

CURRICULUM VITAE

Hokto Kazama, Ph.D.

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Laboratory for Circuit Mechanisms of Sensory Perception
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Appointments

2006/04-05	Postdoctoral research fellow, Department of Physics, The University of Tokyo, Tokyo, Japan
2006/05-2010/05	Research Fellow in Neurobiology, Department of Neurobiology, Harvard Medical School
2010/06-2018/03	Laboratory Head, Laboratory for Circuit Mechanisms of Sensory Perception, RIKEN Brain Science Institute
2011/04-present	Visiting associate professor, Department of Life Sciences, Graduate School of Arts and Sciences, The University of Tokyo
2018/04-present	Laboratory Head, Laboratory for Circuit Mechanisms of Sensory Perception, RIKEN Center for Brain Science

Education

2001 B.S.	Department of Physics, School of Science, The University of Tokyo, Tokyo, Japan
2003 M.S.	Department of Physics, Graduate School of Science, The University of Tokyo, Tokyo, Japan
2006 Ph.D.	Department of Physics, Graduate School of Science, The University of Tokyo, Tokyo, Japan

Awards

2003-2006	Research Fellowship of the Japan Society for the Promotion of Science for Young Scientists (DC1)
2006-2007	Research fellow of the Uehara Memorial Foundation
2008-2010	National Research Service Award (NIH, F32DC009538)
2009	Keystone Symposia Education Fund Scholarship
2017	Ando Momofuku Award

External Grants

2011-2013	Grants-in-Aid for Scientific Research (23680044)
2013-2014	Grants-in-Aid for Scientific Research (25115732)
2015-2017	Grants-in-Aid for Foreign JSPS fellow (15F15384)
2018-2019	Grants-in-Aid for Scientific Research (18K19502)
2018-2020	Grants-in-Aid for Scientific Research (18H02532)
2019-2020	Grants-in-Aid for Foreign JSPS fellow (19F19718)

Teaching and Community service

2003-2004	Teaching assistant, The University of Tokyo, Biophysics
2009	Lecture on English presentation at the National Institute of Genetics
2010-present	Lecture on introductory brain science at the University of Tokyo
2011	Lecture on neural circuit at ASCONE
2011-present	Lecture on learning and memory at RIKEN BSI
2014	Lecture on brain science in the World Brain Week program
2014	Lecture on globalization in MEXT super global high school program
2015	Lecture at meeting for Society for young researchers in neuroscience
2015-present	Lecture on biology at the University of Chiba
2015	Lecture at RIKEN Brain Science Institute Summer School
2016	Lecture at Hibiya High School
2016	Lecture at International Brain Bee local competition
2016	Terumo Foundation Web Material on the neurobiology of smell
2016	Lecture at RIKEN corporate seminar
2017	Lecture at Tokyo University of Pharmacy and Life Sciences
2017	Lecture at Tsukuba High School

Publications

Ando T, Sekine S, Inagaki S, Misaki K, Badel L, Moriya H, Sami MM, Chihara T, Kazama H, Yonemura S, Hayashi S. (2019) Nanopore formation in the cuticle of the insect olfactory sensillum. **Current Biology** 29, 1512-1520.

Fujisawa S and Kazama H. (2019). Circuits and neural dynamics underlying behavior. **Neuroscience Research** 140, 1-2.

Mercier D, Tsuchimoto Y, Ohta K, Kazama H. (2018). Olfactory landmark-based communication in interacting *Drosophila*. **Current Biology** 28, 2624-2631.

Takagi S, Cocanougher BT, Niki S, Miyamoto D, Kohsaka H, Kazama H, Fetter RD, Truman JW, Zlatic M, Cardona A, Nose A (2017). Divergent connectivity of homologous command-like neurons mediates segment-specific touch responses in *Drosophila*. **Neuron** 96, 1373-1387.

Shiozaki HM and Kazama H. (2017). Parallel encoding of recent visual experience and self-motion during navigation in *Drosophila*. **Nature Neuroscience** 20, 1395-1403.

Inada K, Tsuchimoto Y, Kazama H. (2017). Origins of cell-type-specific olfactory processing in the *Drosophila* mushroom body circuit. **Neuron** 95, 357-367.

Badel L, Ohta K, Tsuchimoto Y, Kazama H. (2016). Decoding of context-dependent olfactory behavior in *Drosophila*. **Neuron** 91, 155-167.

Kazama, H. (2015). Systems neuroscience in *Drosophila*: Conceptual and technical advantages. **Neuroscience** 296, 3-14.

Oizumi M, Satoh R, Kazama H, Okada M. (2012). Functional differences between global pre- and postsynaptic inhibition in the *Drosophila* olfactory circuit. **Frontiers in Computational Neuroscience** 6:14.

