, Chinn SH, Hotta N (Eds) Diabetes mellitus: Recent Advances fro the 21st Century, Elsevier (Amsterdam, Netherlands) pp.201~204, 2000
9. Masafumi Matsuda, and Kohei Kaku: Oral Hypoglycemic Agents pp. 136-141, In Annual Review Endocrine and Metabolism 2000. [Chugai Isho], Tokyo Japan. [Japanse]
10. Masafumi Matsuda, and DeFronzo, R.A.: In vivo Measurement of Insulin Sensitivity in Human. pp. 23-65, In Draznin,B and Rizza,R (eds) Clinical Research in Diabetes and Obesity, Part I: Methods, Assessment, and Metabolic Regulation 1997 Humana Press, Totowa, NJ, USA.
11. Kohei Kaku, Matsuda,M., Kaneko,T. and Permutt,M.A.: Genetic analysis of diabetic susceptibility in inbred mouse strains. Recent advances in insulin therapy. Tai Hee Lee et al.(Ed) Springer International pp.127-130, 1990.
- 12.

2. Papers

1. DeFronzo RA, Matsuda M: Reduced time points to calculate the composite index Diabetes Care 33:e93, 2010.

2. Jani R, Molina M, Matsuda M, Balas B, Chavez A, DeFronzo RA, Abdul-Ghani M.: Decreased non-insulin-dependent glucose clearance contributes to the rise in fasting plasma glucose in the nondiabetic range. *Diabetes Care* 31:311-5, 2008.
3. Abdul-Ghani M, Matsuda M, Jani R, Jenkinson CP, Richardson DK, Kaku K, DeFronzo RA.: The relationship between fasting hyperglycemia and insulin secretion in subjects with normal or impaired glucose tolerance *Am J Physiol Endocrinol Metab.* 295:E401-6, 2008.
4. Kanda Y, Matsuda M, Tawaramoto K, Kawasaki F, Hashiramoto M, Matsuki M, Kaku K.: Effects of sulfonylurea drugs on adiponectin production from 3T3-L1 adipocytes: implication of different mechanism from pioglitazone. *Diabetes Res Clin Pract.* 81:13-8, 2008.
5. Makoto Shigeto, Masashi Katsura, Masafumi Matsuda, Ohkuma Seitaro, Kohei Kaku: Low, but physiological, concentration of GLP-1 stimulates insulin secretion independent of the cAMP-dependent protein kinase pathway. *Journal of Pharmacological Sciences.* 108(3):274-9, 2008. Epub 2008 Nov 6.
6. Abdul-Ghani MA, Matsuda M, DeFronzo RA.: Strong association between insulin resistance in liver and skeletal muscle in non-diabetic subjects. *Diabet Med.* 25:1289-94, 2008.
7. Gastaldelli A, Ferrannini E, Miyazaki Y, Matsuda M, Mari A, DeFronzo RA.: Thiazolidinediones Improve Beta-Cell Function in Type 2 Diabetic Patients. *Am J Physiol Endocrinol Metab.* 292:E871-83, 2007.
8. Abdul-Ghani MA, Matsuda M, Balas B, DeFronzo RA.: Muscle and liver insulin resistance indexes derived from the oral glucose tolerance test. *Diabetes Care* 30:89-94, 2007.
9. Shigeto M, Katsura M, Matsuda M, Ohkuma S, Kaku K.: Nateglinide and mitiglinide, but not sulfonylureas, induce insulin secretion through a mechanism mediated by calcium release from endoplasmic reticulum. *J Pharmacol Exp Ther.* 322:1-7, 2007.
10. Matsuki M, Matsuda M, Kohara K, Shimoda M, Kanda Y, Tawaramoto K, Shigetoh M, Kawasaki F, Kotani K, Kaku K.: Pharmacokinetics and pharmacodynamics of glimepiride in type 2 diabetic patients: compared effects of once- versus twice-daily dosing. *Endocr J.* 54:571-6, 2007.
11. Shigeto M, Katsura M, Matsuda M, Ohkuma S, Kaku K.: First phase of glucose-stimulated insulin secretion from MIN 6 cells does not always require extracellular calcium influx. *J Pharmacol Sci.* 101:293-302, 2006.
12. Saito M, Kuratsune H, Nitta H, Kawahara K, Hamano M, Matsuda M, Kaku K, Eto M.: Plasma lipid levels and nutritional intake in childhood- and adolescence-onset young type 1 diabetic patients in Japan. *abetes Res Clin Pract.* 2006 Jan 25; [Epub ahead of print]
13. Kanazawa A, Kawamura Y, Sekine A, Iida A, Tsunoda T, Kashiwagi A, Tanaka Y, Babazono T, Matsuda M, Kawai K, Iizumi T, Fujioka T, Imanishi M, Kaku K, Iwamoto Y, Kawamori R, Kikkawa R, Nakamura Y, Maeda S.: Single nucleotide

