

Curriculum Vitae

April 17, 2017

Name: Tadafumi Kato, M.D., Ph.D. (53 years old, male)
Position: Senior Team Leader, Laboratory for Molecular Dynamics of Mental Disorders
Deputy Director, RIKEN Brain Science Institute



Address: Laboratory for Molecular Dynamics of Mental Disorders
RIKEN Brain Science Institute
Hirosawa 2-1, Wako, Saitama, 351-0198, Japan

Phone: +81-48-467-6949

Fax: +81-48-467-6947

E-mail: kato@brain.riken.jp

Web Site: <http://www.brain.riken.jp/en/faculty/details/22>

Place of Birth: Tokyo, Japan

Date of Birth: August 16, 1963.

Nationality: Japanese

Marital Status: Married, two children.

Degrees: M.D. 1988 (University of Tokyo, Faculty of Medicine)

Ph.D. 1995 (Shiga University of Medical Science)

Education: March 1988, graduated from Faculty of Medicine, University of Tokyo
March 1984 graduated from 2 years pre-med course,
Faculty of Culture and Science, University of Tokyo.

Research Area: Neurobiology of bipolar disorder
(Molecular Biology, Psychopharmacology, Epigenetics)

Research Experiences:

April 1, 2017 – Present	Director, Research Resource Center, RIKEN Brain Science Institute
May 1, 2015 – Present	Director, RIKEN-BSI Takeda Collaboration Center
April 1, 2015 – Present	Deputy Director, RIKEN Brain Science Institute
April 1, 2013 – March 31, 2017	Chief Scientist, RIKEN

April 1, 2009 – Present	Senior Team Leader, Laboratory for Molecular Dynamics of Mental Disorders, RIKEN Brain Science Institute
April 1, 2008 – March 2013	Director, Disease Mechanism Research Core
August 2004 – March 2009	Director, Aging and Psychiatric Research Group RIKEN Brain Science Institute
January 2001 – March 2009	Team Leader, Laboratory for Molecular Dynamics of Mental Disorders, RIKEN Brain Science Institute
July 1999 – December 2000	Lecturer Department of Neuropsychiatry Faculty of Medicine, University of Tokyo
July 1997 - July 1999	Assistant Professor Department of Neuropsychiatry Faculty of Medicine, University of Tokyo
June 1989 - July 1997	Assistant Professor Department of Psychiatry, Shiga University of Medical Science
April 1995 - February 1996	International Visiting Fellow Department of Psychiatry University of Iowa College of Medicine (The laboratory of Dr. Raymond R. Crowe)
June 1988 - May 1989	Resident Department of Neuropsychiatry University of Tokyo Hospital

Major Visiting Appointments

March 31/2016 -	Program Supervisor, Strategic Research Program for Brain Sciences (SRPBS)
April 1, 2015	Adjunct Professor, Hoshi University
April 1, 2014	Adjunct Professor, Fujita Health University School of Medicine
April 1, 2011 – March 31/2016	Program Officer, Strategic Research Program for Brain Sciences (SRPBS)
April 1, 2010 – Mar 31/2013	Adjunct Professor, University of Tokyo
April 1, 2009 – Present	Adjunct Professor, Hiroshima University
April 2001 – Present	Adjunct Lecturer, Department of Neuropsychiatry University of Tokyo, Faculty of Medicine
April 2001 – Mar 2010	Adjunct Lecturer, Department of Psychiatry

	Tokyo Medical and Dental University
April 2006 – Mar 2008	Adjunct Lecturer, Nagasaki University, Faculty of Medicine
April 2003 - Mar 2006	Adjunct Lecturer, Department of Psychiatry Mie University School of Medicine
April 2000 – Mar 2006	Adjunct Lecturer, Department of Psychiatry Sapporo Medical College
April 2004 – March 2005	Adjunct Lecturer, University of Tokyo, Faculty of Education
April 2003 – March 2005	Adjunct Lecturer, Department of Psychiatry Kobe University School of Medicine
September 1997 – March 2001	Adjunct Lecturer, Department of Psychiatry Shiga University of Medical Sciences

Honors and Awards:

