

Curriculum Vitae

José R. Criado, Ph.D.

Work Address

Scripps Research Institute
Molecular and Integrative Neuroscience Department
10550 North Torrey Pines Road
TPC-32
La Jolla, CA 92037
Office Phone: 858-784-7452
Email: jcriado@scripps.edu

Education

1982-1985: **B.S.**, Pontifical Catholic University of Puerto Rico, Department of Psychology, Ponce, Puerto Rico. Major: Psychology.

1985-1989: **M.S.**, University of Oklahoma Health Sciences Center, Department of Psychiatry and Behavioral Sciences, Oklahoma City, Oklahoma. In: Biological Psychology. Thesis topic: *Interactions of ethanol and anesthesia on hippocampal CA3 field potentials*.

1989-1992: **Ph.D.**, University of Oklahoma Health Sciences Center, Department of Psychiatry and Behavioral Sciences, Oklahoma City, Oklahoma. In: Biological Psychology, Thesis topic: *The effects of alcohol on inhibitory mechanisms in rat hippocampal CA1 neurons in vivo*.

1992-1994: Post-doctoral **Fellow**: Research in neuropharmacology, behavioral pharmacology, microiontophoresis and electrophysiology in freely-moving animals. National Institute of Alcohol Abuse and Alcoholism Postdoctoral Trainee; The Scripps Research Institute, Alcohol Research Center, La Jolla CA; Director: Floyd E. Bloom, M.D.

2009-2010: **Master in Integrative Health (MIH)**, National University, School of Health and Human Services, San Diego, California.

Professional Experience

1991-1992: **Research Technician (Part-Time)** of Dr. Robert Beesley, Department of Physiology, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma.

1994-1997: **Research Associate**, Department of Neuropharmacology, The Scripps Research Institute, La Jolla, California.

1997-1999: **Senior Research Associate**, Department of Neuropharmacology, The Scripps Research Institute, La Jolla, California.

1999-2004: **Assistant Professor**, Department of Neuropharmacology, The Scripps Research Institute, La Jolla, California.

2004-2007: **Adjunct Assistant Professor**, Molecular and Integrative Neuroscience Department, The Scripps Research Institute, La Jolla, California.

2004-2007: **Dallas and Mary Clark Fellow in Human Neurophysiology**, Brain Research and Treatment Center, Division of Neurology, Scripps Clinic, La Jolla, California.

2007-Present: **Research Scientist**, MEG Lab, Brain Research and Treatment Center, Division of Neurology, Scripps Clinic, La Jolla, California.

2007-Present: **Staff Scientist**, Molecular and Integrative Neuroscience Department, The Scripps Research Institute, La Jolla, California.

Awards: Training/Research

Graduate and Professional Opportunity Program Fellowship: Pre-Doctoral training (Doctoral Program in Biological Psychology), University of Oklahoma Health Sciences Center, 1985-1986.

Ford Foundation Minority Pre-Doctoral Fellowship: National Research Council, Washington, D.C. (Doctoral Program in Biological Psychology), University of Oklahoma Health Sciences Center, 1986-1989.

Patricia Roberts Harris Fellow: University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma, 1989-1992.

Activities

Ad hoc Reviewer for: Alcoholism: Clinical and Experimental Research, American Journal of Alzheimer's Disease and Other Dementias; Brain Research; Cognitive Brain Research; Journal of Neuroscience; Neurobiology of Aging; Neurobiology of Learning and Memory; Neurology; Pharmacology, Biochemistry and Behavior; Sleep.

Teaching Experience

Laboratory Assistant in Experimental Psychology: Psychology courses 373-374; Department of Psychology, Catholic University of Puerto Rico, 1984 and 1985.

Laboratory Assistant in Physiological Psychology: Psychology course 340; Department of Psychology, Catholic University of Puerto Rico, 1985.

Lecturer in Applied Physiology Course (Physiology DH 3450). Teaching responsibility: Neurophysiology section, University of Oklahoma Health Sciences Center, Department of Physiology, 1990 and 1991.

Lecturer in Psychopharmacology (Psychology 564). Teaching responsibility: Entire course. San Diego State University, Department of Psychology, Spring 2003.