- polymorphisms in the gene encoding Kruppel-like factor 7 are associated with type 2 diabetes. *Diabetologia*. 2005 Jun 4; [Epub ahead of print]
14. Maeda S, Tsukada S, Kanazawa A, Sekine A, Tsunoda T, Koya D, Maegawa H, Kashiwagi A, Babazono T, Matsuda M, Tanaka Y, Fujioka T, Hirose H, Eguchi T, Ohno Y, Groves CJ, Hattersley AT, Hitman GA, Walker M, Kaku K, Iwamoto Y, Kawamori R, Kikkawa R, Kamatani N, McCarthy MI, Nakamura Y.: Genetic variations in the gene encoding TFAP2B are associated with type 2 diabetes mellitus. *J Hum Genet*. 2005 Jun 7; [Epub ahead of print]
 15. Shimazaki A, Kawamura Y, Kanazawa A, Sekine A, Saito S, Tsunoda T, Koya D, Babazono T, Tanaka Y, Matsuda M, Kawai K, Iizumi T, Imanishi M, Shinosaki T, Yanagimoto T, Ikeda M, Omachi S, Kashiwagi A, Kaku K, Iwamoto Y, Kawamori R, Kikkawa R, Nakajima M, Nakamura Y, Maeda S.: Genetic Variations in the Gene Encoding ELMO1 Are Associated With Susceptibility to Diabetic Nephropathy. *Diabetes*. 54:1171-8, 2005.
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 17. Matsuda M, Kawasaki F, Inoue H, Kanda Y, Yamada K, Harada Y, Saito M, Eto M, Matsuki M, Kaku K: Possible contribution of adipocytokines on diabetic neuropathy. *Diabetes Res Clin Pract*. 66 Suppl 1:S121-3, 2004.
 18. Kanda Y, Yamada K, Harada Y, Kawasaki F, Saito M, Inoue H, Matsuda M, Katsuki M, Eto M, and Kaku K: Clinical Parameters for Predicting Possibility of Insulin Therapy Withdrawal in Patients with Type 2 Diabetes Mellitus *J. Jan Diab. Soc*. 47(4):271-275, 2004. [Japanese]
 19. Fumiko Kawasaki, Masafumi Matsuda, Yukiko Kanda, Hiroshi Inoue, and Kohei Kaku: Structural and functional analysis of pancreatic islets preserved by pioglitazone in db/db mice. *Am J Physiol Endocrinol Metab*. 288:E510-518, 2005.
 20. Ferrannini E, Gastaldelli A, Miyazaki Y, Matsuda M, Mari A, DeFronzo RA.: Beta-Cell function in subjects spanning the range from normal glucose tolerance to overt diabetes: a new analysis. *J Clin Endocrinol Metab*. 90:493-500, 2005.
 21. Yukiko Kanda, Kayo Yamada, Yumiko Harada, Fumiko Kawasaki, Mieko Saito, Hiroshi Inoue, Masafumi Matsuda, Michihiro Matsuki, Masaaki Etou, Kohei Kaku: Clinical Parameters for Predicting Possibility of Insulin Therapy Withdrawal in Patients with Type 2 Diabetes Mellitus. *J. Japan Diab. Soc*. 47: 271-275, 2004. [Japanese with English Abstract]
 22. Kanazawa A, Tsukada S, Sekine A, Tsunoda T, Takahashi A, Kashiwagi A, Tanaka Y, Babazono T, Matsuda M, Kaku K, Iwamoto Y, Kawamori R, Kikkawa R, Nakamura Y, Maeda S.: Association of the Gene Encoding Wingless-Type Mammary Tumor Virus Integration-Site Family Member 5B (WNT5B) with Type 2 Diabetes. *Am J Hum Genet*. 75:832-43, 2004
 23. Saito M, Eto M, Nitta H, Kanda Y, Shigeto M, Nakayama K, Tawaramoto K, Kawasaki F, Kamei S, Kohara K, Matsuda M, Matsuki M, Kaku K.: Effect of apolipoprotein E4 allele on plasma LDL cholesterol response to diet therapy in type 2 diabetic patients. *Diabetes Care*. 27:1276-80, 2004

