

CURRICULUM VITAE
January 2013

YOSHIHIRO YOSHIHARA, PH.D.

Senior Team Leader
Laboratory for Neurobiology of Synapse
RIKEN Brain Science Institute

Office Address:

Laboratory for Neurobiology of Synapse, RIKEN Brain Science Institute
2-1 Hirosawa, Wako, Saitama 351-0198, Japan
E-mail: yoshihara@brain.riken.jp Tel. +81-48-467-1699 Fax +81-48-467-2306



Education/Training:

1980–1984 Faculty of Pharmaceutical Sciences, Kyoto University
1984–1989 Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Kyoto University
Ph.D., May 1989 Thesis Supervisor: Masamichi Satoh

Positions and Employment:

1989-1991 Postdoctoral Fellow, Department of Neuroscience, Osaka Bioscience Institute, Osaka, Japan
1992 Assistant Professor, Department of Biochemistry, Osaka Medical College, Osaka, Japan
1992-1996 Lecturer, Department of Biochemistry, Osaka Medical College, Osaka, Japan
1996-1998 Associate Professor, Department of Biochemistry, Osaka Medical College, Osaka, Japan
1998-2009 Team Leader, Laboratory for Neurobiology of Synapse, RIKEN Brain Science Institute, Wako, Japan
2009- Senior Team Leader, Laboratory for Neurobiology of Synapse, RIKEN Brain Science Institute, Wako, Japan

Other Experience and Professional Memberships:

Editorial Boards: Chemical Senses (2005-)
Frontiers in Synaptic Neuroscience (2008-)
Neural Systems and Circuits (2010-)

Professional Societies: Society for Neuroscience
The Japan Neuroscience Society
The Molecular Biology Society of Japan
The Japanese Biochemical Society
The Japanese Association for the Study of Taste and Smell

Honors:

2006 Young Investigator Award, The Japanese Association for the Study of Taste and Smell

Publications:

Peer-Reviewed Articles:

- 1 Braubach OR, Miyasaka N, Koide T, [Yoshihara Y](#), Croll RP, Fine A. Experience-dependent vs. experience-independent postembryonic development of distinct groups of zebrafish olfactory glomeruli. **Journal of Neuroscience** (in press)
- 2 Tachikawa KS, [Yoshihara Y](#), Kuroda KO. Behavioral transition from attack to parenting in male mice: a crucial role of the vomeronasal system. **Journal of Neuroscience** (in press)
- 3 Furutani Y, Kawasaki M, Matsuno H, Mitsui S, Mori K, [Yoshihara Y](#). Vitronectin induces phosphorylation of ezrin/radixin/moesin actin-binding proteins through binding to its novel neuronal receptor telencephalin. **Journal of Biological Chemistry** 287: 39041-39049 (2012)
- 4 Mizuguchi R, Naritsuka H, Mori K, Mao CA, Klein WH, [Yoshihara Y](#). Tbr2 deficiency in mitral and tufted cells disrupts excitatory-inhibitory balance of neural circuitry in the mouse olfactory bulb. **Journal of Neuroscience** 32: 8831-8844 (2012)
- 5 Walling SG, Brown RAM, Miyasaka N, [Yoshihara Y](#), Harley CW. Selective WGA uptake in the hippocampus from the locus coeruleus of DBH-WGA transgenic mice. **Frontiers in Behavioral Neuroscience** 6: 23 (2012)
- 6 Mori Y, Matsui T, Furutani Y, [Yoshihara Y](#), Fukuda M. Small GTPase Rab17 regulates the dendritic morphogenesis and postsynaptic development of hippocampal neurons. **Journal of Biological Chemistry** 287: 8963-8973 (2012)
- 7 Yoshihara S, Takahashi H, Nishimura N, Naritsuka H, Shirao T, Hirai H, [Yoshihara Y](#), Mori K, Stern P, Tsuboi A. 5T4 glycoprotein regulates the sensory input-dependent development of a specific subtype of newborn interneurons in the mouse olfactory bulb. **Journal of Neuroscience** 32: 2217-2226 (2012)
- 8 Langhauser M, Ustinova J, Rivera-Milla E, Ivannikov D, Seidl C, Slomka C, Finne J, [Yoshihara Y](#), Bastmeyer M, Bontrop J. Ncam1a and Ncam1b – two carriers of polysialic acid with different functions in the developing zebrafish nervous system. **Glycobiology** 22: 196-209 (2012)
- 9 Matsumoto I, Ohmoto M, Narukawa M, [Yoshihara Y](#), Abe K. Skn-1a (Pou2f3) specifies taste receptor cell lineage. **Nature Neuroscience** 14: 685-687 (2011)
- 10 Mitsui S, Igarashi KM, Mori K, [Yoshihara Y](#). Genetic visualization of the secondary olfactory pathway in Tbx21 transgenic mice. **Neural Systems and Circuits** 1: 5 (2011)
- 11 Ohmoto M, Maeda N, Abe K, [Yoshihara Y](#), Matsumoto I. Genetic tracing of bitter taste pathway in t2r5-WGA transgenic mice. **Biochemical and Biophysical Research Communications** 400: 734-738 (2010)
- 12 Haga S, Hattori T, Sato T, Sato K, Matsuda S, Kobayakawa R, Sakano H, [Yoshihara Y](#), Kikusui T, Touhara K. A male mouse pheromone ESP1 enhances female sexual behaviour via a select vomeronasal receptor. **Nature** 466: 118-122 (2010)
- 13 Takeuchi H, Inokuchi K, Aoki M, Suto F, Tsuboi A, Matsuda I, Suzuki M, Aiba A, Serizawa S, [Yoshihara Y](#), Fujisawa H, Sakano H. Sequential arrival and graded secretion of Sema3F by olfactory neuron axons specify map topography at the bulb. **Cell** 141: 1056-1067 (2010)
- 14 Koide T, Miyasaka N, Morimoto K, Asakawa K, Urasaki A, Kawakami K, [Yoshihara Y](#). Olfactory neural circuitry for attraction to amino acids revealed by transposon-mediated gene trap approach in zebrafish. **Proceedings of National Academy of Sciences USA** 106: 9884-9889 (2009)
- 15 Miyasaka N, Morimoto K, Tsubokawa T, Higashijima S, Okamoto H, [Yoshihara Y](#). From the olfactory bulb to higher brain centers: genetic visualization of secondary olfactory pathways in zebrafish. **Journal of Neuroscience** 29: 4756-4767 (2009)
- 16 Ohmoto M, Matsumoto I, Yasuoka A, [Yoshihara Y](#), Abe K. Genetic tracing of the gustatory and trigeminal neural pathways originating from T1R3-expressing chemosensory cells. **Molecular and Cellular Neuroscience** 38: 505-517 (2008)

