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EDUCATION

Ph.D.	2001	Neuroscience	University of Toronto
M. Sc.	1989	Neurophysiology	Shandong University School of Medicine, China
M.D.	1986	Medicine	Taishan Medical University, China

TRAINING

2001-2005	Research Associate Neuroscience Johns Hopkins University School of Medicine, HHMI
1996-2001	Ph.D. Neuroscience University of Toronto School of Medicine
1986-1989	M.Sc. Neurophysiology Shandong University School of Medicine, China
1981-1986	M. D. Taishan Medical University, China

ACADEMIC POSITION

2018-present	Professor, Department of Biology, Boston University
2012-2018	Associate Professor (with tenure), Department of Biology, Boston University
2012-present	Associate Professor, Department of Pharmacology & Experimental Therapeutics
2012-2014	Associate Chair, Department of Biology, Boston University
2010-2012	Assistant Professor, Department of Pharmacology & Experimental Therapeutics
2005-2012	Assistant Professor, Department of Biology, Boston University

AWARDS AND HONORS

2013	Dean's Catalyst Award, Boston University
2011	NARSAD Young Investigator Award (Brain and Behavior Research Foundation)
2008	NARSAD Young Investigator Award (Brain and Behavior Research Foundation)
2001	Howard Hughes Medical Institute fellowship, HHMI
2001	Postdoctoral Fellowship, Canadian Institutes for Health Research (CIHR)

2001 Best Dissertation Award, University of Toronto
2000 Andrew Sass-Kortsak Award, The Hospital for Sick Children, Univ. of Toronto
2000 Parke Davis Award, University of Toronto
1999 U of T Open Fellowship, University of Toronto
1999 Graduate Student Fellowship, Ontario Neurotrauma Foundation
1998 Young Investigators' Award, The Hospital for Sick Children, University of Toronto
1998 Clinician-Scientist Award, the Hospital for Sick Children, Univ. of Toronto
1997 Young Investigators' Award, The Hospital for Sick Children, University of Toronto
1995 Fellowship, The Canadian Foundation for the Study of Infant Death

TEACHING

BI 455/655 Developmental Neurobiology
BI 599 Neurobiology of Synapses
BI755 Cellular and Systems Neuroscience (Guest Professor)
HS370 Neuroanatomy and Neurophysiology (Guest Professor)

OTHER PROFESSIONAL ACTIVITIES

Membership

1996-present Society for Neuroscience
2011-2014 The New York Academy of Sciences

Ad Hoc Grant reviewer

National Institutes of Health (NIH)
Alzheimer's Association
Medical Research Council (UK)
Research Grants Council (Hong Kong)
Canada Research Chairs Program
Netherlands Organization for Health Research and Development
China National Natural Science Foundation
Israel Science Foundation

Journal Reviewer

Neuron, PNAS, Nature Neuroscience, J. Neuroscience, Nature Communication, Cell reports, Scientific Reports, J. Neurophysiology, J Neurochem, Molecular Brain, Neurochem Int, Brain Research, Neural Plasticity, Frontiers in Neurotrauma, Cellular Molecular Life Science, Neuron Glia Biology, Current Medicinal Chemistry, Autophagy, FEBS Letters, PLoS One, PLoS Biology, Neuropharmacology, JAMA Psychiatry, Cellular Logistics, Development, Biochemistry and Analytical Chemistry, J Comparative Neurology, Neuroscientist, BBA Mol Basis of Disease, Cerebral Cortex, J. of Clinical Investigation, Neurobiology of Learning and Memory, Human Molecular Genetics

Editorial Board Member

Scientific Reports
J Alzheimer's Disease
J Cell & Developmental Biology
American J. Molecular Biology
Biochemistry & Analytical Biochemistry

