

CURRICULUM VITAE

Lei Yu

ADDRESSES

Rutgers University
Department of Genetics, and
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EDUCATION

- 4/1987 Ph.D. **Biology**
California Institute of Technology
Pasadena, California
- 6/1981 M.S. **Molecular Genetics**
Institute of Genetics, National Academy of Sciences
Beijing, China
- 8/1979 B.S. **Industrial Fermentation**
Jiangnan University
Wuxi, China

ACADEMIC APPOINTMENTS

- 2005 - present **Distinguished Professor**
Department of Genetics, and
Center of Alcohol & Substance Use Studies
Rutgers University
Piscataway, New Jersey
- 1997 - 2005 **Professor**
Department of Cell Biology, Neurobiology and Anatomy
University of Cincinnati College of Medicine
Cincinnati, Ohio

- 1997 - 2005 **Professor (Adjunct)**
Department of Psychiatry
University of Cincinnati College of Medicine
Cincinnati, Ohio
- 1995 - 1997 **Professor**
Department of Medical and Molecular Genetics
Indiana University School of Medicine
Indianapolis, Indiana
- 1993 - 1995 **Associate Professor**
Department of Medical and Molecular Genetics
Indiana University School of Medicine
Indianapolis, Indiana
- 1988 - 1993 **Assistant Professor**
Department of Medical and Molecular Genetics
Indiana University School of Medicine
Indianapolis, Indiana
- 1987 - 1988 **Del Webb Postdoctoral Research Fellow**
Division of Biology
California Institute of Technology
Pasadena, California

PROFESSIONAL EXPERIENCE

National

- 2014 - 2016 **Chair, ZDA1 JXR-G Grant Review Committee**
National Institute on Drug Abuse
National Institutes of Health
- 2007 **CEBRA grant program reviewer**
National Institute on Drug Abuse
National Institutes of Health
- 2006 - 2014 **Center Grant Review Committee**
National Institute on Drug Abuse
National Institutes of Health

- 2006 **Program Project Grant Review Committee**
National Institute on Drug Abuse
National Institutes of Health
- 2006 **Special Grant Review Committee for Epigenetic Studies**
National Institute on Drug Abuse
National Institutes of Health
- 2005 **General Clinical Research Center Site Visit Subcommittee**
National Center for Research Resources
National Institutes of Health
- 2004 **Biomedical Research Review Subcommittee**
National Institute on Alcohol Abuse and Alcoholism
National Institutes of Health
- 2004
Section **Biophysics of Synapses, Channels, and Transporters Study**
Center for Scientific Review
National Institutes of Health
- 2002 - 2003 **Special Molecular Imaging Study Section**
Center for Scientific Review
National Institutes of Health
- 2002 **CEBRA grant program reviewer**
National Institute on Drug Abuse
National Institutes of Health
- 1996 - 1999 **National Advisory Council on Drug Abuse**
National Institutes of Health
- 1996 - 1999 **Board of Scientific Counselors**
Representative of NIDA Council
Intramural Research Program
National Institute on Drug Abuse
National Institutes of Health
- 1996 - 1997 **Blue Ribbon Panel for Review of Intramural Research at NIDA**
National Institutes of Health
- 1994 - 1995 **Extramural Science Advisory Board**
National Institute on Drug Abuse

National Institutes of Health

1994 **Molecular, Cellular & Chemical Neurobiology Study Section**
Center for Scientific Review
National Institutes of Health

University

2022 - 2025 Busch Advisory Committee
Rutgers University

2018 - 2024 Core Requirements Committee
School of Arts & Sciences
Rutgers University

2011 - 2024 New Brunswick Faculty Council
Rutgers University

2011 - 2024 Curriculum, Teaching, and Honors Committee
New Brunswick Faculty Council
Rutgers University

2022 - 2023 Denise Hien Promotion to Distinguished Professor Committee
Graduate School of Applied & Professional Psychology
Rutgers University

2022 - 2023 Tara Matise Promotion to Distinguished Professor Committee
School of Arts & Sciences
Rutgers University

2022 Matthew Lee Reappointment Committee
Department of Applied Psychology
Graduate School of Applied & Professional Psychology
Rutgers University

2021 Gary Heiman Promotion Reading Committee
Department of Genetics
Rutgers University

2020 - 2021 DLS Priority Setting Project Committee
School of Arts & Sciences
Rutgers University