- 17 Kaneko-Goto T, Yoshihara S, Miyazaki H, [Yoshihara Y](#). BIG-2 mediates olfactory axon convergence to target glomeruli. **Neuron** 57: 834-846 (2008)
- 18 Ichinohe N, Knight A, Ogawa M, Ohshima T, Mikoshiba K, [Yoshihara Y](#), Terashima T, Rockland KS. Unusual patch-matrix organization in the retrosplenial cortex of the reeler mouse and Shaking Rat Kawasaki. **Cerebral Cortex** 18: 1125-1138 (2008)
- 19 Furutani Y, Matsuno H, Kawasaki M, Sasaki T, Mori K, [Yoshihara Y](#). Interaction between telencephalin and ERM family proteins mediates dendritic filopodia formation. **Journal of Neuroscience** 27: 8866-8876 (2007)
- 20 Sato Y, Miyasaka N, [Yoshihara Y](#). Hierarchical regulation of odorant receptor gene choice and subsequent axonal projection of olfactory sensory neurons in zebrafish. **Journal of Neuroscience** 27: 1606-1615 (2007)
- 21 Miyasaka N, Knaut H, [Yoshihara Y](#). Cxcl12/Cxcr4 chemokine signaling is required for placode assembly and sensory axon pathfinding in the zebrafish olfactory system. **Development** 134: 2459-2468 (2007)
- 22 Mitsui S, Saito M, Mori K, [Yoshihara Y](#). A transcriptional enhancer that directs transgene expression in the telencephalic neurons. **Cerebral Cortex** 17: 522-530 (2007)
- 23 Oka Y, Katada S, Omura M, Suwa M, [Yoshihara Y](#), Touhara K. Odorant receptor map in the mouse olfactory bulb: in vivo sensitivity and specificity of receptor-defined glomeruli. **Neuron** 52: 857-869 (2006)
- 24 Hirata T, Nakazawa M, Yoshihara S, Kitamura K, [Yoshihara Y](#), Hibi M. Zinc finger gene Fez is required for development of olfactory system in mouse. **Development** 133: 1433-1443 (2006)
- 25 Matsuno H, Okabe S, Mishina M, Yanagida T, Mori K, [Yoshihara Y](#). Telencephalin slows spine maturation. **Journal of Neuroscience** 26: 1776-1786 (2006)
- 26 Sato Y, Miyasaka N, [Yoshihara Y](#). Mutually exclusive glomerular innervation by two distinct types of olfactory sensory neurons revealed in transgenic zebrafish. **Journal of Neuroscience** 25: 4889-4897 (2005)
- 27 Miyasaka N, Sato Y, Yeo SY, Hutson LD, Chien CB, Okamoto H, [Yoshihara Y](#). Robo2 is required for establishment of a precise glomerular map in the zebrafish olfactory system. **Development** 132: 1283-1293 (2005)
- 28 Mitsui S, Saito M, Hayashi K, Mori K, [Yoshihara Y](#). A novel phenylalanine-based targeting signal directs telencephalin to neuronal dendrites. **Journal of Neuroscience** 25: 1122-1131 (2005)
- 29 Yoshihara S, Omichi K, Yanazawa M, Kitamura K, [Yoshihara Y](#). *Arx* homeobox gene is essential for development of mouse olfactory system. **Development** 132: 751-762 (2005)
- 30 Inaki K, Nishimura S, Nakashiba T, Itohara S, [Yoshihara Y](#). Laminar organization of the developing lateral olfactory tract revealed by differential expression of cell recognition molecules. **Journal of Comparative Neurology** 479: 243-256 (2004)
- 31 Nagayama S, Takahashi YK, [Yoshihara Y](#), Mori K. Mitral and tufted cells differ in the decoding manner of odor maps in the rat olfactory bulb. **Journal of Neurophysiology** 91: 2532-2540 (2004)
- 32 Hasegawa S, Yamaguchi M, Nagao H, [Yoshihara Y](#), Mori K. Activated natural killer cells adhere to cultured hippocampal neurons and affect the dendritic morphology. **Journal of Neuroimmunology** 151: 126-136 (2004)
- 33 Inoue M, Nishimura S, Hori G, Nakahara H, Saito M, [Yoshihara Y](#), Amari S. Improved parameter estimation for variance-stabilizing transformation of gene-expression microarray data. **Journal of Bioinformatics and Computational Biology** 2: 669-679 (2004)
- 34 Nishiyori A, Hanno H, Saito M, [Yoshihara Y](#). Aberrant transcription of unrearranged T cell receptor b gene in mouse brain. **Journal of Comparative Neurology** 469: 214-226 (2004)
- 35 Sapir T, Geiman RJ, Wang Z, Belasquez T, Mitsui S, [Yoshihara Y](#), Frank E, Alvarez FJ, Goulding M. *Pax6* and *En1* regulate distinct aspects of Renshaw cell development. **Journal of Neuroscience** 24: 1255-1264 (2004)
- 36 Serizawa S, Miyamichi K, Nakatani H, Suzuki M, Saito M, [Yoshihara Y](#), Sakano H. Negative feedback regulation ensures the one receptor – one olfactory sensory neuron rule in mouse. **Science** 302: 2088-2094 (2003)