PUBLICATIONS

1. Y Zhang, O Guo, Y Huo, G Wang, and **H Y Man** (2018) Amyloid- β Induces AMPA Receptor Ubiquitination and Degradation in Primary Neurons and Human Brains of Alzheimer's Disease. *J of Alzheimer's Disease*, in press
2. X Wang, D Liu, H Huang, Z Wang, T Y Hou, X Yang, N Wei, Y Zhou, M J Dupras, F Calon, Y T Wang, **H Y Man**, J Chen, J Wang, S S Hébert, Y M Lu, L Q Zhu (2018) A novel Mir-124/Ptpn1 signal pathway mediates synaptic and memory deficits in Alzheimer's disease. *Biological Psychiatry*, 2018 Mar 1;83(5):395-405. doi: 10.1016/j.biopsych.2017.07.023. Epub 2017 Aug 10.
3. N Khatri, J P Gilbert, Y Huo, R Sharafdari, M Nee, H Qiao and **H Y Man** (2018) The maternal imprinted autism protein Ube3A/E6AP remodels dendritic arborization via XIAP ubiquitination and caspase 3-mediated pruning. *J Neurosci*, 38 (2) 363-378
4. Zhu H, Yan H, Tang N, Li X, Pang P, Li H, Chen W, Guo Y, Shu S, Cai Y, Pei L, Liu D, Luo MH, **Man H Y**, Tian Q, Mu Y, Zhu LQ, Lu Y (2017) Impairments of spatial memory in an Alzheimer's disease model via degeneration of hippocampal cholinergic synapses. *Nat Commun*. 2017 Nov 22;8(1):1676. doi: 10.1038/s41467-017-01943-0.
5. J Gilbert and **H Y Man** (2017) Fundamental elements in autism: from neurogenesis and neurite growth to synaptic plasticity. *Front Cell Neurosci*, 2017 Nov 20;11:359. doi: 10.3389/fncel.2017.00359. eCollection 2017.
6. G Wang, S Li, J Gilbert, H J Gritton, Z Wang, Z Li, X Han, D J Selkoe and **H Y Man** (2017) Crucial roles for SIRT2 and AMPA receptor acetylation in synaptic plasticity and memory. *Cell Reports*, 20(6):1335-1347
7. Qiu M, Shentu YP, Zeng J, Wang XC, Yan X, Zhou XW, Jing XP, Wang Q, **Man HY**, Wang JZ, Liu R (2017) Zinc mediates the neuronal activity-dependent anti-apoptotic effect. *PLoS One*. 2017 Aug 7;12(8):e0182150. doi: 10.1371/journal.pone.0182150.
8. J Zhu, K Y Lee, K A Jewett, **H Y Man**, H J Chung and N P Tsai (2017) Epilepsy-associated gene Nedd4-2 mediates neuronal activity and seizure susceptibility through AMPA receptors. *PLoS Genetics*, 13(2):e1006634. doi: 10.1371
9. J M Gauthier, A Lin, B Á Nic Dhonnchadha, R D Spealman, **H Y Man**, K M Katak (2017) Environmental enrichment facilitates cocaine-cue extinction, deters reacquisition of cocaine self-administration and alters AMPAR GluA1 expression and phosphorylation. *Addict Biol*. 22(1):152-162. doi: 10.1111/adb.12313.
10. J Gilbert, S Shu, X Yang, Y M Lu, L Q Zhu and **H Y Man** (2016) β -amyloid triggers aberrant over-scaling of homeostatic synaptic plasticity. *Acta Neuropathol Commun*. 2016 Dec 13;4(1):1
11. J Gilbert, **H Y Man** (2016) The X-linked autism protein KIAA2022/KIDLIA regulates neurite outgrowth via N-cadherin and δ -catenin signaling. *eNeuro*, Oct 2016 DOI: 10.1523/ENEURO.0238-16.2016
12. L J Li, Rong Hu, B Lujan, J Chen, J J Zhang, Y Nakano, T Y Cui, M X Liao, J C Chen, **H Y Man**, H Feng, Q Wan (2016) Glycine Potentiates AMPA Receptor Function through Metabotropic Activation of GluN2A-containing NMDA Receptors. *Frontiers in Molecular Neuroscience*, doi: 10.3389/fnmol.2016.00102
13. Canal M, Martín-Flores N, Pérez-Sisqués L, Romani-Aumedes J, Altas B, **H Y Man**, Kawabe H, Alberch J, Malagelada C (2016) Loss of NEDD4 contributes to RTP801 elevation and neuron toxicity: implications for Parkinson's disease. *Oncotarget*, 2016 Aug 2. doi:10.18632/oncotarget.11020
14. R E Kohman, S S Cha, **H Y Man**, X Han (2016) Light-Triggered Release of Bioactive Molecules from DNA Nanostructures. *Nano Letters*, 16(4): 2781-2785

