

Masanori SAKAGUCHI M.D., Ph.D.

PERSONAL DETAILS:

Office: 1-1-1 Tsukuba, Ibaraki, Japan, 305-0006, International Institute for Integrative Sleep Medicine, University of Tsukuba

Email: sakaguchi.masa.fp@u.tsukuba.ac.jp

Age: 41

Nationality: Japanese

URL: <http://sakurai-sakaguchi.wpi-iiis.tsukuba.ac.jp/>

RESEARCH AREAS:

Sleep sciences, memory and adult-neurogenesis

APPOINTMENTS:

2013Apr Principle Investigator, International Institute for Integrated Sleep Medicine, University of Tsukuba, Ibaraki, Japan

2013Feb Research Scientist, International Institute for Integrated Sleep Medicine, University of Tsukuba, Ibaraki, Japan

2011Apr Special Postdoctoral Research Fellow (SPD), RIKEN Brain Science Institute

2010Oct Research Scientist, RIKEN Brain Science Institute: Dr. Yasunori Hayashi lab.

2009Apr Postdoctoral research fellow, Japanese Society for the Promotion of Science

2007Apr Research fellow, Neurosciences and Mental Health, The Hospital for Sick Children, Canada: Dr. Paul W. Frankland lab.

2005Apr Assistant Professor, Department of Physiology, School of Medicine, Keio University.: Dr. Hideyuki Okano lab.

ACADEMIC EDUCATION:

2005Mar Ph.D. in Medicine, Institute of Basic Medical Sciences, University of Tsukuba, Thesis: A method for gene transfer, single isolation and in vitro assay for neural stem cells, Dr. Hideyuki Okano lab.

2001Mar M.D., School of Medicine, University of Tsukuba

PUBLICATION IN SCIENTIFIC JOURNALS:

Akers KG, Fujita Y, Chérasse Y, Srinivasan S, Sakurai T, Sakaguchi M*, Role of adult hippocampal neurogenesis in memory processing and regulation by sleep and epigenetics, *Stem Cells*, 2018 Feb. *corresponding author. DOI: 10.1002/stem.2815

Purple R*, Sakurai T, Sakaguchi M*, Auditory conditioned stimulus presentation during NREM sleep impairs fear memory in mice, *Sci. Rep.*, 7:46247, 2017, *corresponding authors, NHK 報道等

Fujinaka A[‡], Li R[‡], Hayashi M, Kumar D, Changarathil G, Naito K, Miki K, Nishiyama T, Lazarus M, Sakurai S, Kee N, Nakajima S, Wang SH, Sakaguchi M*, Effect of context exposure after fear learning on memory generalization in mice, *Mol. Brain*, 2016 Jan, 9:2, *corresponding author, [‡]equally contributed, 朝日新聞掲載、学長賞受賞等

Sakaguchi M*, Kim K, Yu LMY, Hashikawa Y, Sekine Y, Okumura Y, Kawano M, Hayashi M, Kumar D, Boyden ES, McHugh TJ, Hayashi Y*, Inhibiting the activity of CA1 hippocampal neurons prevents the recall of contextual fear memory in inducible ArchT transgenic mice, *Plos ONE*, 2015 Jun 15;10(6) *corresponding authors

Arruda-Carvalho M, Akers KG, Guskjolen AJ, Sakaguchi M, Josselyn S, Frankland PW, Post-training ablation of adult-generated olfactory granule cells degrades odor-reward memories, *J.Neurosci.*, 2014 Nov 19;34(47):15793-803.

Sakaguchi M and Hayashi Y, Catching the engram: strategies to examine the memory trace, *Mol. Brain* 2012Oct, 5:32(359 viewed in the first 10days, 6th best viewed during the 1st month)

Hirota Y, Sawada M, Kida Y, Huang SH, Yamada O, Sakaguchi M, Ogura T, Okano H, Sawamoto K, Roles of planar cell polarity signaling in maturation of neuronal precursor cells in the postnatal mouse olfactory bulb, *Stem Cells*, 2012 Aug;30(8):1726-33.