- 37 Hanno Y, Nakahira M, Jishage K, Noda T, [Yoshihara Y](#). Tracking mouse visual pathways with WGA transgene. **European Journal of Neuroscience** 18: 2910-2914 (2003)
- 38 Ichinohe N, [Yoshihara Y](#), Hashikawa T, Rockland KS. Developmental study of dendritic bundles in layer 1 of the rat granular retrosplenial cortex with special reference to a cell adhesion molecule, OCAM. **European Journal of Neuroscience** 18: 1764-1774 (2003)
- 39 Treloar HB, Gabeau D, [Yoshihara Y](#), Mori K, Greer CA. Inverse expression of OCAM in a subset of olfactory axons and a subset of mitral/tufted cells in the developing olfactory bulb. **Journal of Comparative Neurology** 458: 389-403 (2003)
- 40 Kinoshita N, Mizuno T, [Yoshihara Y](#). Adenovirus-mediated WGA gene delivery for transsynaptic labeling of mouse olfactory pathways. **Chemical Senses** 27: 215-223 (2002)
- 41 Mizuno T, Kawasaki M, Nakahira M, Kagamiyama H, Kikuchi Y, Okamoto H, Mori K, [Yoshihara Y](#). Molecular diversity in zebrafish NCAM family: three members with different VASE usage and distinct localization. **Molecular and Cellular Neuroscience** 18: 119-130 (2001)
- 42 Nagao H, [Yoshihara Y](#), Mitsui S, Fujisawa H, Mori K. Two mirror-image sensory maps with domain organization in the mouse main olfactory bulb. **NeuroReport** 11: 3023-3027 (2000)
- 43 Tian L, Nyman H, Kilgannon P, [Yoshihara Y](#), Mori K, Andersson LC, Rauvala H, Gallatin WM, Gahmberg CG. Intercellular adhesion molecule-5 induces dendritic outgrowth by homophilic adhesion. **Journal of Cell Biology** 150: 243-252 (2000)
- 44 Tian L, Kilgannon P, [Yoshihara Y](#), Mori K, Gallatin WM, Carpen O, Gahmberg CG. Binding of T lymphocytes to hippocampal neurons through ICAM-5 (telencephalin) and characterization of its interaction with the leukocyte integrin CD11a/CD18. **European Journal of Immunology** 30: 810-818 (2000)
- 45 Tabuchi K, Sawamoto K, Suzuki E, Ozaki K, Sone M, Hama C, Tanifuji-Morimoto T, Yuasa Y, [Yoshihara Y](#), Nose A, Okano H. The *GAL4/UAS-WGA* system as a powerful tool for tracing *Drosophila* transsynaptic neural pathways. **Journal of Neuroscience Research** 59: 94-99 (2000)
- 46 Mizuno T, [Yoshihara Y](#), Kagamiyama H, Ohsawa K, Imai Y, Kohsaka S, Mori K. Neuronal adhesion molecule telencephalin induces rapid cell spreading of microglia. **Brain Research** 849: 58-66 (1999)
- 47 [Yoshihara Y](#), Mizuno T, Nakahira M, Kawasaki M, Watanabe Y, Kagamiyama H, Jishage K, Ueda O, Suzuki H, Tabuchi K, Sawamoto K, Okano H, Noda T, Mori K. A genetic approach to visualization of multisynaptic neural pathways using plant lectin transgene. **Neuron** 22: 33-41 (1999)
- 48 Nakai Y, [Yoshihara Y](#), Hayashi H, Kagamiyama H. cDNA cloning and characterization of mouse *nifS*-like protein, mNfs1: mitochondrial localization of eukaryotic NifS-like proteins. **FEBS Letters** 433: 143-148 (1998)
- 49 Okuda-Ashitaka E, Minami T, Tachibana S, [Yoshihara Y](#), Nishiuchi Y, Kimura T, Ito S. Nocistatin, a peptide blocking nociceptin action in pain transmission. **Nature** 392: 286-289 (1998)
- 50 Sakurai E, Hashikawa T, [Yoshihara Y](#), Kaneko S, Satoh M, Mori K. Involvement of dendritic adhesion molecule telencephalin in long-term potentiation. **NeuroReport** 9: 881-886 (1998)
- 51 Benson DL, [Yoshihara Y](#), Mori K. Polarization and cell-type specific localization of telencephalin, an ICAM-related protein, in hippocampal neurons. **Journal of Neuroscience Research** 52: 43-53 (1998)
- 52 Tamada A, [Yoshihara Y](#), Mori K. Telencephalin, a dendritic adhesion molecule, promotes neurite outgrowth. **Neuroscience Letters** 240: 163-166 (1998)
- 53 von Campenhausen H, [Yoshihara Y](#), Mori K. OCAM reveals segregated mitral/tufted cell pathways in developing accessory olfactory bulb. **NeuroReport** 8: 2607-2612 (1997)
- 54 Sugino H, [Yoshihara Y](#), Copeland NJ, Gilbert DL, Jenkins NA, Mori K. Genomic organization and chromosomal localization of the mouse telencephalin gene, a neuronal member of the ICAM family. **Genomics** 43: 209-215 (1997)