15. Hou Q, Ruan H, Gilbert J, Wang G, Ma Q, Yao WD and **H Y Man** (2015) MicroRNA miR124 is required for the expression of homeostatic synaptic plasticity. *Nature Commun.* 2015 Dec 1;6:10045. doi: 10.1038/ncomms10045.
16. G Wang, S Amato and **H Y Man** (2015) Resveratrol up-regulates AMPA receptor expression via AMPK/PI3K signaling. *Neuropharmacology* 95: 144-153
17. Y Huo, N Khatri, Q Hou, J Gilbert, G Wang and **H Y Man** (2015) The deubiquitinating enzyme (DUB) USP46 regulates AMPA receptor deubiquitination and trafficking. *J Neurochem.* 134(6): 1067-1080
18. L Ning, L Li, G Wang, W Hu, Q Hou, Y Tong, L Qing, X Chen, **H Y Man***, P Liu*, J He* (2015) Quantitative assessment of single-cell sequencing methods in hippocampal neurons (*corresponding authors). *Scientific Reports*, 2015 Jun 19;5:11415. doi: 10.1038/srep11415.
19. Y S Xiong, F F Liu, D Liu, H Z Huang, N Wei, L Tan, J G Chen, **H Y Man**, C X Gong, Y M Lu, J Z Wang, L Q Zhu (2015) Opposite effects of two estrogen receptors on tau phosphorylation through disparate effects on the miR-218/PTPA pathway. *Aging Cell* 14(5): 867-877
20. Liu D, Wei N, **H Y Man**, Lu Y, Zhu LQ, Wang JZ (2015). The MT2 receptor stimulates axonogenesis and enhances synaptic transmission by activating Akt signaling. *Cell Death & Differentiation* 22(4): 583-596
21. A Lin and **H Y Man** (2014) Endocytic adaptor EPS15 is involved in the trafficking of ubiquitinated AMPA receptors. *J Biol Chem* 289: 24652-24664.
22. J Gilbert and **H Y Man** (2014) Translational dysregulation in autism (Review). *Cell Dev Biol*, 3:2
23. N Khatri and **H Y Man** (2013) Synaptic activity and bioenergy homeostasis: implications in brain trauma and neurodegenerative diseases (Review). *Frontiers in Neurology* 4:199
24. L V Maldergem, Q Hou, V M Kalscheuer, M Rio, M Doco-Fenzy, A Medeira, A P de Brouwer, C Cabrol, S A Haas, P Cacciagli, S Moutton, E Landais, J Motte, L Colleaux, C Bonnet, L Villard, J Dupont, **H Y Man** (2013) Loss of function of KIAA2022 causes mild to severe intellectual disability with an autism spectrum disorder and impairs neurite outgrowth. *Hum Mol Genet* 22(16): 3306-3314
25. M Ellabaan, Y S Ong, S D Handoko, C K Kwoh, and **H Y Man** (2013) Discovering unique, low-energy transition states of small, non-cyclic molecules using evolutionary molecular memetic computing. *IEEE Computational Intelligence* 3: 54-63
26. A Lin and **H Y Man** (2013) Ubiquitination of neurotransmitter receptors and postsynaptic scaffolding proteins (Review). *Neural Plasticity* 2013:432057. doi: 10.1155/2013/432057
27. B N Dhonnchadha, A Lin, K A Leite-Morris, G B Kaplan, **H Y Man**, and K M Kantak (2013). Alterations in expression and phosphorylation of GluA1 receptors following cocaine-cue extinction learning. *Behavioural Brain Research* 238: 119-123.
28. Q Hou, **H Y Man** (2012) Input-specific homeostatic regulation of AMPA receptor accumulation at central synapses. *Commun. Integr. Biol.* 5(6): 553-536.
29. K Foo, L Blumenthal and **H Y Man** (2012) Glutamate induces rapid depletion of neuronal ATP independent of receptor activation. *J Int Neurochem* 61: 389-396.
30. B N Dhonnchadha, B Lovascio, N Shrestha, C Kirkman, A Lin, K A Leite-Morris, **H Y Man**, G B Kaplan and K M Kantak (2012) Changes in expression of c-Fos protein following cocaine-cue extinction learning. *Behavioural Brain Research* 234, 100-106.
31. **H Y Man** (2012) The Sodium Pump: Novel Functions in the Brain. *Biochem Anal Biochem* 1:5, 2012
32. G Wang, J Gilbert and **H Y Man** (2012) AMPA receptor trafficking in homeostatic synaptic plasticity: functional molecules and signaling cascades (Invited Review). *Neural Plasticity* 2012;2012:825364. doi: 10.1155/2012/825364.
33. M Ellabaan, Y S Ong, S D Handoko, C K Kwoh, S Bahnassy, and **H Y Man** (2012) A Tree-structured Covalent-bond-driven Molecular Memetic Algorithm for Optimization of Ring-deficient Molecules. *Computers and Mathematics with Applications* 64: 3792-3804.
34. H Jo, S Mondal, D Tan, E Nagata, A K Sharma, Q Hou, K Shanmugasundaram, J Tung, A O Tejada, **H Y Man**, A C Rigby, H R Luo (2012) Small molecule-induced cytosolic activation of Akt rescues ischemia-induced neuronal death. *PNAS* 109 (26): 10581-10586.