Sakaguchi M, Okano H. Neural stem cells, adult neurogenesis and galectins: from bench to bedside, *Dev. Neurobiol.*, 2012 Jul;72(7):1059-67.

Stone S, Teixeira CM, Zaslavsky K, Wheeler AL, Canabal AM, Wang AH, Sakaguchi M, Lozano AM, Frankland PW, Functional Convergence of Developmentally- and Adult- Generated Granule Cells in Dentate Gyrus Circuits Supporting Hippocampus-Dependent Memory, *Hippocampus*. 2011 Dec;21(12):1348-62.

Arruda-Carvalho M*, Sakaguchi M*, Akers KG., Josselyn SA., Frankland PW., Post-training ablation of adult-generated neurons degrades previously-acquired memories., *J. Neurosci.* 2011 Oct 19;31(42):15113-27., *The authors contributed equally

Yamane J*, Ishibashi S*, Sakaguchi M*, Kuroiwa T., Kanemura Y., Nakamura M.,

Miyoshi H., Sawamoto K., Toyama Y., Mizusawa H. and Okano H., Transplantation of human neural stem/progenitor cells overexpressing Galectin-1 improves functional recovery from focal brain ischemia in the Mongolian gerbil, *Mol. Brain*, 2011,4:35, *The authors contributed equally

Sakaguchi M., Arruda-Carvalho M., Kang NH., Imaizumi Y., Poirier F., Okano H. and Frankland PW., Impaired spatial and contextual memory formation in galectin-1 deficient mice, *Mol Brain*. 2011Sep 1;4(1):33

Leslie AT., Akers KG., Krakowski A., Stone SD., Sakaguchi M., Arruda-Carvalho M., Frankland PW., Impact of early adverse experience on complexity of adult-generated neurons, *Translational Psychiatry*, 1, e35, 2011 Aug;1:e35

Imaizumi Y, Sakaguchi M, Morishita T, Ito M, Poirier F, Sawamoto K, Okano H, Galectin-1 is expressed in early-type neural progenitor cells and down-regulates neurogenesis in the adult hippocampus, *Mol. Brain*, 2011Jan 27;4:7.

Ikeda M, Hirota Y, Sakaguchi M, Yamada O, Kida YS, Ogura T, Otsuka T, Okano H, Sawamoto K., Expression and Proliferation-Promoting Role of Diversin in the Neuronally Committed Precursor Cells Migrating in the Adult Mouse Brain., *Stem Cells*. 2010 Nov;28(11):2017-26.

Hirota Y, Meunier A, Huang S, Shimozawa T, Yamada O, Kida YS, Inoue M, Ito T, Kato H, Sakaguchi M, Sunabori T, Nakaya M, Nonaka S, Ogura T, Higuchi H, Okano H, Spassky N, and Sawamoto K, Planar polarity of multiciliated ependymal cells involves the anterior migration of basal bodies regulated by non-muscle myosin II, *Development*, 2010 Sep;137(18):3037-46.

Sakaguchi M, Imaizumi Y, Shingo T, Tada H, Hayama K, Yamada O, Morishita T, Kadoya T, Uchiyama N, Shimazaki T, Kuno A, Poirier F, Hirabayashi J, Sawamoto K, Okano H., Regulation of adult neural progenitor cells by Galectin-1/beta1 Integrin interaction., *J Neurochem*. 2010 Jun;113(6):1516-24.