- 55 [Yoshihara Y](#), Kawasaki M, Tamada A, Fujita H, Hayashi H, Kagamiyama H, Mori K. OCAM: a new member of the NCAM family related to zone-to-zone projection of olfactory and vomeronasal axons. **Journal of Neuroscience** 17: 5830-5842 (1997)
- 56 Hino H, Mori K, [Yoshihara Y](#), Iseki E, Akiyama H, Nishimura T, Ikeda K, Kosaka K. Reduction of telencephalin immunoreactivity in the brain of patients with Alzheimer's disease. **Brain Research** 753: 353-357 (1997)
- 57 Fujimori KE, Takauji R, [Yoshihara Y](#), Tamada A, Mori K, Tamamaki N. A procedure for in situ hybridization combined with retrograde labeling of neurons: application to the study of cell adhesion molecule expression in DiI-labeled rat pyramidal neurons. **Journal of Histochemistry and Cytochemistry** 45: 455-459 (1997)
- 58 Tian L, [Yoshihara Y](#), Mizuno T, Mori K, Gahmberg CG. The neuronal glycoprotein, telencephalin, is a cellular ligand for CD11a/CD18 leukocyte integrin. **Journal of Immunology** 158: 928-936 (1997)
- 59 Mizuno T, [Yoshihara Y](#), Inazawa J, Kagamiyama H, Mori K. cDNA cloning and chromosomal localization of the human telencephalin and its distinctive interaction with lymphocyte function-associated antigen-1. **Journal of Biological Chemistry** 272: 1156-1163 (1997)
- 60 [Yoshihara Y](#), Kawasaki M, Tamada A, Nagata S, Kagamiyama H, Mori K. Overlapping and differential expression of BIG-2, BIG-1, TAG-1, and F3: four members of an axon-associated cell adhesion molecule subgroup of the immunoglobulin superfamily. **Journal of Neurobiology** 28: 51-69 (1995)
- 61 [Yoshihara Y](#), Kawasaki M, Tani A, Nagata S, Kagamiyama H, Mori K. BIG-1: a new TAG-1/F3-related member of the immunoglobulin superfamily with neurite outgrowth-promoting activity. **Neuron** 13: 415-426 (1994)
- 62 [Yoshihara Y](#), Oka S, Nemoto Y, Watanabe Y, Nagata S, Kagamiyama H, Mori K. An ICAM-related neuronal glycoprotein, telencephalin, with brain segment-specific expression. **Neuron** 12: 541-553 (1994)
- 63 Koshimoto H, Katoh K, [Yoshihara Y](#), Nemoto Y, Mori K. Immunohistochemical demonstration of embryonic expression of an odor receptor protein and its zonal distribution in the rat olfactory epithelium. **Neuroscience Letters** 169: 73-76 (1994)
- 64 Katoh K, [Yoshihara Y](#), Mori K. Development of glomerular structure in rabbit olfactory bulb: three-dimensional reconstitution under the confocal laser scanning microscopy. **NeuroImage** 1: 199-207 (1994)
- 65 Nemoto Y, Ikeda J, Katoh K, Koshimoto H, [Yoshihara Y](#), Mori K. R2D5 antigen: a calcium-binding phosphoprotein predominantly expressed in olfactory receptor neurons. **Journal of Cell Biology** 123: 963-976 (1993)
- 66 Kawasaki M, [Yoshihara Y](#), Yamaji M, Watanabe Y. Expression of prostaglandin endoperoxide synthase in rat brain. **Molecular Brain Research** 19: 39-46 (1993)
- 67 [Yoshihara Y](#), Katoh K, Mori K. Odor stimulation causes disappearance of R4B12 epitope on axonal surface molecule of olfactory sensory neurons. **Neuroscience** 53:101-110 (1993)
- 68 Koshimoto H, Katoh K, [Yoshihara Y](#), Mori K. Distribution of putative odour receptor proteins in olfactory epithelium. **NeuroReport** 3: 521-523 (1992)
- 69 [Yoshihara Y](#), Yamaji M, Kawasaki M, Watanabe Y. Ontogeny of cytosolic phospholipase A activity in rat brain. **Biochemical and Biophysical Research Communications** 185: 350-3 (1992)
- 70 Tani A, [Yoshihara Y](#), Mori K. Increase in cytoplasmic free Ca²⁺ elicited by noradrenalin and serotonin in cultured local interneurons of mouse olfactory bulb. **Neuroscience** 49: 193-199 (1992)
- 71 [Yoshihara Y](#), Oka S, Watanabe Y, Mori K. Spatially and developmentally regulated expression of HNK-1 carbohydrate antigen on a novel phosphatidylinositol-anchored glycoprotein in rat brain. **Journal of Cell Biology** 115: 731-744 (1991)
- 72 Satoh M, Ueda H, Tamura S, [Yoshihara Y](#), Fukushima N. Inositol 1,4,5-trisphosphate activates Ca²⁺ channels in the plasma membranes of rat brain nerve terminals. **Advances in Experimental Medicine and Biology** 287: 97-100 (1991)
- 73 [Yoshihara Y](#), Watanabe Y. Translocation of phospholipase A2 from cytosol to membrane in rat brain induced by calcium ions. **Biochemical and Biophysical Research Communications** 170: 484-490 (1990)