2014	Tsukahara Memorial Award, Brain Science Foundation
2008	NARSAD Independent Investigator's Award
2000	NARSAD Independent Investigator's Award
1998	CINP Rafaelson Fellowship Award
1995	Stanley Foundation Research Award
1995	Academic Prize of Japanese Society of Biological Psychiatry

Membership:

Collegium Internationale Neuro-Psychopharmacologium (CINP) (Councilor 2006-2008)
International Society of Bipolar Disorder (Councilor 2005-2007, 2011-2013)
Society of Biological Psychiatry
International Society of Psychiatric Genetics
Society for Neuroscience
Japan Neuroscience Society (Councilor, 2011-2016)
Japanese Society of Biological Psychiatry (Councilor, 2013-2015)
Japanese Society of Neurology and Psychiatry
Japanese Society of Human Genetics (Board Member)
Japanese Society of Neurochemistry (Councilor 2011-2013)
Japanese Society of Neuropsychopharmacology (Councilor 2012-2016)
Japanese Society of Mood Disorders (Councilor 2012-)

Board Certification:

2007 Board Certified Member of Japanese Society of Neurology and Psychiatry (#8167)

1994 Designated Psychiatrist by Japanese Ministry of Health, Labour and Welfare (#9769)

Editorship:

Editor in Chief “*Psychiatry and Clinical Neurosciences*”

Section Editor “*Neuroscience Research*”

Academic Editor “*PLoS ONE*”

Editorial Board Member “*Journal of Affective Disorders*”

 “*International Journal of Bipolar Disorders*”

Refereed Original Articles

1. Takata A, Matsumoto N, Kato T (2017) Genome-wide identification of splicing QTLs in the human brain and their enrichment among schizophrenia-associated loci. *Nature Communications* 8: 14519
2. Kasahara T, Ishiwata M, Kakiuchi C, Fuke S, Iwata N, Ozaki N, Kunugi H, Minabe Y, Nakamura K, Iwata Y, Fujii K, Kanba S, Ujike H, Kusumi I, Kataoka M, Matoba N, Takata A, Iwamoto K, Yoshikawa T, Kato T. Enrichment of deleterious variants of mitochondrial DNA polymerase gene (POLG1) in bipolar disorder. *Psychiatry and Clinical Neurosciences* (in press)
3. Nakajima K, Kazuno A, Kelsoe J, Nakanishi M, Takumi T, Kato T (2016) Exome sequencing in the knockin mice generated using the CRISPR/Cas system. *Scientific Reports* 6: 34703
4. Kageyama Y, Kasahara T, Morishita H, Mataga N, Deguchi Y, Tani M, Kuroda K, Hattori K, Yoshida S, Inoue K, Kato T. Search for plasma biomarkers in drug-free patients with bipolar disorder and schizophrenia using metabolome analysis. *Psychiatry and Clinical Neurosciences* (in press)
5. Nakamura T, Kazuno AA, Nakajima K, Kusumi I, Tsuboi T, Kato T (2016) Loss of function mutations in ATP2A2 and psychoses: A case report and literature survey. *Psychiatry Clin Neurosci.* 2016 Apr 23.
6. Kataoka M, Matoba N, Sawada T, Kazuno AA, Ishiwata M, Fujii K, Matsuo K, Takata A, Kato T (2016) Exome sequencing for bipolar disorder points to roles of de novo loss-of-function and protein-altering mutations. *Mol Psychiatry* 21: 885-93.
7. Kasahara T*, Takata A*, Kato TM*, Kubota-Sakashita M, Sawada T, Kakita A, Mizukami H, Kaneda D, Ozawa K, Kato T(*co-first authors) (2016) Depression-like Episodes in Mice Harboring mtDNA Deletions in Paraventricular Thalamus. *Molecular Psychiatry*, 21: 39-48
8. Hou L, Heilbronner U, Degenhardt F, Adli M, Akiyama K, Akula N, Ardu R, Arias B, Backlund L, Banzato CE, Benabarre A, Bengesser S, Bhattacharjee AK, Biernacka JM, Birner A, Brichant-Petitjean C, Bui ET, Cervantes P, Chen GB, Chen HC, Chillotti C, Cichon S, Clark SR, Colom F, Cousins DA, Cruceanu C, Czerski PM, Dantas CR, Dayer A, Étain B, Falkai P, Forstner AJ, Frisé L, Fullerton JM, Gard S, Garnham JS, Goes FS, Grof P, Gruber O, Hashimoto R, Hauser J, Herms S, Hoffmann P, Hofmann A, Jamain S, Jiménez E, Kahn JP, Kassem L, Kittel-Schneider S, Kliwiczki S, König B, Kusumi I, Lackner N, Laje G, Landén M, Lavebratt C, Leboyer M, Leckband SG, Jaramillo CA, MacQueen G, Manchia M, Martinsson L, Mattheisen M, McCarthy MJ, McElroy SL, Mitjans M, Mondimore FM, Monteleone P, Nievergelt CM, Nöthen MM, Ösby U, Ozaki N, Perlis RH, Pfennig A, Reich-Erkelenz D, Rouleau GA, Schofield PR, Schubert KO, Schweizer BW, Seemüller F, Severino G, Shekhtman T, Shilling PD, Shimoda K, Simhandl C, Slaney CM, Smoller JW, Squassina A,