Akers K.G., Sakaguchi M., Arruda-Carvalho M., Functional contribution of adult-generated olfactory bulb interneurons: Odor discrimination versus odor memory., *Journal of Neuroscience*, *J Neurosci*. 2010 Mar 31;30(13):4523-5

Yamane J., Nakamura M., Iwanami A., Sakaguchi M., Katoh H., Yamada M., Momoshima M., Miyao S., Ishii K., Tamaoki N., Nomura T., Okano H.J., Kanemura Y., Toyama Y., Okano H., Transplantation of Galectin-1-expressing human neural stem cells into the injured spinal cord of adult common marmosets, *Journal of Neuroscience Research*, *J Neurosci Res*. 2010 May 15;88(7):1394-405.

Frankland P.W., Sakaguchi M., Arruda-Carvalho M., Starting at the endophenotype: A role for alpha-CaMKII in schizophrenia?, *Molecular brain*,1(1),5-7,2008

Ishibashi S., Kuroiwa T., Sakaguchi M., Sun L., Kadoya T., Okano H., Mizusawa H.,

Galectin-1 regulates neurogenesis in the subventricular zone and promotes functional recovery after stroke., *Exp Neurol.*,207(2),302-313,2007

Okano H., Sakaguchi M., Ohki K., Suzuki N., Sawamoto K., Regeneration of the central nervous system using endogenous repair mechanisms., *J Neurochem.*,102(5),1459-1465.,2007

Adachi K., Mirzades Z., Sakaguchi M., Yamashita T., Nikolcheva T., Gotoh Y., Peltz G., Gong L., Kawase T., Alvarez-Buylla A., Okano H., Sawamoto K., β -catenin signaling promotes proliferation of progenitor cells in the adult mouse subventricular zone., *Stem Cells*,25(11),2827-2836,2007

Sakaguchi M., Imaizumi Y. and Okano H, Expression and function of galectin-1 in adult neural stem cells., *Cell Mol Life Sci.*, 64, pp1254-8, 2007

Yamashita T., Ninomiya M., Acosta PH., García-Verdugo JM., Sunabori T., Sakaguchi M., Adachi K., Kojima T., Hirota Y., Kawase T., Araki, N., Abe K., Okano H., Sawamoto K., Subventricular-zone-derived neuroblasts migrate and differentiate into mature neurons in the post-stroke adult striatum., *J. Neurosci.*,26,6627-6636,2006.

Sakaguchi M., Shingo T., Shimazaki T., Okano H.J., Shiwa M., Ishibashi S., Oguro H., Ninomiya M., Kadoya T., Horie H., Shibuya A., Mizusawa H., Poirier F., Nakauchi H., Sawamoto K., Okano H. A carbohydrate binding protein, Galectin-1, promotes proliferation of adult neural stem cells. *Proc. Natl. Acad. Sci. USA* 103:7112-7117, 2006(Track II *direct submission*)

Sakaguchi M., Sawamoto K., Shimazaki T., Kitamura T., Shibuya A., Okano H. A method for gene transfer, single isolation and in vitro assay for neural stem cells., *Inflammation and Regeneration*,25, 50-54, 2005

Ishibashi S., Sakaguchi M., Kuroiwa T., Shimazaki T., Okano H., Mizusawa H. Human neuronal stem cells improve sensorimotor and cognitive impairment in Mongolian gerbils after ischemia., *J.Neurosci.Res.*,78, 215-223, 2004

Mikami Y., Okano H., Sakaguchi M., Nakamura M., Shimazaki T., Okano H.J., Kawakami Y., Toyama Y., Toda M. Implantation of dendritic cells in the injured adult spinal cord results in activation of the endogenous neural/progenitor cells for denovo neurogenesis and axonal regeneration, leading to functional recovery., *J. Neurosci. Res.*,76, 453-465, 2004

Ohba H., Chiyoda T., Endo E., Yano M., Hayakawa Y., Sakaguchi M., Darnell RB., Okano H.J., Okano H. Sox21 is a repressor of neuronal differentiation and is antagonized by YB-1., *Neurosci. Lett.*,358, 157-160, 2004

REVIEWS:

小柳伊代, 坂口昌徳, 記憶と睡眠, 執筆中, 睡眠学第2版, 朝倉書店, 2018

小柳伊代, 李若詩, 藤中彩乃, 坂口昌徳, ト라우マ記憶を弱めるには - マウスの記憶・睡眠研究から考える PTSD ケア, *academistJournal*, 2017年7月26日, Web publication, <https://academist-cf.com/journal/?p=5352>

大石誠、中島聡美、坂口昌徳「心的外傷直後の場所刺激が記憶犯科に与える影響」『医学の歩み』、2016Sep, v258i13, p1209-1210

坂口昌徳, 脳内で新生するニューロンと中枢神経再生への応用, *ブレインサイエンスレビュー*, 2016 Feb 29, p263-279

Imaizumi Y, Sakaguchi M, Hideyuki O, Galectin., *Molecular Therapy*, Sentan Igaku Sha, (6),pp80-81,2007 (in Japanese)

Sakaguchi M, Imaizumi Y, Sawamoto K, Okano H., The carbohydrate binding protein, Galectin-1 promotes proliferation of adult neural stem cells., *Cell Engineering*, Yodo Sha., (25),pp912-913, 2006 (in Japanese)

Okano H., Kohyama J., Ohba H., Sakaguchi M., Tokunaga A., Shimazaki T., Okano HJ., Neural stem cells: Isolation and self-renewal. In *Tissue Stem Cells; Biology & Applications*, Taylor & Francis Group, LLC, New York, pp55-70, 2006

Sakaguchi M, Sawamoto K, Okano H., Neuro-regenerative therapy - future therapeutic strategy, new medical lecture for nurse, Nakayama Shoten, pp88-92, 2005 (in Japanese)

Sakaguchi M, Sunabori K, Sawamoto K, Okano H., Development and regeneration of nervous system., *Illustration map of development and regeneration*, Yodo sha, pp139-148, 2005 (in Japanese)

Ninomiya M, Sawamoto K, Sakaguchi M, Okano H., Neural Stem Cells, *Igaku no Ayumi*, 212(10), pp865-868, 2005 (in Japanese)

INTERNATIONAL PATENTS:

USA Patent #7,662,385, Okano H, Sakaguchi M, Hirabayashi J, Sawamoto K., Agent for inhibiting proliferation of neural stem cells., Keio Univ., 2007Feb09

USA Patent #7,785,596, EU#04787726.1 HMJ04191EP, Okano H, Okano JH, Sakaguchi M, Mizusawa H, Ishibashi S, Methods for enhancing survival and/or proliferation of neural stem cells and neurite extension enhancers therefore pharmaceutical compositions containing neural stem cells assay methods and screening methods. Keio Univ., 2005Mar24

WO/2003/080818, Toda M, Okano H, Kawakami Y, Toyama Y, Mikami Y, Sakaguchi M, Method of inducing growth of nerve stem cells.

WO2005026343A1, Ishibashi S, Mizusawa H, Okano H, Okano JH, Sakaguchi M, Method of promoting subsistence and/or proliferation of neural stem cell and promoting extension of neurite, promoter therefor, pharmaceutical composition

containing neural stem cell, method of assay and method of screening

EXTERNAL FUNDING obtained after 2013 (net total):

Takeda Science Foundation (2,000,000JPY), 2017

Shimadzu Science Foundation (1,000,000JPY), 2016

Takeda Science Foundation Scholarship for Foreign Researchers, Financial Support for one year salary and invitation of Dr. Sakthivel Srinivasan, (3,000,000JPY), 2017

MEXT Scholarship for recruiting Ph.D. student for Mr. Pablo Ismael Vergara Garcia (4yrs financial support), 2017Oct~2021Sep

Senshin Medical Research Foundation (1,000,000JPY), 2016

CREST, JST, Development and application of optical technology for spatiotemporal control of biological functions, (40,000,000JPY), 2016~2020

The Ichiro Kanehara Foundation for the Promotion of Medical Sciences and Medical Care (1,000,000JPY), 2016