- 74 [Yoshihara Y](#), Ueda H, Fujii N, Shide A, Yajima H, Satoh M. Purification of a novel type of calcium-activated neutral protease from rat brain – possible involvement in production of the neuropeptide, kyotorphin, from calpastatin fragments -. **Journal of Biological Chemistry** 265: 5809-5815 (1990)
- 75 Ueda H, [Yoshihara Y](#), Misawa H, Fukushima N, Katada T, Ui M, Takagi H, Satoh M. The kyotorphin (tyrosine-arginine) receptor and a selective reconstitution with purified Gi, measured with GTPase and phospholipase C assays. **Journal of Biological Chemistry** 264: 3732-3741 (1989)
- 76 [Yoshihara Y](#), Ueda H, Imajoh S, Takagi H, Satoh M. Calcium-activated neutral protease (CANP), a putative processing enzyme of the neuropeptide, kyotorphin, in the brain. **Biochemical and Biophysical Research Communications** 155: 546-553 (1988)
- 77 Ueda H, Fukushima N, [Yoshihara Y](#), H. Takagi. A Met-enkephalin releaser, kyotorphin-induced release of plasma membrane-bound Ca^{2+} from rat brain synaptosomes. **Brain Research** 419: 197-200 (1987)
- 78 Kitabatake S, Tsurutani R, Nakajima H, Tomita K, [Yoshihara Y](#), Ueda H, Takagi H, Imahori K. A novel method for the synthesis of kyotorphin, Tyr-Arg, and 3H -Tyr-Arg, catalyzed by tyrosyl-tRNA synthetase from *Bacillus stearothermophilus*. **Pharmaceutical Research** 4: 154-157 (1987)
- 79 Ueda H, [Yoshihara Y](#), Fukushima N, Shiomi H, Nakamura A, Takagi H. Kyotorphin (tyrosine-arginine) synthetase in rat brain synaptosomes. **Journal of Biological Chemistry** 262: 8165-8173 (1987)
- 80 Ueda H, [Yoshihara Y](#), Takagi H. A putative Met-enkephalin releaser, kyotorphin enhances intracellular Ca^{2+} in the synaptosomes. **Biochemical and Biophysical Research Communications** 137: 897-902 (1986)
- 81 Ueda H, Matsumoto S, [Yoshihara Y](#), Fukushima N, Takagi H. Uptake and release of kyotorphin in the rat brain synaptosomes. **Life Sciences** 38: 2405-2411 (1986)
- 82 Ueda H, [Yoshihara Y](#), Nakamura A, Shiomi H, Satoh M, Takagi H. How is kyotorphin (Tyr-Arg) generated in the brain? **Neuropeptide** 5: 525-528 (1985)