- Stamm T, Stopkova P, Tighe SK, Tortorella A, Turecki G, Volkert J, Witt S, Wright A, Young LT, Zandi PP, Potash JB, DePaulo JR, Bauer M, Reininghaus EZ, Novák T, Aubry JM, Maj M, Baune BT, Mitchell PB, Vieta E, Frye MA, Rybakowski JK, Kuo PH, Kato T, Grigoriu-Serbanescu M, Reif A, Del Zompo M, Bellivier F, Schalling M, Wray NR, Kelsoe JR, Alda M, Rietschel M, McMahon FJ, Schulze TG (2016) Genetic variants associated with response to lithium treatment in bipolar disorder: a genome-wide association study. *Lancet*, 38: 1085-1093
9. Kimura H, Tsuboi D, Wang C, Kushima I, Koide T, Ikeda M, Iwayama Y, Toyota T, Yamamoto N, Kunimoto S, Nakamura Y, Yoshimi A, Banno M, Xing J, Takasaki Y, Yoshida M, Aleksic B, Uno Y, Okada T, Iidaka T, Inada T, Suzuki M, Ujike H, Kunugi H, Kato T, Yoshikawa T, Iwata N, Kaibuchi K, Ozaki N (2015) Identification of Rare, Single-Nucleotide Mutations in NDE1 and Their Contributions to Schizophrenia Susceptibility. *Schizophrenia Bulletin*, 41: 744-753
 10. Sugawara H, Bundo M, Asai T, Sunaga F, Ueda J, Ishigooka J, Kasai K, Kato T, Iwamoto K (2015) Effects of quetiapine on DNA methylation in neuroblastoma cells. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 56: 117-121
 11. Fuke S, Kametani M, Yamada K, Kasahara T, Kubota-Sakashita M, Kujoth GC, Prolla TA, Hitoshi S, Kato T (2014) Heterozygous Polg mutation causes motor dysfunction due to mtDNA deletions. *Annals of Clinical and Translational Neurology*, 1: 909-920
 12. Saito T, Kondo K, Iwayama Y, Shimasaki A, Aleksic B, Yamada K, Toyota T, Hattori E, Esaki K, Ujike H, Inada T, Kunugi H, Kato T, Yoshikawa T, Ozaki N, Ikeda M, Iwata N (2014) Replication and cross-phenotype study based upon schizophrenia GWASs data in the Japanese population: Support for association of MHC region with psychosis. *American Journal of Medical Genetics*, 165B: 421-427
 13. Kubota-Sakashita M, Iwamoto K, Bundo M, Kato T (2014) A role of ADAR2 and RNA editing of glutamate receptors in mood disorders and schizophrenia. *Molecular Brain*, 7:5
 14. Bundo M, Toyoshima M, Okada Y, Akamatsu W, Ueda J, Nemoto-Miyauchi T, Sunaga F, Toritsuka M, Ikawa D, Kakita A, Kato M, Kasai K, Kishimoto T, Nawa H, Okano H, Yoshikawa T, Kato T, Iwamoto K (2014) Increased L1 retrotransposition in the neuronal genome in schizophrenia. *Neuron*
 15. Mehta D, Iwamoto K, Ueda J, Bundo M, Adati N, Kojima T, Kato T (2013) Comprehensive survey of CNVs influencing gene expression in the human brain and its implications for pathophysiology. *Neurosci Res*
 16. Ikegame T, Bundo M, Sunaga F, Asai T, Nishimura F, Yoshikawa A, Kawamura Y, Hibino H, Tochigi M, Kakiuchi C, Sasaki T, Kato T, Kasai K, Iwamoto K (in press) DNA methylation analysis of BDNF gene promoters in peripheral blood cells of schizophrenia patients. *Neuroscience Research*
 17. Yoshida S, Esposito G, Ohnishi R, Tsuneoka Y, Okabe S, Kikusui T, Kato T, Kuroda KO (2013) Transport Response is a filial-specific behavioral response to maternal carrying in C57BL/6 mice. *Frontiers in Zoology*, 10: 50