- 2020 Michael Sheldon NTT Evaluation Committee
Department of Genetics
Rutgers University
- 2020 Amrik Sahota NTT Evaluation Committee
Department of Genetics
Rutgers University
- 2019 Andrew Brooks NTT Reappointment Committee
Department of Genetics
Rutgers University
- 2018 – 2019 Maureen Barr Promotion to Distinguished Professor Committee
School of Arts & Sciences
Rutgers University
- 2018 – 2019 Marsha Bates Promotion to Distinguished Professor Committee
Department of Kinesiology and Health
Rutgers University
- 2017 - 2018 Michael Sheldon Mentoring & Evaluation Committee
Department of Genetics
Rutgers University
- 2016 - 2017 Faculty Search Committee
Department of Genetics
Rutgers University
- 2016 Departmental Review Committee
Center of Alcohol Studies
Rutgers University
- 2016 Amrik Sahota Reappointment Committee
Department of Genetics
Rutgers University
- 2016 Bryce Nickels Promotion Reading Committee
Department of Genetics
Rutgers University
- 2015 Chair, Marsha Bates Promotion to Distinguished Professor
Committee

- Rutgers University
- 2014 Linda Brzustowicz Promotion to Distinguished Professor
Committee
Rutgers University
- 2011 - 2018 Undergraduate Study and Advising Committee
Department of Genetics
Rutgers University
- 2011 - 2016 Faculty Advisory Board
Office of Technology Commercialization
Rutgers University
- 2011 - 2012 Bryce Nickels Mentoring Committee
Department of Genetics
Rutgers University
- 2010 - 2019 Academic Affairs Committee
Center of Alcohol Studies
Rutgers University
- 2010 Helene White Promotion to Distinguished Professor Committee
Rutgers University
- 2010 Derek Gordon Tenure Committee
Department of Genetics
Rutgers University
- 2010 Eun Young Mun Promotion and Tenure Committee
Center of Alcohol Studies
Rutgers University
- 2009 - 2012 Teaching Effectiveness Committee
Department of Genetics
Rutgers University
- 2009 - 2016 Chair, Biomedical Research Advisory Committee
Busch Biomedical Grant Program
Rutgers University
- 2009 - 2017 Committee for Appointments and Promotions to Distinguished Professor
SAS

- Rutgers University
- 2009 - 2016 Faculty Compensation Peer Evaluation Committee (FCP)
Center of Alcohol Studies
Rutgers University
- 2009 Elizabeth Epstein Promotion Committee
Center of Alcohol Studies
Rutgers University
- 2008 - 2009 Derek Gordon Mentoring Committee
Department of Genetics
Rutgers University
- 2007 - 2014 Molecular Biosciences Graduate Recruitment Committee
Rutgers University and UMDNJ
- 2007 - 2012 Institutional Animal Care and Use Committee (IACUC)
Rutgers University
- 2007 - 2011 Curriculum and Assessment Committee
Department of Genetics
Rutgers University
- 2007 Chair
Terry McGuire Promotion Reading Committee
Department of Genetics
Rutgers University
- 2006 - 2008 Advisory Committee for Appointments and Promotions to Professor II
School of Arts and Sciences
Rutgers University
- 2006 Fundraising Committee
Department of Genetics
Rutgers University
- 2005 - 2007 Faculty Search Committee
Department of Genetics
Rutgers University
- 2002 - 2005 Chair

- Finance Committee
Department of Cell Biology, Neurobiology and Anatomy
University of Cincinnati College of Medicine
- 2002 - 2005 Institutional Biosafety Committee
University of Cincinnati
- 2001 - 2005 Chair
Faculty-Staff Relations Committee
Department of Cell Biology, Neurobiology and Anatomy
University of Cincinnati College of Medicine
- 2001 - 2003 Chair
Space Allocation Committee
Department of Cell Biology, Neurobiology and Anatomy
University of Cincinnati College of Medicine
- 2001 - 2002 Student Stipend Committee
Neuroscience Graduate Program
University of Cincinnati
- 2000 - 2001 Centers of Excellence Task Force on Neurobehavior Science
University of Cincinnati
- 2000 - 2001 Search Committee for X-ray crystallography faculty member
Department of Pharmacology and Cell Biophysics
University of Cincinnati College of Medicine
- 1999 - 2004 Graduate Recruiting Activity Planning Committee
Neuroscience Graduate Program
University of Cincinnati
- 1998 - 2005 Executive Committee
Department of Cell Biology, Neurobiology and Anatomy
University of Cincinnati College of Medicine
- 1998 - 2005 Reappointment, Promotion and Tenure Committee
Department of Cell Biology, Neurobiology and Anatomy
University of Cincinnati College of Medicine
- 1998 - 2002 Scottish Rite Fellowship Committee
University of Cincinnati College of Medicine