Review Articles:

- 1 Miyasaka N, Wanner AA, Li J, Mack-Bucher J, Genoud C, [Yoshihara Y](#), Friedrich RW. Functional development of the olfactory system in zebrafish. **Mechanisms of Development** (in press)
- 2 [Yoshihara Y](#), De Roo M, Muller D. Dendritic spine formation and stabilization. **Current Opinion in Neurobiology** 19: 146-153 (2009)
- 3 Miyasaka N, Sato Y, [Yoshihara Y](#). Axon guidance of olfactory sensory neurons in zebrafish. **Chemical Senses** 30: 92-93 (2005)
- 4 [Y. Yoshihara](#). Visualizing selective neural pathways with WGA transgene: combination of neuroanatomy with gene technology. **Neuroscience Research** 44: 133-140 (2002)
- 5 [Yoshihara Y](#), Nagao H, Mori K. Sniffing out odors with multiple dendrites. **Science** 291: 835-837 (2001)
- 6 Mori K, von Campenhausen H, [Yoshihara Y](#). Zonal organization in mammalian olfactory system. **The Royal Society Philosophical Transactions: Biological Sciences** 355: 1801-1812 (2000)
- 7 Mori K, Nagao H, [Yoshihara Y](#). The olfactory bulb: coding and processing of odor molecule information. **Science** 286: 711-715 (1999)
- 8 [Yoshihara Y](#), Mori K. Basic principles and molecular mechanisms of olfactory axon pathfinding. **Cell and Tissue Research** 290: 457-463 (1997)
- 9 Mori K, [Yoshihara Y](#). Molecular recognition and olfactory processing in the mammalian olfactory system. **Progress in Neurobiology** 45: 585-620 (1995)
- 10 [Yoshihara Y](#), Mori K. Telencephalin: a neuronal area code molecule? **Neuroscience Research** 21: 119-124 (1994)
- 11 [Yoshihara Y](#), Oka S, Ikeda J, Mori K. Immunoglobulin superfamily molecules in the nervous system. **Neuroscience Research** 10: 83-105 (1991)

Book Chapters:

- 1 Yoshihara Y. Molecular genetic dissection of the zebrafish olfactory system. In *Chemosensory Systems in Mammals, Fishes and Insects* (eds. W. Meyerhof and S. Korsching) pp.97-120 (2009)
- 2 Yoshihara Y. Immunoglobulin superfamily cell adhesion molecules. In *Encyclopedic References of Neuroscience* (eds. M. D. Binder, N. Hirokawa, U. Windhorst) pp.1923-1926 (2009)
- 3 Yoshihara Y., Mori K. IgSF molecules involved in olfactory axon projection. In *Molecular Basis of Axon Growth and Nerve Pattern Formation* (ed. H. Fujisawa) pp.143-153 (1997)
- 4 Mori K, Tamada A, Sugino H, Mizuno T, Yoshihara Y. Multiple functional roles of brain segment-specific neuronal recognition molecule, telencephalin. In *Integrative and Molecular Approach to Brain Function.* (eds. M. Ito and Y. Miyashita) pp.97-106 (1996)

Invited Talks:

- 03/1996 19th Taniguchi International Symposium on Brain Sciences, Kyoto, Japan
 03/1997 20th Taniguchi International Symposium on Brain Sciences, Kyoto, Japan
 12/1997 Senri Life Science Foundation "Shin-Tekijuku" Osaka, Japan
 12/1997 20th Annual Meeting for the Molecular Biology Society of Japan, Kyoto, Japan
 07/1998 Workshop of MEXT Grant "Neuronal Apoptosis", Hamamatsu, Japan
 09/1998 Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan
 09/1998 COE International Symposium on Plasticity and Regeneration of Neural Network, Tokyo, Japan
 10/1998 71st Annual Meeting for Japanese Biochemistry Society, Nagoya, Japan
 11/1998 20th Annual Meeting for Japan Society for Biomedical Gerontology, Tokyo, Japan
 12/1998 Osaka University, Graduate School of Engineering Science, Osaka, Japan
 12/1998 Tsukuba University, Tsukuba, Japan
 07/1999 22nd Annual Meeting for Japan Neuroscience Society, Osaka, Japan
 10/1999 1st MIT-RIKEN Neuroscience Symposium on New Frontiers in Brain Science, Boston, USA
 10/1999 72nd Annual Meeting for Japanese Biochemistry Society, Yokohama, Japan
 10/1999 Kyoto University, Institute for Virus Research, Kyoto, Japan
 11/1999 6th Synapse Research Meeting, Okazaki, Japan
 02/2000 Azabu University, Sagamihara, Japan
 02/2000 8th International Conference on Peace through Mind/Brain Science, Hamamatsu, Japan
 04/2000 22nd Annual Meeting for Japanese Society of Biological Psychiatry, Tokyo, Japan
 04/2000 Japanese Biochemistry Society, Kanto Branch Symposium, Yokohama, Japan
 04/2000 National Institute of Genetics, Mishima, Japan
 09/2000 24th Annual Meeting for Japan Neuroscience Society, Kyoto, Japan
 11/2000 2nd Korea-Japan Joint Workshop on Neurobiology and Neuroinformatics, Kyongju, Korea
 03/2001 78th Annual Meeting for Physiological Society of Japan, Kyoto, Japan
 04/2001 RIKEN BSI Neuronal Function Research Group 1st Workshop, Wako, Japan
 06/2001 Tokyo Medical and Dental University, Tokyo, Japan
 07/2001 Nagasaki University, Faculty of Pharmaceutical Sciences, Nagasaki, Japan
 07/2001 26th Workshop of Japan Society of Histochemistry and Cytochemistry, Kyoto, Japan
 10/2001 35th Annual Meeting of Japanese Association for the Study of Taste and Smell, Kochi, Japan
 12/2001 National Institute for Basic Biology, Okazaki, Japan
 12/2001 24th Annual Meeting for the Molecular Biology Society of Japan, Yokohama, Japan
 03/2002 World Brain Awareness Week, Wako, Japan
 05/2002 The University of Tokyo, Graduate School of Medicine, Tokyo, Japan
 05/2002 RIKEN BSI Neuronal Function Research Group 2nd Workshop, Wako, Japan
 03/2004 RIKEN BSI-CDB Joint Symposium, Kobe, Japan
 10/2004 Tohoku University, Institute of Development, Aging and Cancer, Sendai, Japan