18. Asai T, Bundo M, Sugawara H, Sunaga F, Ueda J, Tanaka G, Ishigooka J, Kasai K, Kato T, Iwamoto K (2013) Effect of mood stabilizers on DNA methylation in human neuroblastoma cells. *International Journal of Neuropsychopharmacology*, 16: 2285-2294
19. Kondo K, Ikeda M, Kajio Y, Saito T, Iwayama Y, Aleksic B, Yamada K, Toyota T, Hattori E, Ujike H, Inada T, Kunugi H, Kato T, Yoshikawa T, Ozaki N, Iwata N (2013) Genetic Variants on 3q21 and in the Sp8 Transcription Factor Gene (SP8) as Susceptibility Loci for Psychotic Disorders: A Genetic Association Study. *PLoS ONE*, 8: e70964
20. Manchia M, Adli M, Akula N, Ardu R, Aubry JM, Backlund L, Banzato CE, Baune BT, Bellivier F, Bengesser S, Biernacka JM, Brichant-Petitjean C, Bui E, Calkin CV, Cheng AT, Chillotti C, Cichon S, Clark S, Czerski PM, Dantas C, Zompo MD, Depaulo JR, Detera-Wadleigh SD, Etain B, Falkai P, Fris?n L, Frye MA, Fullerton J, Gard S, Garnham J, Goes FS, Grof P, Gruber O, Hashimoto R, Hauser J, Heilbronner U, Hoban R, Hou L, Jamain S, Kahn JP, Kassem L, Kato T, Kelsoe JR, Kittel-Schneider S, Kliwicky S, Kuo PH, Kusumi I, Laje G, Lavebratt C, Leboyer M, Leckband SG, L?pez Jaramillo CA, Maj M, Malafosse A, Martinsson L, Masui T, Mitchell PB, Mondimore F, Monteleone P, Nallet A, Neuner M, Nov?k T, O'Donovan C, Osby U, Ozaki N, Perlis RH, Pfennig A, Potash JB, Reich-Erkelenz D, Reif A, Reininghaus E, Richardson S, Rouleau GA, Rybakowski JK, Schalling M, Schofield PR, Schubert OK, Schweizer B, Seem?ller F, Grigoriu-Serbanescu M, Severino G, Seymour LR, Slaney C, Smoller JW, Squassina A, Stamm T, Steele J, Stopkova P, Tighe SK, Tortorella A, Turecki G, Wray NR, Wright A, Zandi PP, Zilles D, Bauer M, Rietschel M, McMahon FJ, Schulze TG, Alda M (2013) Assessment of Response to Lithium Maintenance Treatment in Bipolar Disorder: A Consortium on Lithium Genetics (ConLiGen) Report. *PLoS ONE*, 8: e65636
21. Balan S, Yamada K, Iwayama Y, Toyota T, Ohnishi T, Maekawa M, Toyoshima M, Iwata Y, Suzuki K, Kikuchi M, Ujike H, Inada T, Kunugi H, Ozaki N, Iwata N, Nanko S, Kato T, Yoshikawa T (2013) Lack of association of EGR2 variants with bipolar disorder in Japanese population. *Gene*, 526: 246-250
22. Esposito G, Yoshida S, Ohnishi R, Tsuneoka Y, Rostagno Mdel C, Yokota S, Okabe S, Kamiya K, Hoshino M, Shimizu M, Venuti P, Kikusui T, Kato T, Kuroda KO (2013) Infant Calming Responses during Maternal Carrying in Humans and Mice. *Current Biology*, 23: 739-745
23. Tsuneoka Y, Maruyama T, Yoshida S, Nishimori K, Kato T, Numan M, Kuroda KO (2013) Functional, anatomical, and neurochemical differentiation of medial preoptic area subregions in relation to maternal behavior in the mouse. *Journal of Comparative Neurology* 521: 1633-63.
24. Nishioka M, Shimada T, Bundo M, Ukai W, Hashimoto E, Saito T, Kano Y, Sasaki T, Kasai K, Kato T, Iwamoto K (2013) Neuronal cell-type specific DNA methylation patterns of the Cacna1c gene. *International Journal of Developmental Neuroscience* 31: 89-95
25. Yoshinaga T, Hashimoto E, Ukai W, Ishii T, Shirasaka T, Kigawa Y, Tateno M, Kaneta H, Watanabe K, Igarashi T, Kobayashi S, Sohma H, Kato T, Saito T (2013) Effects of atelocollagen on neural stem cell function and its migrating capacity into brain in psychiatric