- Kazama H, Yaksi E, Wilson RI. (2011). Cell death triggers olfactory circuit plasticity via glial signaling in *Drosophila*. **The Journal of Neuroscience** 31, 7619-7630.
- Satoh R, Oizumi M, Kazama H, Okada M. (2010). Mechanisms of maximum information preservation in the *Drosophila* antennal lobe. **PLoS One** 5 (5), e10644.
- Kazama H and Wilson RI. (2009). Origins of correlated activity in an olfactory circuit. **Nature Neuroscience** 12, 1136-1144.
- Kazama H and Wilson RI. (2008). Homeostatic matching and nonlinear amplification at identified central synapses. **Neuron** 58, 401-413.
- Kazama H, Ichikawa A, Kohsaka H, Morimoto-Tanifuji T, Nose A. (2008). Innervation and activity dependent dynamics of postsynaptic oxidative metabolism. **Neuroscience** 152, 40-49.
- Kazama H, Nose A, Morimoto-Tanifuji T. (2007). Synaptic components necessary for retrograde signaling triggered by calcium/calmodulin-dependent protein kinase II during synaptogenesis. **Neuroscience** 145, 1007-1015.
- Nakayama H, Kazama H, Nose A, Morimoto-Tanifuji T. (2006). Activity-dependent regulation of synaptic size in *Drosophila* neuromuscular junctions. **The Journal of Neurobiology** 66, 929-939.
- Morimoto-Tanifuji T, Kazama H, Nose A. (2004). Developmental stage-dependent modulation of synapses by postsynaptic expression of activated calcium/calmodulin-dependent protein kinase II. **Neuroscience** 128, 797-806.
- Kazama H, Morimoto-Tanifuji T, Nose A. (2003). Postsynaptic activation of calcium/calmodulin-dependent protein kinase II promotes coordinated pre- and postsynaptic maturation of *Drosophila* neuromuscular junctions. **Neuroscience** 117, 615-625.

Invited Talks

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| 2019 | Annual meeting of the Molecular Biology Society of Japan, Fukuoka (<i>forthcoming</i>) |
| 2019 | Naito Conference on Integrated Sensory Sciences, Sapporo (<i>forthcoming</i>) |
| 2019 | Annual meeting of the Japan neuroscience society, Niigata (<i>forthcoming</i>) |
| 2019 | The University of Tokyo Medical School, Tokyo |
| 2019 | Annual meeting of the Japanese society of developmental biologists, Osaka |
| 2018 | UCSF, San Francisco, CA |
| 2018 | Annual meeting of the Japan neuroscience society, Kobe (organizer) |
| 2018 | International Workshop on olfaction, OIST, Okinawa, (organizer) |
| 2018 | MIT Colloquium, Cambridge, MA |
| 2018 | New York University, NY |
| 2018 | Columbia Workshop on Brain Circuits, Columbia University, NY |
| 2018 | The Japan Society of Applied Physics, Tokyo |
| 2018 | Tokyo Medical and Dental University Symposium, Tokyo |
| 2017 | Hokkaido University, Sapporo |
| 2017 | Consortium of Biological Sciences, Kobe |
| 2017 | International Symposium on whole-brain/organ imaging, Saitama Univ, Saitama |
| 2017 | International Symposium on Taste and Olfactory Perception, Kyushu Univ, Fukuoka |
| 2017 | Research Meeting on Emotion, NIPS, Okazaki |
| 2017 | International Workshop on Neuroscience, Nagoya University, Nagoya |

2017 Kao Corporation Research Institute, Tochigi
2017 Tokyo University of Pharmacy and Life Sciences, Hachioji
2017 NICT-NSF Workshop on Computational Neuroscience, CiNet, Osaka
2016 University of Washington, Seattle, WA
2016 Salk Institute, La Jolla, CA
2016 Interdisciplinary Theoretical Science Colloquium, RIKEN, Wako
2016 International symposium on olfaction and taste (ISOT), satellite, Tokyo
2015 Annual meeting of the Japan neuroscience society, Kobe (organizer)
2015 Chiba University, Chiba
2015 Meeting for Society for young researchers on neuroscience, Kanagawa
2014 National Institute of Neuroscience, Tokyo
2013 Tokyo Metropolitan Institute of Medical Science, Tokyo
2013 Mesoscopic neurocircuitry, Atami
2013 Mechanisms of Brain and Mind Workshop, Rusutsu
2012 Annual meeting of the Japan neuroscience society, Nagoya
2012 Comprehensive Brain Science Network Workshop on olfaction, Tokyo
2011 Osaka University, Osaka
2011 Toyama University, Toyama
2011 Autumn School for Computational Neuroscience, Suwa
2011 Annual meeting of the Zoological Society of Japan, Asahikawa
2011 Comprehensive Brain Science Network workshop, Kobe
2011 Synapse meeting at National Institute for Physiological Sciences, Okazaki
2010 International Symposium on Taste and Olfactory Perception, Fukuoka
2010 The University of Tokyo, Tokyo
2010 Annual meeting of the Japan neuroscience society, Kobe
2010 University of Massachusetts Medical School, Worcester, MA
2009 Harvard University, Cambridge, MA
2009 National Institute of Genetics, Mishima
2009 RIKEN Brain Science Institute, Wako
2009 Tokyo University of Pharmacy and Life Sciences, Hachioji
2008 National Institute of Genetics, Mishima
2008 The University of Tokyo, Tokyo