12/2004 27th Annual Meeting for the Molecular Biology Society of Japan, Kobe, Japan
07/2005 University of Hohenheim, Institute of Physiology, Stuttgart, Germany
07/2005 28th Annual Meeting for Japan Neuroscience Society, Yokohama, Japan
08/2005 Summer Workshop of MEXT Grant "Togo-Nou", Nagano, Japan
10/2005 The University of Tokyo, Graduate School of Medicine, Tokyo, Japan
10/2005 Osaka University, Graduate School of Frontier Biosciences, Osaka, Japan
11/2005 3rd International Symposium on Taste and Olfactory Perception, Fukuoka, Japan
11/2005 Gunma University, Institute for Molecular and Cellular Regulation, Maebashi, Japan
06/2006 Kyoritsu College of Pharmacy, Tokyo, Japan
07/2006 40th Annual Meeting of Japanese Association for the Study of Taste and Smell, Fukuoka, Japan
07/2006 29th Annual Meeting for Japan Neuroscience Society, Kyoto, Japan
11/2006 The University of Tokyo, Faculty of Pharmaceutical Sciences, Tokyo, Japan
11/2006 Hokkaido University, Faculty of Pharmaceutical Sciences, Sapporo, Japan
12/2006 Nagaoka Institute of Technology, Nagaoka, Japan
01/2007 Kyushu University, Faculty of Science, Fukuoka, Japan
03/2007 National Institute of Genetics, Mishima, Japan
06/2007 Tokyo Metropolitan Institute for Neuroscience, Fuchu, Japan
07/2007 9th China-Japan-Korea Joint Workshop on Neurobiology and Neuroinformatics, Cheju, Korea
09/2007 30th Annual Meeting for Japan Neuroscience Society, Yokohama, Japan
11/2007 5th International Symposium on Taste and Olfactory Perception, Fukuoka, Japan
11/2007 6th MIT-RIKEN Neuroscience Symposium on New Frontiers in Brain Science, Boston, USA
11/2007 Yale University School of Medicine, New Haven, USA
12/2007 30th Annual Meeting for the Molecular Biology Society of Japan, Yokohama, Japan
07/2008 31st Annual Meeting for Japan Neuroscience Society, Tokyo, Japan
09/2008 18th European Chemoreception Research Organization Congress, Portoroz, Slovenia
11/2008 Kochi University School of Medicine, Kochi, Japan
12/2008 46th Annual Meeting for the Biophysical Society of Japan, Fukuoka, Japan
05/2009 Japan Cement Association, Tokyo, Japan
09/2009 UCSF Neuroscience Graduate Program, San Francisco, USA
09/2009 43rd Annual Meeting of Japanese Association for the Study of Taste and Smell, Asahikawa, Japan
12/2009 32nd Annual Meeting for the Molecular Biology Society of Japan, Yokohama, Japan
04/2010 Nara Medical University, Nara, Japan
05/2010 87th Annual Meeting for Physiological Society of Japan, Morioka, Japan
05/2010 Janelia Farm Conference: Form and Function of the Olfactory System, Ashburn, USA
07/2010 Tohoku University GCOE Retreat, Sendai, Japan
10/2010 10th China-Japan-Korea Joint Workshop on Neurobiology and Neuroinformatics, Kunming, China
11/2010 International Symposium on Systems Molecular Ethology, Tokyo, Japan
09/2011 34th Annual Meeting for Japan Neuroscience Society, Tokyo, Japan
09/2011 84th Annual Meeting for Japanese Biochemistry Society, Kyoto, Japan
11/2011 Senri Life Science Seminar: Smell, Scent and Pheromone, Osaka, Japan
12/2011 International Institute for Advanced Studies, Research Conference, Kyoto, Japan
01/2012 Nagoya University GCOE Symposium, Nagoya, Japan
06/2012 16th International Symposium on Olfaction and Taste (ISOT), Stockholm, Sweden
09/2012 Workshop on Neural Bases for Olfactory Information Processing, Tokyo, Japan
09/2012 35th Annual Meeting for Japan Neuroscience Society, Nagoya, Japan
11/2012 Cold Spring Harbor Asia Conference on Neural Circuit Basis of Behavior, Suzhou, China
01/2013 University of Hyogo, Graduate School of Life Science, Harima, Japan

02/2013 RIKEN Joint Retreat, Shizuoka, Japan
02/2013 International Symposium on "Sensory Systems and Neural Circuits", Tokyo, Japan
02/2013 International Institute for Advanced Studies, Research Conference, Kyoto, Japan
03/2013 90th Annual Meeting for Physiological Society of Japan, Tokyo, Japan
06/2013 36th Annual Meeting for Japan Neuroscience Society, Kyoto, Japan
07/2013 Takasago International Corporation, Kanagawa, Japan