disease model. *Journal of neural transmission*, 120: 1491-1498

26. Kazuno A, Ohtawa K, Otsuki K, Usui M, Sugawara H, Okazaki Y, Kato T (2013) Proteomic analysis of lymphoblastoid cells derived from monozygotic twins discordant for bipolar disorder: a preliminary study. *PLoS ONE*, 8: e53855
27. Takata A, Iwayama Y, Fukuo Y, Ikeda M, Okochi T, Maekawa M, Toyota T, Yamada K, Hattori E, Ohnishi T, Toyoshima M, Ujike H, Inada T, Kunugi H, Ozaki N, Nanko S, Nakamura K, Mori N, Kanba S, Iwata N, Kato T, Yoshikawa T (2013) A Population-Specific Uncommon Variant in *GRIN3A* Associated with Schizophrenia. *Biological Psychiatry*, 73: 532-539
28. Bundo M, Sunaga F, Ueda J, Kasai K, Kato T, Iwamoto K (2012) A systematic evaluation of whole genome amplification of bisulfite-modified DNA. *Clinical Epigenetics*, 4: 22
29. Kishi T, Ichinose H, Yoshimura R, Fukuo Y, Kitajima T, Inada T, Kunugi H, Kato T, Yoshikawa T, Ujike H, Musso GM, Umene-Nakano W, Nakamura J, Ozaki N, Iwata N (2012) GTP cyclohydrolase 1 gene haplotypes as predictors of SSRI response in Japanese patients with major depressive disorder. *Journal of affective disorders. Journal of Affective Disorders*, 142: 315-322
30. Yu CC, Furukawa M, Kobayashi K, Shikishima C, Cha PC, Sese J, Sugawara H, Iwamoto K, Kato T, Ando J, Toda T (2012) Genome-wide DNA methylation and gene expression analyses of monozygotic twins discordant for intelligence levels. *PLoS ONE*, 7: e47081
31. Matsunaga S, Ikeda M, Kishi T, Fukuo Y, Aleksic B, Yoshimura R, Okochi T, Yamanouchi Y, Kinoshita Y, Kawashima K, Umene-Nakano W, Inada T, Kunugi H, Kato T, Yoshikawa T, Ujike H, Nakamura J, Ozaki N, Kitajima T, Iwata N (2012) An evaluation of polymorphisms in casein kinase 1 delta and epsilon genes in major psychiatric disorders. *Neuroscience Letters*, 529: 66-69.
32. Kishi T, Yoshimura R, Fukuo Y, Kitajima T, Okochi T, Matsunaga S, Inada T, Kunugi H, Kato T, Yoshikawa T, Ujike H, Umene-Nakano W, Nakamura J, Ozaki N, Serretti A, Correll CU, Iwata N (2011) The *CLOCK* gene and mood disorders: A case-control study and meta-analysis. *Chronobiology International*, 28: 825-833
33. Sugawara H, Iwamoto K, Bundo M, Ueda J, Miyauchi T, Komori A, Kazuno A, Adati N, Kusumi I, Okazaki Y, Ishigooka J, Kojima T, Kato T (2011) Hypermethylation of serotonin transporter gene in bipolar disorder detected by epigenome analysis of discordant monozygotic twins. *Translational Psychiatry*, 1, e24
34. Takata A, Kato M, Nakamura M, Yoshikawa T, Kanba S, Sano A, Kato T (2011) Exome sequencing identifies a novel missense variant in *RRM2B* associated with autosomal recessive progressive external ophthalmoplegia. *Genome Biology* 12: R92
35. Kato T, Hayashi-Takagi A, Toyota T, Yoshikawa T, Iwamoto K (2011) Gene expression analysis in lymphoblastoid cells as a potential biomarker of bipolar disorder. *Journal of*