- 1998 - 1999 University Research Council
University of Cincinnati
- 1998 Subcommittee on Cell III course evaluation for neuroscience curriculum
Neuroscience Graduate Program
University of Cincinnati
- 1997 - 1998 Neuroscience Faculty Search Committee
Department of Cell Biology, Neurobiology and Anatomy
University of Cincinnati College of Medicine
- 1996 - 1997 Biomedical Research Committee
Indiana University School of Medicine
- 1995 - 1997 Committee for Student Research Program in Academic Medicine
Indiana University School of Medicine
- 1995 - 1996 Search Committee for the Chairperson of the Department of
Medical and Molecular Genetics
Indiana University School of Medicine
- 1995 - 1996 Faculty Search Committee
Department of Physiology and Biophysics
Indiana University School of Medicine
- 1994 - 1995 Review Committee for the Department of Medical and Molecular
Genetics
Indiana University School of Medicine
- 1994 - 1995 Chair
Evaluation Committee for Student Seminars
Department of Medical and Molecular Genetics
Indiana University School of Medicine
- 1994 - 1995 Seminar Coordinator
Medical and Molecular Genetics Seminar Series
Department of Medical and Molecular Genetics
Indiana University School of Medicine
- 1994 - 1997 Chair
Graduate Admissions Committee
Department of Medical and Molecular Genetics

- Indiana University School of Medicine
- 1993 - 1996 Steering Committee
Department of Physiology and Biophysics
Indiana University School of Medicine
- 1994 - 1995 Selkurt Lectureship Committee
Department of Physiology and Biophysics
Indiana University School of Medicine
- 1993 - 1994 Faculty Search Committee
Department of Physiology and Biophysics
Indiana University School of Medicine
- 1993 - 1994 Graduate Qualifying Examinations Committee
Department of Medical and Molecular Genetics
Indiana University School of Medicine
- 1992 - 1993 Seminar Coordinator
Molecular and Cellular Biophysics Seminar Series
Department of Physiology and Biophysics
Indiana University School of Medicine
- 1992 - 1993 Faculty Council
Department of Physiology and Biophysics
Indiana University School of Medicine
- 1992 Faculty Search Committee
Department of Physiology and Biophysics
Indiana University School of Medicine
- 1992 Faculty Search Committee
Department of Medical and Molecular Genetics
Indiana University School of Medicine
- 1991 - 1993 University Faculty Council
Indiana University - Purdue University Indianapolis
- 1991 - 1993 Faculty Search Committee
Institute of Psychiatric Research
Indiana University School of Medicine

- 1991 Faculty Search Committee
Department of Biochemistry and Molecular Biology
Indiana University School of Medicine
- 1990 - 1997 Chair
Student-Faculty Relations Committee
Department of Medical and Molecular Genetics
Indiana University School of Medicine
- 1990 Judging Panel
Sigma Xi Graduate Student Research Competition
Indiana University School of Medicine
- 1989 - 1991 Graduate Qualifying Examinations Committee
Department of Medical and Molecular Genetics
Indiana University School of Medicine
- 1989 - 1994 Graduate Admissions Committee
Department of Medical and Molecular Genetics
Indiana University School of Medicine
- 1989 Student Benefits Committee
Department of Medical and Molecular Genetics
Indiana University School of Medicine

REVIEWER OF SCIENTIFIC WORK FOR JOURNALS

Acta Pharmaceutica Sinica
Acta Physiologica Sinica
Addiction Biology
Alcoholism: Clinical and Experimental Research
American Journal of Human Genetics
Biomedicine & Pharmacotherapy
BioTechniques
Brain Research
Brain Research Bulletin
Experimental Neurology
European Journal of Pain
European Psychiatry