Lecturer in Biopsychology (Psychology 360). Teaching responsibility: Entire course. California State University- San Marcos, Fall 2006.

Affiliations

American Psychological Society
Association for Applied Psychophysiology and Biofeedback
National Hispanic Science Network on Drug Abuse, Research Scientist member

Community Outreach and Education

2008-Present: Education Component, Alcohol Research Center, Molecular and Integrative Neuroscience Department, The Scripps Research Institute, La Jolla, California.
Community outreach and education concerning the activities of the Alcohol Research Center. Presentation to parents of high school students in the San Diego area. Title of Presentation: English: "Underage Drinking". Spanish: "Consumo de Alcohol por Menores de Edad".

Bibliography

Papers

Michaelis RC, Holohean AM, **Criado JR**, Harland R, Hunter GA and Holloway FA: The Chlordiazepoxide/Pentylentetrazol discrimination: characterization of drug interactions and homeostatic responses to drug challenges. *Psychopharmacology* **96**: 15-20, 1988.

Gauvin DV, Harland RD, **Criado JR**, Michaelis RC and Holloway FA: The discriminative stimulus properties of ethanol and acute ethanol withdrawal states in rats. *Drug Alcohol Depend*, **24**: 103-113, 1989.

Gauvin DV, **Criado JR**, Moore KM and Holloway FA: Potentiation of cocaine's discriminative effects by caffeine: A time-effect analysis. *Pharmacol Biochem Behav* **36**: 195-197, 1990.

Holloway FA, Michaelis RC, Harland RD, **Criado JR** and Gauvin DV: Tolerance to Ethanol's Effects on Operant Performance in Rats: Role of Number and Pattern of Intoxicated Practice Opportunities. *Psychopharmacology*, **109**:112-120, 1992.

Criado JR, Steffensen SC, and Henriksen SJ: Ethanol acts via the ventral tegmental area to influence hippocampal physiology. *Synapse*, **17**: 84-96, 1994.

de Lecea L, Soriano E, **Criado JR**, Steffensen SC, Henriksen SJ and Sutcliffe JG: Transcripts encoding a neural membrane CD26 peptidase-like protein are stimulated by synaptic activity. *Mol Brain Res*, **25**: 286-296, 1994.

Prospéro-García O, **Criado JR**, and Henriksen SJ: Pharmacology of ethanol and glutamate antagonists on rodent sleep: a comparative study. *Pharmacol Biochem Behav*, **49(2)**: 413-416, 1994.

Criado JR and Thies R: Acute effects of ethanol on recurrent inhibitory circuits of CA1 neurons *in vivo*. *Alcohol*, **11(6)**: 533-538, 1994.

Criado JR, Lee RS, Berg G and Henriksen SJ: Sensitivity of nucleus accumbens neurons *in vivo* to intoxicating doses of ethanol. *Alcohol Clin Exp Res*, **19(1)**: 164-169, 1995.

de Lecea L, **Criado JR**, Prospéro-García O, Gautvik KM, Schweitzer P, Danielson PE, Dunlop CLM, Siggins GR, Henriksen SJ and Sutcliffe JG: Cortistatin, a cortical neuropeptide with neuronal depressant and sleep-modulating properties. *Nature*, **381**: 242-245, 1996.

Criado JR, Steffensen SC and Henriksen SJ: Microelectrophoretic application of SCH-23390 into the lateral septal nucleus blocks ethanol-induced suppression of LTP, *in vivo*, in the adult rodent hippocampus *Brain Res*, **716**: 192-196, 1996.

Ryabinin AE, **Criado JR**, Henriksen SJ, Bloom FE and Wilson MC: Differential sensitivity of c-Fos expression in hippocampus and other brain regions to moderate and low doses of alcohol. *Mol Psychiatry*, **2**: 32-43, 1997.

Criado JR, Lee RS, Berg GI and Henriksen SJ: Ethanol inhibits single-unit responses in the nucleus accumbens evoked by stimulation of the basolateral nucleus of the amygdala. *Alcohol Clin Exp Res*, **21(2)**: 368-374, 1997.

de Lecea L, del Rio JA, **Criado JR**, Alcántara S, Morales M, Henriksen SJ, Soriano E and Sutcliffe JG: Cortistatin is expressed in a distinct subset of cortical interneurons. *J Neurosci*, **17(15)**: 5868-5880, 1997.