36. Yamada K, Iwayama Y, Hattori E, Iwamoto K, Toyota T, Ohnishi T, Ohba H, Maekawa M, Kato T, Yoshikawa T (2011) Genome-Wide Association Study of Schizophrenia in Japanese Population. *PLoS One* 6: e20468
37. Kishi T, Fukuo Y, Kitajima T, Okouchi T, Yamanouchi Y, Kinoshita Y, Kawashima K, Inada T, Kunugi H, Kato T, Yoshikawa T, Ujike H, Ozaki N, Iwata N (2011) *SIRT1* gene, schizophrenia and bipolar disorder in the Japanese population: an association study. *Genes, Brain and Behavior* 10: 257-263
38. Iwamoto K, Ueda J, Bundo M, Kojima T, Kato T (2011) Survey of the effect of genetic variations on gene expression in human prefrontal cortex and its application to genetics of psychiatric. *Neuroscience Research* 70: 238-242
39. Iwamoto K, Bundo M, Ueda J, Oldham MC, Ukai W, Hashimoto E, Saito T, Geschwind DH, Kato T (2011) Neurons show distinctive DNA methylation profile and higher interindividual variations compared with non-neurons. *Genome Research* 21: 688-696
40. Takata A, Kawasaki H, Iwayama Y, Yamada K, Gotoh L, Mitsuyasu H, Miura T, Kato T, Yoshikawa T, Kanba S (2011) Nominal association between a polymorphism in *DGKH* and bipolar disorder detected in a meta-analysis of East Asian case-control samples. *Psychiatry and Clinical Neurosciences* 65: 280-285
41. Sugawara H, Iwamoto K, Bundo M, Ueda J, Ishigooka J, Kato T (2011) Comprehensive DNA methylation analysis of human peripheral blood leukocytes and lymphoblastoid cell lines. *Epigenetics* 6: 508-515
42. Takata A, Kim SH, Ozaki N, Iwata N, Kunugi H, Inada T, Ujike H, Nakamura K, Mori N, Ahn YM, Joo EJ, Song JY, Kanba S, Yoshikawa T, Kim YS, Kato T (2011) Association of *ANK3* with bipolar disorder confirmed in East Asia. *American Journal of Medical Genetics, Part B* 156: 312-315
43. Fuke S, Kubota-Sakashita M, Kasahara T, Shigeyoshi Y, Kato T (2011) Regional variation in mitochondrial DNA copy number in mouse brain. *Biochimica et Biophysica Acta* 1807: 270-274
44. Kishi T, Okochi T, Tsunoka T, Okumura T, Kitajima T, Kawashima K, Yamanouchi Y, Kinoshita Y, Naitoh H, Inada T, Kunugi H, Kato T, Yoshikawa T, Ujike H, Ozaki N, Iwata N (2011) Serotonin 1A receptor gene, schizophrenia and bipolar disorder: An association study and meta-analysis. *Psychiatry Research* 185: 20-26
45. Takata A, Kakiuchi C, Ishiwata M, Kanba S, Kato T (2010) Behavioral and gene expression analyses in heterozygous *XBP1* knockout mice: Possible contribution of chromosome 11qA1 locus to prepulse inhibition *Neuroscience Research* 68: 250-255