FEBS Letters
Frontiers in Psychiatry
Gene
Genomics
Human Heredity
Human Molecular Genetics
iScience
Journal of Neurochemistry
Journal of Neuroimmunology
Journal of Neurophysiology
Journal of Neuroscience
Journal of Pharmacology and Experimental Therapeutics
Journal of Pharmacy and Pharmacology
Journal of Receptor and Signal Transduction Research
Journal of Receptor Research
Life Sciences
Molecular Pain
Molecular Pharmacology
Molecular Brain Research
Mutation Research
Neuropharmacology
Neuropsychopharmacology
Neuroscience Bulletin
Neuroscience Letters
Pain
Pharmacogenetics
PLOS One
Proceedings of the National Academy of Sciences
Psychopharmacology

REVIEWER OF GRANT APPLICATIONS FOR FUNDING AGENCIES

Alzheimer's Association (USA)
American Heart Association (USA)
Cancer Research Council (United Kingdom)
French National Research Agency (ANR)
Foundation for Polish Science (Poland)
Medical Research Council (United Kingdom)

Ministry of University and of Scientific and Technological Research (Italy)
National Institutes of Health (USA)
National Medical Research Council (Singapore)
National Science Foundation (USA)
National Science Foundation of China (China)
Veteran Administration (USA)
US Army Medical Research and Materiel Command (USA)

PUBLICATIONS

Journal Articles

- Nyman J, Guo N, Sandström A, Hallberg M, Nyberg F, Yu L (2021) The amino-terminal heptapeptide of the algesic substance P provides analgesic effect in relieving chronic neuropathic pain. *Eur J Pharmacol.* 892:173820.
- Sachdeo BLY, Yu L, Giunta GM, Bello NT (2019) Binge-like eating is not influenced by the murine model of OPRM1 A118G polymorphism. *Frontiers Psychol.* 10:246. doi: 10.3389/fpsyg.2019.00246
- Zeng L, Tao Y, Hou W, Zong L, Yu L (2018) Electro-acupuncture improves psychiatric symptoms, anxiety and depression in methamphetamine addicts during abstinence: A randomized controlled trial. *Medicine* 97(34):e11905.
- Lax NC, Chen R, Leep SR, Uhrich KE, Yu L, Kolber BJ (2017) PolyMorphine provides extended analgesic-like effects in mice with spared nerve injury. *Mol. Pain* 13:1-12.
- Zou H, Liu M, Luan Y, Xie Q, Cheng Z, Zhao G, Jin M, Guo N, Jin GJ, Yu L (2017) Pattern of novel object exploration in cynomolgus monkey *Macaca fascicularis*. *J. Med. Primatol.* 46:19-24.
- Tomie A, Samuel AG, Merchant A, Yu L (2016) The effects of proximal and distal social stimulation on ethanol intake in male and female CD-1 mice. *J. Drug Alcohol Res.* 5, doi:10.4303/jdar/235949.
- Tomie A, Samuel AG, Sprung DM, Malul Y, Yu L (2015) Effects of number of cagemates on home-cage ethanol drinking during proximal cagemate drinking (PCD) procedures in male and female CD-1 mice. *Prog Neuropsychopharmacol Biol Psychiatry* 57:1-10.