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31. Gastaldelli A, Miyazaki Y, Pettiti M, Matsuda M, Mahankali S, Santini E, DeFronzo RA, Ferrannini E: Metabolic effects of visceral fat accumulation in type 2 diabetes. *J Clin Endocrinol Metab* 87:5098-5103 2002
32. Matsuda M, Kawasaki F, Mikami Y, Takeuchi Y, Saito M, Eto M, Kaku K: Rescue of beta-cell exhaustion by diazoxide after the development of diabetes mellitus in rats with streptozotocin induced diabetes *Eur J Pharm* 453:141-148, 2002.
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- remnant lipoproteins, and nephropathy in type 2 diabetic patients *Am J Kidney Dis* 40:243-251, 2002.
36. Miyazaki Y, Matsuda M, DeFronzo RA: Dose-response effect of pioglitazone on insulin sensitivity and insulin secretion in type 2 diabetes *Diabetes Care* 25:517-523, 2002.
 37. Miyazaki Y, Mahankali A, Matsuda M, Glass L, Mahankali S, Ferrannini E, Cusi K, Mandarino LJ, DeFronzo RA: Improved glycemic control and enhanced insulin sensitivity in type 2 diabetic subjects treated with pioglitazone *Diabetes Care* 24:710-719, 2001.
 38. Miyazaki Y, Glass L, Triplitt C, Matsuda M, Cusi K, Mahankali A, Mahankali S, Mandarino LJ, DeFronzo RA: Effect of rosiglitazone on glucose and non-esterified fatty acid metabolism in Type II diabetic patients *Diabetologia* 44:2210-2219, 2001.
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 41. Kaku K, Matsuda M, Urae A, Irie S: Pharmacokinetics and pharmacodynamics of insulin aspart, a rapid-acting analog of human insulin, in healthy Japanese volunteers *Diabetes Res Clin Pract* 49:119-126, 2000.
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 45. Matsuda M, DeFronzo RA: Insulin sensitivity indices obtained from oral glucose tolerance testing: comparison with the euglycemic insulin clamp *Diabetes Care* 22:1462-1470, 1999.
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69. Masafumi Matsuda, Kaku,K., Matsutani,A., Tsuchiya,M., Okuya,S. and Kaneko,T.: DG-5128 modification of the liver fructose 2,6-bisphosphate concentration suppressed by glucagon and epinephrine. Peptide Hormones in Pancreas 7: 229-233, 1987.
70. Masafumi Matsuda and Kaku,K.: Tissue metabolic specificity to insulin and sulfonylureas and its actions. Journal of Japan Diabetes Society 30:1193-1194, 1987.
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