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47. Inoue H, Yamasue H, Tochigi M, Suga M, Iwayama Y, Abe O, Yamada H, Rogers MA, Aoki S, Kato T, Sasaki T, Yoshikawa T, Kasai K(2010) Functional (GT)_n polymorphisms in promoter region of *N*-methyl-d-aspartate receptor 2A subunit (*GRIN2A*) gene affect hippocampal and amygdala volumes. *Genes, Brain and Behavior* 9: 269-275
48. Kubota M, Kasahara T, Iwamoto K, Komori A, Ishiwata M, Miyauchi T, Kato T (2010) Therapeutic implications of down-regulation of cyclophilin D in bipolar disorder. *International Journal of Neuropsychopharmacology* 13: 1355-1368
49. Kasahara T, Abe K, Mekada K, Yoshiki A, Kato T (2010) Genetic variation of melatonin productivity in laboratory mice under domestication. *Proceedings of the National Academy of Sciences of the United States of America* 107: 6412-6417
50. Kushima I, Aleksic B, Ito Y, Nakamura Y, Nakamura K, Mori N, Kikuchi M, Inada T, Kunugi H, Nanko S, Kato T, Yoshikawa T, Ujike H, Suzuki M, Iwata N, Ozaki N (2010) Association study of ubiquitin-specific peptidase 46 (USP46) with bipolar disorder and schizophrenia in a Japanese population. *Journal of Human Genetics* 55: 133-136
51. Abe O, Yamasue H, Kasai K, Yamada H, Aoki S, Inoue H, Takei K, Suga M, Matsuo K, Kato T, Masutani Y, Ohtomo K (2010) Voxel-based analyses of gray/white matter volume and diffusion tensor data in major depression. *Psychiatry Research* 181: 64-70
52. Bundo M, Iwamoto K, Yamada K, Yoshikawa T, Kato T (2010) Mutation screening and assessment of the effect of genetic variations on expression and RNA editing of serotonin receptor 2C in the human brain. *Psychiatry and Clinical Neurosciences* 64: 57-61
53. Sugawara H, Iwamoto K, Bundo M, Ishiwata M, Ueda J, Kakiuchi C, Ishigooka J, Kato T (2010) Effect of mood stabilizers on gene expression in lymphoblastoid cells. *Journal of Neural Transmission* 117: 155-164
54. Kuroda KO, Omthanalai VG, Kato T, Murphy NP (2010) FosB null mutant mice show enhanced methamphetamine neurotoxicity: Potential involvement of FosB in intracellular feedback signaling and astroglial function. *Neuropsychopharmacology* 35: 641-655
55. Ohtani T, Matsuo K, Kasai K, Kato T, Kato N (2009) Hemodynamic responses of eye movement desensitization and reprocessing in posttraumatic stress disorder. *Neuroscience Research*. 65: 375-383
56. Iwayama Y, Hattori E, Maekawa M, Yamada K, Toyota T, Ohnishi T, Iwata Y, Tsuchiya KJ, Sugihara G, Kikuchi M, Hashimoto K, Iyo M, Inada T, Kunugi H, Ozaki N, Iwata N, Nanko S, Iwamoto K, Okazaki Y, Kato T, Yoshikawa T (2009) Association analyses between