- Zou H, Luan Y, Liu M, Agre LA, Buyske S, Xie Q, Cheng Z, Zhao G, Jin M, Guo N, Jin GJ, Yu L (2015) Differential behavior patterns in cynomolgus monkey *Macaca fascicularis* in home cage in response to human gaze. *J. Med. Primatol.* 44:1-11.
- Guo N, Gu X, Xie Y, Zhao J, Xie Q, Zhao G, Jin M, Zhao Z, Zou H, Zhang Y, Jin GJ, Yu L (2014) Sciatic nerve neuropathy in cynomolgus monkey *Macaca fascicularis*: Altered leg usage and peripheral nerve firing. *J. Neurol. Neurophysiol.* 5(6):247.
- Wang K, Song H, Jin M, Xiao H, Zhao G, Zou H, Yu L (2014) Chronic alcohol consumption from adolescence-to-adulthood in mice — Hypothalamic gene expression changes in insulin signaling pathway. *Alcohol* 48:571-578.
- Zou H, Wang K, Gao Y, Song H, Xie Q, Jin M, Zhao G, Xiao H, Yu L (2014) Chronic alcohol consumption from adolescence-to-adulthood in mice — Hypothalamic gene expression changes in the dilated cardiomyopathy signaling pathway. *BMC Neuroscience* 15:61.
- Tomie A, Defuria AA, Jones HA, Edwards SD, Yu L (2014) Effects of cagemate gender and the cagemate's access to ethanol on ethanol and water intake of the proximal male or the proximal female CD-1 mouse. *Alcohol* 48:73-82.
- Londono D, Chen KM, Musolf A, Wang R, Shen T, Brandon J, Herring JA, Wise CA, Zou H, Jin M, Yu L, Finch SJ, Matise TC, Gordon D (2013) A novel method for analyzing genetic association with longitudinal phenotypes. *Statistical Applications in Genetics and Molecular Biology* 12:241-261.
- Tomie A, Azogu I, Yu L (2013) Effects of naltrexone on post-abstinence alcohol drinking in C57BL/6NCRL and DBA/2J mice. *Prog Neuropsychopharmacol Biol Psychiatry* 44:240-247.
- Guo N, Gu X, Zhao J, Zhao G, Jin M, Zou H, Zhang Y, Zhao Z, Jin GJ, Yu L (2012) Maxillary nerve compression in cynomolgus monkey *Macaca fascicularis*: Altered somatic sensation and peripheral nerve firing. *BMC Neuroscience* 13:150.
- Rosario-Meléndez R, Harris CL, Delgado-Rivera R, Yu L, Uhrich KE (2012) PolyMorphine: An innovative biodegradable polymer drug for extended pain relief. *J. Controlled Release* 162:538-544.
- Tomie A, Lincks M, Nadarajah SD, Pohorecky LA, Yu L (2012) Pairings of lever and food induce Pavlovian conditioned approach of sign-tracking and goal-tracking in C57BL/6 mice. *Behav. Brain Res.* 226:571-578.

- Smelson DA, Yu L, Buyske S, Gonzalez G, Tischfield JA, Deutsch CK, Ziedonis D (2012) Genetic association of GABA-A receptor alpha-2 and mu opioid receptor with cocaine cue-reactivity: Evidence for inhibitory synaptic neurotransmission involvement in cocaine dependence. *Am. J. Addict.* 21:411-415.
- Pitchers KK, Balfour ME, Lehman MN, Richtand NM, Yu L, Coolen LM (2010) Neuroplasticity in the mesolimbic system induced by natural reward and subsequent reward abstinence. *Biol. Psych.* 67:872-879.
- Zhang M, Ji B, Zou H, Shi J, Zhang Z, Li X, Zhu H, Feng G, Jin M, Yu L, He L, Wan C (2010) Vitamin A depletion alters sensitivity of motor behavior to MK-801 in C57BL/6J mice. *Behav. Brain Funct.* 6:7-16.
- Peng G, Han M, Du Y, Lin A, Yu L, Zhang Y, Jing N (2009) SIP30 is regulated by ERK in peripheral nerve injury-induced neuropathic pain. *J. Biol. Chem.* 284:30138-30147.
- Zhang YQ, Guo N, Peng G, Han M, Raincrow J, Chiu C, Coolen LM, Wenthold RJ, Zhao ZQ, Jing N, Yu L (2009) Role of SIP30 in the development and maintenance of peripheral nerve injury-induced neuropathic pain. *Pain* 146:130-140.
- Zou H, Xie Q, Zhang M, Zhang C, Zhao G, Jin M, Yu L (2009) Chronic alcohol consumption from adolescence to adulthood in mice — effect on growth and social behavior. *Drug Alcohol Depend.* 104:119-125.
- Zou H, Zhang C, Xie Q, Zhang M, Shi J, Jin M, Yu L (2008) Low dose MK-801 reduces social investigation in mice. *Pharmacol. Biochem. Behav.* 90:753-757.
- Qi C, Zou H, Zhang R, Zhao G, Jin M, Yu L (2008) Age-related differential sensitivity to MK-801-induced locomotion and stereotypy in C57BL/6 mice. *Eur. J. Pharmacol.* 580:161-168.
- Yuan Y, Gao X, Guo N, Zhang H, Xie Z, Jin M, Li B, Yu L, Jing N (2007) rSac3, a novel Sac domain phosphoinositide phosphatase, promotes neurite outgrowth in nerve growth factor stimulated PC12 cells. *Cell Res.* 17:919-932.
- Yates JW, Meij TAJ, Sullivan JR, Richtand NM, Yu L (2007) Bimodal effect of amphetamine on motor behaviors in C57BL/6 mice. *Neurosci. Lett.* 427: 66-70.
- Qi C, Zou H, Zhang CH, Xie Q, Jin M, Yu L (2006) Effect of GNTI, a kappa opioid receptor antagonist, on MK-801-induced hyperlocomotion and stereotypy in mice. *Acta Pharmacologica Sinica* 27:1401-1408.