Morales M, **Criado JR**, Sanna PP, Henriksen SJ and Bloom FE: Acute ethanol activates GABAergic neurons of the central nucleus of the amygdala. *Brain Res*, **798**: 333-336, 1998.

de Lecea L, **Criado JR**, Rivera S, Wen W, Soriano E, Henriksen S, Taylor S, Gall C and Sutcliffe JG: Endogenous protein kinase A inhibitor (PKI α) modulates synaptic activity. *J Neurosci Res*, **53**: 269-278, 1998.

Lee RS, **Criado JR**, Koob GF and Henriksen SJ: Cellular responses of nucleus accumbens neurons to opiate-seeking behavior: I. Sustained responding during heroin self-administration. *Synapse*, **33**: 49-58, 1999.

Criado JR, Li H, Jiang X, Spina M, Huitrón-Reséndiz S, Liapakis G, Calbet M, Siehler S, Henriksen SJ, Koob GF, Hoyer D, Sutcliffe JG, Goodman MH and de Lecea L: Structural and compositional determinants of cortistatin activity. *J Neurosci Res*, **56**: 611-619, 1999.

Gallegos RA, Lee RS, **Criado JR**, Henriksen SJ and Steffensen SC: Adaptive responses of γ -Aminobutyric acid neurons in the ventral tegmental area to chronic ethanol. *J Pharmacol Exp Ther*, **291**: 1045-1053, 1999.

Criado JR and Morales M: Ethanol induces c-fos immunoreactivity in pro-enkephalin expressing neurons of the central nucleus of the amygdala. *Brain Res*, **861**: 173-177, 2000.

Criado JR, Gombart LM, Huitrón-Reséndiz S and Henriksen SJ: Neuroadaptations in dentate gyrus function following repeated methamphetamine administration. *Synapse*, **37**: 163-166, 2000.

Steffensen SC, Nie Z, **Criado JR**, Siggins GR and Henriksen SJ: Ethanol inhibition of NMDA responses by activation of presynaptic GABA_B receptors. *J Pharmacol Exp Ther*, **294**: 637-647, 2000.

Sanchez-Alavez M, **Criado JR**, Gomez-Chavarin M, Jimenez-Anguiano A, Navarro L, Diaz-Ruiz O, Galicia O, Sanchez-Narvaez F, Murillo-Rodriguez E, Henriksen SJ, Elder JH, Prospero-Garcia O. HIV- and FIV-derived gp120 alter spatial memory, LTP, and sleep in rats. *Neurobiol Dis*, **7(4)**:384-394, 2000.

Bourgin P, Huitron-Resendiz S, Spier AD, Fabre V, Morte B, **Criado JR**, Sutcliffe JG, Henriksen SJ and de Lecea L: Hypocretin-1 modulates rapid eye movement sleep through activation of locus coeruleus neurons. *J Neurosci*, **20(20)**:7760-7765, 2000.

Giacchino JL, **Criado JR**, Games D and Henriksen, SJ: *In vivo* synaptic transmission in young and aged amyloid precursor protein transgenic mice. *Brain Res*, **876(1-2)**:185-190, 2000.

Thomas EA, Sautkulis LN, **Criado JR**, Games D and JG Sutcliffe: Apolipoprotein D mRNA expression is elevated in aged PDAPP transgenic mice. *J Neurochem*, **79**: 1059-1064, 2001.

Huitrón-Reséndiz S, Sánchez-Alavez M, Gallegos RA, Berg G, Battenberg E, Giacchino JL, Games D, Henriksen SJ and **Criado JR**: Age-independent and age-related functional deficits in PDAPP mice involve alterations in visuospatial learning, sleep-wake states, thermoregulation and motor activity. *Brain Res*, **928**: 126-137, 2002.

Sánchez-Alavez M, Gallegos RA, Kalafut MA, Games D, Henriksen SJ, **Criado JR**: Loss of medial septal modulation of dentate gyrus physiology in young mice overexpressing human β -amyloid precursor protein. *Neurosci Lett*, **330**: 45-48, 2002.