- brain-expressed fatty-acid binding protein (*FABP*) genes and schizophrenia and bipolar disorder. *American Journal of Medical Genetics, Part B (Neuropsychiatric Genetics)* 153B: 484-493
57. Nakatani J, Tamada K, Hatanaka F, Ise S, Ohta H, Inoue K, Tomonaga S, Watanabe Y, Chung YJ, Banerjee R, Iwamoto K, Kato T, Okazawa M, Yamauchi K, Tanda K, Takao K, Miyakawa T, Bradley A, Takumi T (2009) Abnormal behavior in a chromosome-engineered mouse model for human 15q11-13 duplication seen in autism. *Cell* 137: 1235-1246
 58. Hattori E, Toyota T, Ishitsuka Y, Iwayama Y, Yamada K, Ujiike H, Morita Y, Kodama M, Nakata K, Minabe Y, Nakamura K, Iwata Y, Takei N, Mori N, Naitoh H, Yamanouchi Y, Iwata N, Ozaki N, Kato T, Nishikawa T, Kashiwa A, Suzuki M, Shioe K, Shinohara M, Hirano M, Nanko S, Akahane A, Ueno M, Kaneko N, Watanabe Y, Someya T, Hashimoto K, Iyo M, Itokawa M, Arai M, Nankai M, Inada T, Yoshida S, Kunugi H, Nakamura M, Iijima Y, Okazaki Y, Higuchi T, Yoshikawa T (2009) Preliminary genome-wide association study of bipolar disorder in the Japanese population. *American Journal of Medical Genetics, Part B (Neuropsychiatric Genetics)* 150B: 8 1110-1117
 59. Washizuka S, Iwamoto K, Kakiuchi C, Bundo M, Kato T (2009) Expression of mitochondrial complex I subunit gene *NDUFV2* in the lymphoblastoid cells derived from patients with bipolar disorder and schizophrenia. *Neuroscience Research* 63: 199-204
 60. Kakiuchi C, Ishigaki S, Osowski CM, Fonseca SG, Kato T, Urano F (2009) Valproate, a mood stabilizer, induces *WFS1* expression and modulates its interaction with ER stress protein *GRP94*. *PLoS One* 4: e4134
 61. Hayashi A, Kasahara T, Kametani M, Toyota T, Yoshikawa T, Kato T (2009) Aberrant endoplasmic reticulum stress response in lymphoblastoid cells from patients with bipolar disorder. *International Journal of Neuropsychopharmacology* 12: 33-43
 62. Kazuno A, Munakata K, Mori K, Nanko S, Kunugi H, Nakamura K, Mori N, Yamada K, Yoshikawa T, Kato N, Kato T (2009) Mitochondrial DNA haplogroup analysis in patients with bipolar disorder. *American Journal of Medical Genetics, Part B (Neuropsychiatric Genetics)* 150B: 243-247
 63. Oldham MC, Konopka G, Iwamoto K, Langfelder P, Kato T, Horvath S, Geschwind DH (2008) Functional organization of the transcriptome in human brain. *Nature Neuroscience* 11: 1271 – 1282
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Invited Lectures (Selected 10 recent presentations)

- 1) Kato T (2016) Neurobiological basis of bipolar disorder: toward novel strategies for drug development. CINP2016 Morning Seminar Seoul, July 4/2016
- 2) Kato T (2016) Neurobiology of Bipolar Disorder: mitochondrial hypothesis and beyond. Symposium "Mitochondrial bioenergetics and genetics in bipolar disorder". International Society of Bipolar Disorder 2016 Symposium. July 15/2016, Amsterdam
- 3) Kato T, Matoba N, Kataoka M, Fujii K (2014) Exome analysis in trio families of bipolar disorder. 22nd World Congress of Psychiatric Genetics, Denmark, Copenhagen, Oct. 12-16
- 4) Kato T (2014) Development of mood stabilizers based on mitochondrial dysfunction hypothesis of bipolar disorder. 29th CINP World Congress of Neuropsychopharmacology, Canada, Vancouver, June 22-26
- 5) Kato T (2014) Neurobiological basis of bipolar disorder. **Keynote Lecture**, 16th annual conference of the international society for bipolar disorders, South Korea, Seoul, Mar. 18-21

- 6) Kato T (2013) Neurobiology of bipolar disorder. Toward development of new mood stabilizers. **Plenary Lecture**, CINP 2013 Thematic Meeting, Jerusalem, Israel, April 22
- 7) Kato T (2011) Neurobiology of bipolar disorder. **Plenary Lecture** at 10th World Congress of Biological Psychiatry, Prague, Czech Republic, May 29-June 2
- 8) Kato T (2011) Brain DNA Methylomes: Cell-specific Regulation, Subject-Specific Signatures, and Potential Changes in Bipolar Disorder. Symposium at the Society of Biological Psychiatry 66th Annual Meeting, San Francisco, USA, May 12-14
- 9) Kato T (2010) Neural basis of bipolar disorder-like phenotypes in mice accumulating deleted mitochondrial DNA. Symposium at American College of Neuropsychopharmacology (ACNP), Miami, USA, Dec. 5-9
- 10) Kato T (2010) Neurobiology of bipolar disorder. **Plenary Lecture** at 4th Annual Scientific Meeting (ASM) of Hong Kong Society of Biological Psychiatry, Hong Kong, China, Jan.8-9

Other publications

256 review/original articles in Japanese

10 books in Japanese