35. S Amato and **H Y Man** (2012) AMPK signaling in neuronal polarization: putting the brakes on axonal traffic of PI3-Kinase (Invited Review). *Communicative and Integrative Biology*, volume 5, issue 2.
36. **H Y Man** and X M Ma (2012) (Invited Editorial Highlight) A role for neuroserpin in neuron morphological development. *J Neurochemistry*, 121 (4): 495-496.
37. L Jarzylo and **H Y Man** (2012) Parasynaptic NMDA receptor signaling couples neuronal glutamate transporter function to AMPA receptor synaptic distribution and stability. *J Neurosci* 32(7):2552-2563.
38. Q Hou, J Gilbert and **H Y Man** (2011) Homeostatic regulation of AMPA receptor trafficking and degradation by light-controlled single-synaptic activation. *Neuron* 72: 806-819 (Highlighted in Previews).
39. S Amato and **H Y Man** (2011) Bioenergy sensing in the brain: the role of AMP-activated protein kinase in neuronal metabolism, development and neurological diseases (Invited Review). *Cell Cycle* 10 (20).
40. S Amato, X Liu, B Zheng, L Cantley, P Rakic, **H Y Man** (2011) AMP-Activated Protein Kinase Regulates Neuronal Polarization by Interfering with PI 3-Kinase Localization. *Science* 332(6026):247-51.
41. S Amato and **H Y Man** (2011) AMPK links cellular bioenergy status to the decision making of axon initiation in neurons (Invited Review). *Cellular Logistics* 1(3): 103-105.
42. **H Y Man** (2011) GluA2-lacking, calcium-permeable AMPA receptors--inducers of plasticity? (Invited Review). *Current Opinion in Neurobiology* 21 (1): 1-8.
43. A Lin, Q Hou, L Jarzylo, S Amato, J Gilbert, F Shang and **H Y Man** (2011) Nedd4-mediated AMPA receptor ubiquitination regulates receptor turnover and trafficking. *J. Neurochemistry*, 117 (5), 614-625.
44. D Zhang, Q Hou, M Wang, A Lin, A Navis, A Raissi, F Liu and **H Y Man** (2009) Na, K-ATPase activity regulates AMPA receptor turnover through proteasome-mediated proteolysis. *J Neurosci* 29 (14): 4498-4511 (recommended in *Science Signaling*).
45. J Oberlander, A Lin, **H Y Man**, and M Erskine (2009) AMPA receptors in the medial amygdala are critical for establishing a neuroendocrine memory in the female rat. *Eur J Neurosci* 29(1):146-60.
46. Q Hou, Y Huang, S Amato, S H Snyder, R L Huganir, **H Y Man** (2008) Regulation of AMPA receptor localization in lipid rafts. *Mol. Cel. Neurosci* 38 (2): 213-223.
47. Q Hou, D Zhang, L Jarzylo, R L Huganir, **H Y Man** (2008) Homeostatic regulation of AMPA receptor expression at single hippocampal synapses. *PNAS* 105(2):775-80 (recommended in Faculty of 1000).
48. B B Andken, I Lim, G Benson, J J Vincent, M T Ferenc, B Heinrich, L A Jarzylo, **H Y Man**, J O Deshler (2007) 3'-UTR SIRF: a database for identifying clusters of whort interspersed repeats in 3' untranslated regions. *BMC Bioinformatics* 30; 8:274.
49. **H Y Man**, Y Sekine-Aizawa, and R L Huganir (2007) Regulation of α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor trafficking through PKA phosphorylation of the Glu receptor 1 subunit. *PNAS* 104 (9), 3579-3584.
50. Y Huang, **H Y Man**, Y Sekine-Aizawa, Y Han, K Juluri, H Luo, J Cheah, C Lowenstein, R L Huganir and S H Snyder (2005) S-nitrosylation of N-ethylmaleimide sensitive factor mediates surface expression of AMPA receptors. *Neuron* 46(4):533-40.
51. **H Y Man**, Q H Wang, W Y Lu, W Ju, G Amardian, S D'Souza, L D Liu, T P Wong, L E Becker, L Pai, F Liu, M P Wymann, J F MacDonald and Y T Wang (2003) Activation of PI3-kinase is required for AMPA receptor insertion during LTP of mEPSCs in cultured hippocampal neurons. *Neuron* 37, 611-624.
52. H Y Lee, K Takamiya, J S Han, **H Y Man**, C H Kim, G Rumbaugh, S Yu, L Ding, C He, R S Petralia, R J Wenthold, M Gallagher and R L Huganir (2003) Phosphorylation of the AMPA receptor GluR1 subunit is required for synaptic plasticity and retention of spatial memory. *Cell* 112, 631-643.