Samland H, Huitrón-Resendiz S, Masliah E, **Criado JR**, Henriksen SJ, Campbell IL: Profound increase in sensitivity to glutamatergic but not cholinergic agonist induced seizures in transgenic mice with astrocyte production of IL-6. *J Neurosci Res*, **73**: 176-187, 2003.

Sánchez-Alavez M, Gombart LM, Huitrón-Reséndiz S, Carr JR, Wills DN, Berg G, Campbell IL, Gauvin DV, Henriksen SJ, **Criado JR**: Physiological and behavioral effects of methamphetamine in a mouse model of endotoxemia: a preliminary study. *Pharmacol Biochem Behav*, **77**: 365-370, 2004.

Solforosi L, **Criado JR**, McGavern D, Wirz S, Sanchez-Alavez M, DeGiorgio LA, Volpe BT, Wiseman E, Abalos G, Masliah M, Oldstone MB, Conti B, Williamson A. Crosslinking cellular prion protein triggers neuronal apoptosis in vivo. *Science*. **303**: 1514-1516, 2004; published online 29 January 2004 (10.1126/science.1094273).

Winsky-Sommerer R, Spier A, Fabre V, de Lecea L, **Criado JR**: Overexpression of the human β -amyloid precursor protein downregulates cortistatin mRNA in PDAPP mice. *Brain Res*, **1023**: 157-162, 2004.

Criado JR, Sánchez-Alavez M, Conti B, Giacchino JL, Wills DN, Henriksen SJ, Manson JC, Chesebro B and Oldstone MBA: Mice devoid of prion protein have cognitive deficits that are rescued by reconstitution of PrP in neurons. *Neurobiol Dis*, **19**: 255-265, 2005.

Sánchez-Alavez M, Huitrón-Reséndiz S and **Criado JR**: Sleep/wake states in transgenic mouse models overexpressing the human β -amyloid precursor protein. *Am J Alzheimers Dis Other Demen*, **20**: 87-90, 2005.

Huitrón-Reséndiz S, Clark SD, Sánchez-Alavez M, Tyler C, Nothacker H-P, Civelli O, Leonard CS, Henriksen SJ, **Criado JR** and de Lecea L: Urotensin II modulates REM sleep through activation of brainstem cholinergic neurons. *J Neurosci*, **25**: 5465-5474, 2005.

Tallent MK, Fabre V, Qiu C, Calbet M, Lamp T, Baratta MV, Suzuki C, Levy CL, Siggins GR, Henriksen SJ, **Criado JR**, Roberts A, de Lecea L: Cortistatin overexpression in transgenic mice produces deficits in synaptic plasticity and learning. *Mol Cell Neurosci*, 30(3): 465-475, 2005.

Polich J, **Criado JR**: Neuropsychology and Neuropharmacology of P3a and P3b. *Int J Psychophysiol*, 60(2): 172-185, 2006.

Amo C, **Criado JR**, Otis SM: MEG Recording from secondary motor areas during motor imagined movements. *Arq Neuropsiquiatr*, 64(2): 394-397, 2006.

Sánchez-Alavez M, Chan L, Mattson MP, **Criado JR**: Electrophysiological and cerebrovascular effects of α -secretase-derived form of amyloid precursor protein in young adult and middle-aged rats. *Brain Res*, 1131(1): 112-117, 2007.

Ehlers CL, Phillips E, Finnerman G, Gilder D, Lau P, **Criado JR**: P3 components and adolescent binge drinking in Southwest California Indians. *Neurotoxicol Teratol*, 29(1):153-163, 2007.

Criado JR, Amo C, Quint P, Kurelowech L, Otis SM: Using magnetoencephalography to study patterns of brain magnetic activity in Alzheimer's disease. *Am J Alzheimers Dis Other Demen*, 21(6): 416-423, 2007.

Sánchez-Alavez M, Conti B, Moroncini G, **Criado JR**: Contribution of neuronal prion protein on sleep recovery and stress response following sleep deprivation. *Brain Res*, 1158: 71-80, 2007.

Bourgin P, Fabre V, Huitrón-Reséndiz S, Henriksen SJ, Prospero-García O, **Criado JR**, de Lecea L: Cortistatin promotes and negatively correlates with slow-wave sleep. *Eur J Neurosci*, 26(3): 729-738, 2007.