Grant in Aid for Young Researcher (B), Japanese Society for the Promotion of Science, (3,100,000JPY), 2016-2019

Inamori Foundation, (1,000,000JPY), 2016

MEXT Scholarship for recruiting Msc. student for Ms. Pimpimon Nondhalee, 2016Oct~2018Sep (Full financial support for two years), 2016

Kato Memorial Bioscience Foundation, (2,000,000JPY), 2015~2016

The Uehara Memorial Foundation Research Grant, (2,000,000JPY), 2015

Life Science Foundation of Japan, (1,000,000JPY), 2015

KANAE Foundation for the promotion of medical science, (1,000,000JPY), 2015

Research Foundation for Opto-Science and Technology, (1,800,000JPY), 2015~2016

Senshin Medical Research Foundation Research Grant, (1,000,000JPY), 2015

Kowa Life Science Foundation Research Grant, (500,000JPY), 2015

GSK Japan Research Grant, (2,000,000JPY), 2015

JSPS FPD Scholarship for recruiting foreign postdoc fellow with research grant for Dr. Deependra Kumar, (2,500,000JPY in total), 2015~2017

MEXT Scholarship for recruiting Ph.D. student for Mr. Gopakumar Chanragarthil, 2015~2019 (full financial scholarship)

FENS-JNS young researchers exchange support program for Mr. Ross Purple, (2000EUR), 2015

Grant-in-Aid for Scientific Research on Innovative Areas, Japanese Society for the Promotion of Science, (9,230,000JPY), 2014-2015

Research Grant, Brain Science Foundation (1,000,000JPY), 2013

Japan Foundation for Applied Enzymology (TMFC) (aprx.1,500,000JPY), 2013~2017

Grant-in-Aid for Scientific Research on Innovative Areas, Japanese Society for the Promotion of Science, (7,020,000JPY), 2013-2014

Grant in Aid for Young Researcher (B), Japanese Society for the Promotion of Science, (4,420,000JPY), (2012-)2013,

AWARDS:

Fujinaka A¥, Li R¥, Hayashi M, Kumar D, Changarathil G, Naito K, Miki K, Nishiyama T, Lazarus M, Sakurai S, Kee N, Nakajima S, Wang SH, Sakaguchi M, Effect of context exposure after fear learning on memory generalization in mice, Mol. Brain, 2016 Jan, 9:2, 筑波大学学長賞受賞(藤中綾乃), 卓越した学群生の国際誌発表論文に対して

坂口 昌徳, 「睡眠中の新生ニューロンの興奮は、記憶形成に必要である」, 第11回成体脳のニューロン新生懇談会、口頭発表、名古屋、2015年11月14日、優秀発表賞

Sakaguchi M, The role of adult born neurons during sleep, International Symposium "Homeodynamics in Clocks, Sleep and Metabolism Tokyo Translational Therapeutics Meeting" , University of Tokyo, Tokyo, Japan, 2014Sep, 優秀発表賞

The Hospital for Sick Children, Travel Award for conference (Sfn), 2008, 1000CAD

Keystone Symposia Scholarship Award, 2004 (NIH;1R13 NS047606-01), 1000USD

PRESENTATIONS:

2017 (Invitation or oral presentation for the lab-members)

Sakaguchi M, Srinivasan S, Koyanagi I, Nondhalee P, Yu T, Vogt K, Singh S, Obo H, Naoi T, Kernie T G, Sakurai T, Yanagisawa M, Kumar D, Memory consolidation during sleep and its mechanism for clinical insights, Asian Society of Sleep Medicine 2018 Congress, Mar 22-24, 2018, TBA, Seoul, Korea, Invited as a symposium speaker(Sakaguchi)