- Hou QL, Gao X, Lu Q, Zhang XH, Tu YY, Jin ML, Zhao G, Yu L, Jing NH, Li BM (2006) SNAP-25 in hippocampal CA3 region is required for long-term memory formation. *Biochem. Biophys. Res. Commun.* 347:955-962.
- Tang Y, Zou H, Strong JA, Cui Y, Xie Q, Zhao G, Jin M, Yu L (2006) Paradoxical effects of very low dose MK-801. *Eur. J. Pharmacol.* 537:77-84.
- Ulrich-Lai YM, Xie W, Meij JTA, Dolgas CM, Yu L, Herman JP (2006) Limbic and HPA axis function in an animal model of chronic neuropathic pain. *Physiology and Behavior* 88:67-76.
- Strong JA, Dalvi A, Revilla FJ, Sahay A, Samaha FJ, Welge JA, Gong J, Gartner M, Yue X, Yu L (2006) Genotype and smoking history affect risk of levodopa-induced dyskinesias in Parkinson's disease. *Movement Disorders* 21:654-659.
- Balfour ME, Brown JL, Yu L, Coolen LM (2006) Potential contributions of efferents from medial prefrontal cortex to neural activation following sexual behavior in the male rat. *Neuroscience* 137:1259-1276.
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- Xie W, Strong JA, Meij JTA, Zhang JM, Yu L (2005) Neuropathic pain: Early spontaneous afferent activity is the trigger. *Pain* 116:243-256.
- Jin M, Wang X, Tu YY, Zhang X, Gao X, Guo N, Xie Z, Zhao G, Jing NH, Li BM, Yu L (2005) The negative cell cycle regulator, Tob (Transducer of ErbB-2), is a multifunctional protein involved in hippocampus-dependent learning and memory. *Neuroscience* 131:647-659.
- Wu J, Zou H, Strong JA, Yu J, Zhou X, Xie Q, Zhao G, Jin M, Yu L (2005) Bimodal effects of MK-801 on locomotion and stereotypy in C57BL/6 mice. *Psychopharmacol.* 177:256-263.

- Wang XD, Kong LW, Xie ZQ, Zhang YQ, Lin ZX, Zhao ZQ, Yu L, Jing NH (2004) Identification and characterization of a rat novel gene RSEP4 expressed specifically in central nervous system. *Acta Biochim Biophys Sin (Shanghai)* 36:501-507.
- Moalem G, Xu K, Yu L (2004) T lymphocytes play a role in neuropathic pain following peripheral nerve injury in rats. *Neuroscience* 129:767-777.
- You H, Qi X, Yu L (2004) Direct AFM observation of saposin C-induced membrane domains in lipid bilayers: from simple to complex lipid mixtures. *Chem. Physics Lipids* 132:15-22.
- Hou Q, Gao X, Zhang X, Kong L, Wang X, Bian W, Tu YY, Jin M, Zhao G, Li BM, Jing NH, Yu L (2004) SNAP-25 in hippocampal CA1 region is involved in memory consolidation. *Eur. J. Neurosci.* 20:1593-1603.
- Meij JTA, Haselton CL, Hillman KL, Muralikrishnan D, Ebadi M, Yu L (2004) Differential mechanisms of nitric oxide- and peroxynitrite-induced cell death. *Mol. Pharmacol.* 66:1043-1053.
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- Balfour ME, Yu L, Coolen LM (2004) Sexual behavior and sex-associated environmental cues activate the mesolimbic system in male rats. *Neuropsychopharmacol.* 29: 718-730.
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- You H, Lau JM, Zhang S, Yu L (2000) Atomic force microscopy imaging of living cells: a preliminary study of the disruptive effect of the cantilever tip on cell morphology. *Ultramicroscopy* 82:297-305.
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- Chen Y, Liu J, Yu L (1996) Functional coupling of a μ opioid receptor to G proteins and adenylyl cyclase: modulation by chronic morphine treatment. *Addiction Biol.* 1:49-59.
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