53. W Y Lu*, **H Y Man***, W Ju, W Trimble, Y T Wang and J F MacDonald (2001) Activation of synaptic NMDA receptors induces membrane insertion of new AMPA receptors and LTP in cultured hippocampal neurons. (* Equal contribution) *Neuron* 29, 243–254.
54. R Q Hu, M A Cortez, **H Y Man**, J Roder, Y T Wang and O C Snead III (2001) Alteration of GluR2 expression in the rat brain following absence seizures induced by hydroxybutyric acid. *Epilepsy Research* 44(1), 41-51.
55. R Q Hu, M A Cortez, **H Y Man**, J Roder, Z P Jia, Y T Wang and O C Snead III (2001) GHB-induced absence seizures in GluR2 null mutant mice. *Brain Research* 897 (1-2): 27-35.
56. **H Y Man**, W Ju, G Ahmadian and Y T Wang (2000) Intracellular trafficking of AMPA receptors in synaptic plasticity. (Review). *Molecular and Cellular Life Science* 57 (11): 1526-1534.
57. **H Y Man**, J Lin, W Ju, G Ahmadian, L Liu, L E Becker, M Sheng and Y T Wang (2000) Regulation of AMPA receptor-mediated synaptic transmission by clathrin-dependent receptor internalization. *Neuron* 25:649-662.
58. D I McRitchie, N Isowa, J D Edelson, A M Xavier, L Cai L, **H Y Man**, Y T Wang, S H Keshavjee, A S Slutsky, M Liu (2000) Production of tumour necrosis factor alpha by primary cultured rat alveolar epithelial cells. *Cytokine* 12(6):644-54.
59. Q Wan, **H Y Man**, F Liu, J Brauton, H B Niznik, S F Pang, G M Brown and Y T Wang (1999) Differential modulation of GABAA receptor function by Mel1a and Mel1b receptors. *Nature Neurosci.* 2 (5):401-403.
60. **H Y Man**, E Ted, L E Becker and Y T Wang (1998) Modulation of baroreflex sensitivity by the state of tyrosine phosphorylation in the brainstem of rat. *Brain Research* 792:141-148.
61. Z B Pristupa, F McConkey, F Liu, **H Y Man**, F J S Lee, Y T Wang and H B Niznik (1998) Protein kinase-mediated bidirectional trafficking and functional regulation of the human dopamine transporter. *Synapse* 30:79-87.
62. Q Wan, **H Y Man**, J Brauton, W Wang, M W Salter, L Becker and Y T Wang (1997) Modulation of GABAA receptor function by tyrosine phosphorylation of b subunits. *J Neurosci* 17(13): 5062-5069.
63. Q Wan, Z G Xiong, **H Y Man**, C A Ackerley, J Brauton, L E Becker, J F MacDonald and Y T Wang (1997). Recruitment of functional GABAA receptors to postsynaptic domains by insulin. *Nature* 388:686-690.
64. **H Y Man** and L Lui (1992) Effect of electrical and L-glutamate stimulation of nucleus raphe obscurus on phrenic nerve activity in rabbits. *Acta Physiologica Sinica* 44 (1): 92-97.
65. Y Q Zhang, **H Y Man** and L Liu (1991) Respiratory effects of microinjection of three kinds of neurotransmitters in ventromedial region of nucleus facialis. *Acta Physiologica Sinica* 43 (6): 594-599.

Book Chapters

J Gilbert and **H Y Man** (2012) (Invited book chapter) Homeostatic synaptic plasticity: cellular mechanisms and implications in neurological diseases. Book "Synaptic Plasticity: Cell Biology, Regulation and Role in Disease", Nova Science Publishers