Sakaguchi M, Koyanagi I, Srinivasan S, Nondhalee P, Singh S, Yu T, Vogt K, Obo H, Naoi T, Kernie S G, Sakurai T, Yanagisawa M, Kumar D, Mechanism of memory consolidation during sleep, NIPS conference: An approach to the integrative understanding of learning and memory, Oct 11-12, 2017, National Institute for Physiological Sciences, Okazaki, Aichi, Japan, Invited speaker (Sakaguchi)

Sakaguchi M, Koyanagi I, Srinivasan S, Nondhalee P, Singh S, Yu T, Vogt K, Obo H, Naoi T, Kernie S G, Sakurai T, Yanagisawa M, Kumar D, 脳と心のフロンティア～「知」と「療」の連携, The 39th Japanese Society for Biological Psychology, The 47th Japanese Society for Neuropsychopharmacology, Sep 28-30, 2017, Sapporo convention center, Sapporo, Hokkaido, Japan, Invited as a symposium speaker (Sakaguchi)

Kumar D, Koyanagi I, Srinivasan S, Nondhalee P, Singh S, Yu T, Vogt K, Obo H, Naoi T, Kernie S G, Sakurai T, Yanagisawa M, Sakaguchi M*, The role of adult-born neurons in memory consolidation during sleep, Indian society for sleep research, Sep 20-23, 2017, The International Centre Goa, Goa, India, Invited as a symposium speaker(Kumar)

Sakaguchi M, Srinivasan S, Koyanagi I, Nondhalee P, Yu T, Vogt K, Singh S, Obo H, Naoi T, Kernie T G, Sakurai T, Yanagisawa M, Kumar D, Function of the adult-born neurons for memory consolidation during sleep, The 20th KSBNS annual meeting, August 30-31, 2017, Grand Hilton Hotel, Seoul, Korea, Invited as a symposium speaker (Sakaguchi)

Nondhalee P, Ohnishi T, Kumar D, Singh S, Koyanagi I, Obo H, Sakurai T, Sakaguchi M, EEG brain rhythms for memory consolidation during sleep, The 40th Annual Meeting of the Japan Neuroscience Society, Jul 20-23, 2017, Makuhari Messe, Chiba, Japan, Selected for oral presentation (Nondhalee)

Li R, Koyanagi I, Sakurai T, Sakaguchi M, Active Role of Sleep in Forgetting of Memory, The 40th Annual Meeting of the Japan Neuroscience Society, Jul 20-23, 2017, Makuhari Messe, Chiba, Japan, Selected for oral presentation (Li)

Koyanagi I, Sonomura K, Kumar D, Obo H, Sato T, Sakurai T, Sakaguchi M, Molecular mechanisms of memory consolidation during sleep, The 40th Annual Meeting of the Japan Neuroscience Society, Jul 20-23, 2017, Makuhari Messe, Chiba, Japan, Selected for oral presentation (Koyanagi)

Sakaguchi M, Function of the adult-born neurons in memory consolidation during sleep, Department seminar, May 28, 2017, Peking University, Beijing, China, Invited speaker(Sakaguchi)

Sakaguchi M, Function of adult-born neurons in memory consolidation during sleep, Neurogenesis in Developing and Adult Primate Brain - Challenges for Therapeutic Applications“, May 19-20, 2017, Chernomore Hotel, Varna, Bulgaria, Invited as a symposium speaker (Sakaguchi)

Sakaguchi M, Metabolomic analysis for memory consolidation of the adult-born neurons during sleep, The Adult Neurogenesis Conference, Feb 18, 2017, Shiga Medical Univ, Shiga, Japan, Invited(Sakaguchi)

2016 (Invitation only)

坂口昌徳, 医療心理懇話会演題, マウス光遺伝学を用いたトラウマ記憶の脳内処理過程, 2016, フクラシア東京, 東京

Sakaguchi M, RIKEN PDF/A Pizza and Science Seminars, Function of the adult-born neurons in memory consolidation during sleep, 2016, RIKEN BSI, Saitama

