

CURRICULUM VITAE

Takeshi Imai, Ph.D

Professor, Graduate School of Medical Sciences,
Kyushu University
3-1-1, Maidashi, Higashi-ku, Fukuoka, 812-8582, Japan
e-mail: imai.takeshi.457@m.kyushu-u.ac.jp
URL: <https://www.lab.med.kyushu-u.ac.jp/dn/>



Positions:

2017-present Professor, Graduate School of Medical Sciences, Kyushu University
2010-2017 Adjunct Associate Professor, Graduate School of Biostudies,
Kyoto University
2010-2018 Team Leader, RIKEN Center for Developmental Biology (CDB)
2009-2015 PRESTO researcher, Japan Science and Technology Agency (JST)
2006-2009 Postdoctoral fellow, The University of Tokyo
(Supervisor: Hitoshi Sakano)

Education:

2001-2006 Ph.D., Biophysics and Biochemistry, The University of Tokyo
(Supervisor: Hitoshi Sakano)
2001 B.Sc., Biophysics and Biochemistry, The University of Tokyo

Awards and honors:

2015 MEXT Young Scientists' Prize
2007 GE Healthcare & Science Prize for Young Life Scientists,
Regional Prize Winner (Science/AAAS);
2007 Research Promotion Award, Graduate School of Science,
The University of Tokyo
2003-2006 Predoctoral fellow (DC1), Japan Society for the Promotion of Science

Selected publications:

Fujimoto S, Leiwe MN, Aihara S, Sakaguchi R, Muroyama Y, Kobayakawa R,
Kobayakawa K, Saito T, Imai T. Activity-dependent lateral inhibition signals for
synaptic competition. *bioRxiv* 625616.
Leiwe MN, Fujimoto S, Baba T, Moriyasu D, Saha B, Sakaguchi R, Inagaki S, Imai T.
Automated neuronal reconstruction with super-multicolour fluorescence imaging.
bioRxiv 10.20.512984.
Aihara S, Fujimoto S, Sakaguchi R, Imai T. (2021) BMPR-2 gates activity-dependent
stabilization of primary dendrites during mitral cell remodeling. *Cell Rep* 35, 109276.
Inagaki S, Iwata R, Iwamoto M, Imai T. (2020) Widespread Inhibition, Antagonism,
and Synergy in Mouse Olfactory Sensory Neurons In Vivo. *Cell Rep* 31, 107814.
Sakaguchi R, Leiwe MN, Imai T. (2018) Bright multicolor labeling of neuronal circuits
with fluorescent proteins and chemical tags. *eLife* 7, e40350.
Iwata R, Kiyonari H, Imai T. (2017) Mechanosensory-Based Phase Coding of Odor
Identity in the Olfactory Bulb. *Neuron* 96, 1139-1152.

Murai A, Iwata R, Fujimoto S, Aihara S, Tsuboi A, Muroyama Y, Saito T, Nishizaki K, Imai T. (2016) Distorted coarse axon targeting and reduced dendrite connectivity underlie dysosmia after olfactory axon injury. *eNeuro* 3, e0242-16.

Ke MT, Nakai Y, Fujimoto S, Takayama R, Yoshida S, Kitajima TS, Sato M, Imai T. (2016) Super-resolution mapping of neuronal circuitry with an index optimized clearing agent. *Cell Rep* 14, 2718-2732.

Imai T (2014) Construction of functional neuronal circuitry in the olfactory bulb. *Semin Cell Dev Biol* 35, 180-188. (Review)

Nakashima A*, Takeuchi H*, Imai T*, Saito H, Kiyonari H, Abe T, Chen M, Weinstein LS, Ron Yu C, Storm DR, Nishizumi H, Sakano H. (2013) Agonist-Independent GPCR Activity Regulates Anterior-Posterior Targeting of Olfactory Sensory Neurons. *Cell* 154:1314-1325.

Ke MT, Fujimoto S, & Imai T. (2013) SeeDB: a simple and morphology-preserving optical clearing agent for neuronal circuit reconstruction. *Nat Neurosci* 16, 1154-1161.

Imai T, Yamazaki T, Kobayakawa R, Kobayakawa K, Abe T, Suzuki M, Sakano H. (2009) Pre-Target Axon Sorting Establishes the Neural Map Topography. *Science*. 325, 585-60.

Imai T, Suzuki M, Sakano H. (2006) Odorant receptor-derived cAMP signals direct axonal targeting. *Science*. 314, 657-61.

Full publication list:

<https://scholar.google.com/citations?sortby=pubdate&hl=en&user=VPwm0QUAAAAJ>

Teaching (regular):

2017- Faculty lecture on Physiology, School of Medicine, Kyushu University
2017- Faculty lecture on Neuroscience, Graduate School of Medical Sciences, Kyushu University

Professional Memberships:

Society for Neuroscience
The Japan Neuroscience Society
Japanese Society of Developmental Biologists
The Physiological Society of Japan

Ad hoc referee for journals:

Biomicrofluidics, Cellular and Molecular Life Sciences, Cell Reports, Cell Reports Methods, Cell Research, Cerebral Cortex, eNeuro, eLIFE, FEBS Openbio, European Journal of Neuroscience, Frontiers in Ecology and Evolution, Frontiers in Molecular Neuroscience, iScience, PLOS ONE, Nature Biotechnology, Nature Biomedical Engineering, Nature Communications, Nature Methods, Nature Neuroscience, Nature Protocols, Neural Plasticity, Neuroscience Research, Proceedings of the Royal Society B, Science Advances, Scientific Reports, STAR Methods, Zoological letters