Criado JR, Ehlers CL: Electrophysiological Responses to Affective Stimuli in Southwest California Indians: Relationship to Alcohol Dependence. *J Stud Alcohol Drugs*, 68(6): 813-823, 2007.

Criado JR, Ehlers CL: Electrophysiological Responses to Affective Stimuli in Mexican-Americans: Relationship to Alcohol Dependence and Personality Traits. *Pharmacol Biochem Behav*, 88(2): 148-157, 2007.

Pian JP, **Criado JR**, Walker BM, Ehlers CL: Differential effects of acute alcohol on EEG and sedative responses in adolescent and adult Wistar rats. *Brain Res*, 1194: 28-36, 2008.

Sanchez-Alavez M, **Criado JR**, Klein I, Moroncini G, Conti B: Hypothalamic-Pituitary-Adrenal Axis Disregulation in PrP^c-Null Mice. *Neuroreport*, 19(15): 1473-1477, 2008.

Criado JR, Wills DN, Walker BM, Ehlers CL: Electrophysiological effects of dizocilpine (MK-801) in adult rats exposed to ethanol during adolescence. *Alcohol Clin Exp Res*, 32(10): 1752-1762, 2008.

Pian JP, **Criado JR**, Walker BM, Ehlers CL: Differential effects of acute alcohol on prepulse inhibition and event-related potentials in adolescent and adult Wistar rats. *Alcohol Clin Exp Res*, 32(12): 2062-2073, 2008.

Criado JR, Wills DN, Walker BM, Ehlers CL: Effects of adolescent ethanol exposure on sleep in adult rats. *Alcohol*, 42(8): 631-639, 2008.

Steffensen SC, Walton CH, Hansen DM, Yorgason JT, Gallegos RA, **Criado JR**: Contingent and non-contingent effects of low-dose ethanol on GABA neuron activity in the ventral tegmental area. *Pharmacol, Biochem Behav*, 92(1): 68-75, 2009.

Ehlers CL, **Criado JR**: Event-related oscillations in mice: Effects of stimulus characteristics. *J Neurosci Methods*, 181(1): 52-57, 2009.

Kinney JW, Sanchez-Alavez M, Barr AM, **Criado JR**, Crawley JN, Behrens MM, Henriksen SJ, Bartfai T: Impairment of Memory Consolidation by Galanin Correlates with In-Vivo Inhibition of Both LTP and CREB Phosphorylation. *Neurobiol Learn Mem*, 92(3): 429-438, 2009.

Criado JR Ehlers CL: Event-related oscillations (EROs) as risk markers in genetic mouse models of high alcohol preference. *Neuroscience*, 163(2): 506-523, 2009.

Pian JP, **Criado JR**, Walker BM, Ehlers CL: Milk Consumption During Adolescence Decreases Alcohol Drinking in Adulthood. *Pharmacol Biochem Behav*, 94(1): 179-185, 2009.

Ehlers CL, Gilder DA, **Criado JR**, Caetano R: Acculturation stress, anxiety disorders, and alcohol dependence in a select population of young adult Mexican Americans. *Journal of Addiction Medicine*, 3(4): 227-233, 2009.

Ehlers CL, **Criado JR**: Adolescent ethanol exposure: does it produce long lasting electrophysiological effects? *Alcohol*, 44(1): 27-37, 2010.

Criado JR, Ehlers CL: Effects of adolescent ethanol exposure on event-related oscillations (EROs) in the hippocampus of adult rats. *Behavioural Brain Research*, 210(2): 164-170, 2010.

Criado JR, Ehlers CL: Event-related oscillations (EROs) in the parietal cortex of adult alcohol-preferring (P) and alcohol-nonpreferring (NP) rats. *Alcohol*, 44(4): 335-342, 2010.

Pian JP, **Criado JR**, Milner R, Ehlers CL: NMDAR subunit expression in adult and adolescent brain following chronic ethanol exposure. *Neuroscience*, 170(2): 645-654, 2010.

Ehlers CL, Gilder DA, **Criado JR**, Caetano R: Sleep quality and alcohol-use disorders in a select population of young-adult Mexican americans. *J Stud Alcohol Drugs*, 71(6): 879-884, 2010.