Deependra K, Sakaguchi M, 記憶研究会 2016, Function of the adult-born neurons in memory consolidation during

sleep, 2016, 東京大学, 東京

Sakaguchi M., NCTC seminar, The activity of adult born neurons are necessary for memory consolidation during sleep, 2016, National Chiao-Tung University, Hsinchu(Taiwan)

坂口昌徳, 第89回日本薬理学会年会, 新生神経の光制御にて明らかにする, 記憶と睡眠の関係, シンポジウム演者, 2016, パシフィコ横浜, 神奈川

坂口昌徳, 日本睡眠学会第41回定期学術集会, 成体脳で新生するニューロンが, 睡眠中の記憶の固定化に果たす役割, 2016, 京王プラザホテル, 東京

坂口昌徳, 脳肝センターシンポジウム, Adult neurogenesis plays critical role in sleep stage dependent memory formation, 2016, 全日空ホテル, 石川

2015 (Invitation only)

坂口昌徳, 「新生ニューロンの光制御にて明らかにする, 記憶と睡眠の関係」, シンポジウム演者, 第89回日本薬理学会年会, 横浜, 2016年3月9~11日

Sakaguchi M., Kumar D, Function of adult born neurons in memory formation during sleep, Symposium Speaker, The 4th annual IIS symposium, Tsukuba, 2016Feb26

坂口昌徳, 「成体脳に新生するニューロンの光制御により明らかにする, 睡眠中の記憶形成機構」, 講演者, 比較記憶研究会, 岡崎, 2015年10月8~9日

坂口昌徳, 「Brain regeneration」, 講演者, 慶應義塾大学眼科学講座定期セミナー, 2015年9月3日

坂口昌徳, 「The function of adult born neurons during sleep」, シンポジウム演者, 第38回日本神経科学大会, 神戸, 2015年7月29日

坂口昌徳, Deependra Kumar, 林政信, 櫻井武, 「光による睡眠ステージ特異的制御にて明らかにする, 新生ニューロンの記憶における機能」, 口頭演者, 成人病の病因・病態の解明に関する研究助成第21回研究発表会(TMFC), 大阪, 2015年7月3-4日

2014 (Invitation only)

Sakaguchi M., How memory engram is formed? (tentative), Symposium, 成体脳ニューロン新生懇談会, University of Tokyo, Tokyo, Japan, 2014Dec

Sakaguchi M., Manipulation of a traumatic memory, Symposium, Comprehensive Brain Science Network, Tokyo Medical and Dental University, Tokyo, Japan, 2014Dec

Sakaguchi M., Regeneration of neural circuits in the adult brain, KAIST seminar series, Korea Advanced Institute of Science and Technology, Daejeon, Korea, 2014Dec

Sakaguchi M., Regeneration of neural circuits in the adult brain, Academic Exchange for Japan-Korea Medical Students, Keio University, Tokyo, Japan, 2014Jul

2013 (Invitation only)

Sakaguchi M., Selective and precise temporal ablation of adult born neurons in the hippocampus reveals their function in memory, department seminar, New York University, Neuroscience Institute, New York, USA, 2013Nov

坂口昌徳, 「IISにおける, 光遺伝学を用いた, 睡眠とその記憶における機能の研究について」, シンポジスト, 日本睡眠学会第38回定期学術集会, 秋田, 2013年6月

Sakaguchi M., Neural stem cells, adult neurogenesis and memory: an overview of my past work and vision in IIS, Symposium, Epocal Tsukuba, Tsukuba, Japan, 2013Mar

Sakaguchi M., Function of adult neurogenesis in visual discrimination memory, Symposium on Behavioral Molecular Neuroscience, Symposium, Yurakucho International Forum, Tokyo, Japan, 2013Feb

ADDITIONAL SKILLS:

Japanese medical license holder (2001Jun, license#422466)

Certified FACS operator (Becton Dickinson)

Languages: English, Chinese (HSK-level4, ID# H41402011069)