

# Clever Sys Product References

## (1) HomecageScan References

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### HomeCageScan Poster Presentations

A. L. Miller, J. V. Roughan, P. A. Flecknell, Comparative Biology Ctr., Newcastle Univ., Newcastle upon Tyne, United Kingdom BEHAVIOURAL POST-OPERATIVE PAIN ASSESSMENT IN MICE - A COMPARISON OF TWO METHODS OF VASECTOMY, 13<sup>th</sup> World Congress on Pain, Montreal, September 2010.

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## (2) TopScan References

### (2.1) TopScan as a suite

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## (2.2) ObjectScan and LocoScan

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## **(6) DrugEffectScan**

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## (7) FreezeScan and Empathy Test

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G. L. KNAACK, C. G. MCDONALD, J. M. FLINN; The effects of chronic unpredictable stress on the ability to extinguish fear: Zinc as a mediator, SFN 2010, San Diego.

N. PADILLA, D. SIERRA-MERCADO, G. J. QUIRK, The roles of the ventral hippocampus and mediodorsal thalamus in fear expression and extinction, SFN 2010, San Diego.

J. B. PANKSEPP, G. P. LAHVIS, Mapping the adolescent mouse social brain with F18-flurodeoxyglucose, SFN 2010, Dan Diego.

B. KENNEDY, J. B. PANKSEPP, G. P. LAHVIS, Effects of social experience on place preference conditioning to morphine in juvenile mice, SFN 2010, Dan Diego.

R. HAVEKES, T. HUANG, T. NIE, A. PARK, L. GUERCIO, J. HAWK, J. WASSERMAN, B. ACAR, Q. GRIMES, T. ABEL, Loss of the alpha isoform of the A-kinase anchoring protein gravin impairs  $\beta$ 2 adrenergic receptor mediated hippocampal synaptic plasticity and memory, SFN2010, San Diego.

G. L. KNAACK, T. J. PEREZ CASILLAS, T. L. MICHELI, E. T. BROWN, S. C. ERCHOV, Y. B. LIM, J. M. FLINN; The effects of supplemented zinc on the extinction of conditioned fear in older rats SFN2009, Chicago.

M. A. WILSON, K. A. KAIGLER, R. BUTLER, J. PARRILLACARRERO, L. A. SMITH, J. ZHANG, S. P. WILSON, J. FADEL; The role of amygdalar mu opioid receptors in unconditioned and conditioned anxiety responses SFN2009, Chicago.

G. LI, D. PARE, G. J. QUIRK, S. S. NAIR; Biophysical modeling of the amygdale network in acquisition and extinction of conditioned fear, SFN 2009 Chicago.

A. ROUGEMONT-BUECKING, C. LINNMAN, K. LEBRONMILAD, J. RODRIGUEZ-ROMAGUERA, R. K. PITMAN, M. R. MILAD; Context recognition during extinction recall and fear renewal in PTSD: An fMRI study, SFN 2009 Chicago.

J. L. PETERS, L. DIEPPA, G. J. QUIRK; BDNF infused into infralimbic cortex "simulates" extinction memory, SFN 2009 Chicago.

M. T. SEPULVEDA-ORENGO, A. V. LOPEZ, G. J. QUIRK, J. T. PORTER; Extinction of conditioned fear increases the AMPA/NMDA ratio in infralimbic neurons, SFN 2009 Chicago.

F. SOTRES-BAYON, D. SIERRA-MERCADO, G. J. QUIRK; Amygdala input to medial prefrontal cortex is necessary for excitatory drive and conditioned tone responses, but not bursting SFN 2009, Chicago.

D. SIERRA-MERCADO, N. PADILLA- COREANO, G. J. QUIRK; Dissociable roles of prelimbic and infralimbic cortices in fear expression and extinction, respectively SFN 2009, Chicago.

- S. PENDYAM, A. BURGOS-ROBLES, G. J. QUIRK, S. S. NAIR; The role of prelimbic prefrontal neurons in the expression of conditioned auditory fear - A computational study SFN 2009, Chicago.
- S. IGOE, K. MILAD, M. MILAD; Estrogen and progesterone receptors antagonists impair extinction of auditory fear conditioning.
- Bergstrom, H. C., McDonald, C.G., & Smith, R.F. (2007, November). Adolescent nicotine exposure enhances extinction of fear conditioning in adult rat. Presented at SFN, San Diego, CA.
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- Burgos-Robles, A., Vidal-Gonzalez, I., Peters, J., & Quirk, G.J. (2008, November). Food reward increases burst firing in infralimbic prefrontal neurons, but does not facilitate consolidation of fear extinction. Presented at SFN, Washington, DC.
- Burns, A. J., Micheli, T.L., Groeber, C.M., Gideons, E.S., Railey, A.M., & Flinn, J.M. (2008, November). Fear conditioning as a measure of memory in the Tg2576 mouse model of Alzheimer's disease: A study of metal amyloid plaque deposition, and behavior. Presented at SFN, Washington, DC.
- Chadderton, R., Quirk, G.J., & Thompson, K.J. (2007, November). Exposure to the Morris water maze selectively enhances contextual fear conditioning and decreases BDNF expression in hippocampus. Presented at SFN, San Diego, CA.
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- Filmartin, M. R., & Helmstetter, F.J. (2008, November). Activation of the mammalian target of rapamycin (mTOR) signaling pathway in the medial prefrontal cortex following trace fear conditioning. Presented at SFN, Washington, DC.
- Fontanez-Nuin, D. E., Santini, E., Quirk, G.J., Porter, J.T. (2007, November). Metabotropic glutamate receptors (mGluR5) modulate the intrinsic excitability of infralimbic neurons and memory for fear extinction. Presented at SFN, San Diego, CA.
- Gafford, G. M., Parsons, R.G., & Helmstetter, F.J. (2008, November). Expression of PP1 and the mTOR signaling pathway after retrieval of recent and remote context fear memory. Presented at SFN, Washington, DC.
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- Lee, T., & Helmstetter, F.J. (2008, November). Plasticity in sensory pathways following Pavlovian fear conditioning: an fMRI study in the rat. Presented at SFN, Washington, DC.

- Liston, C.M., Sepulveda-Orengo, M., Miller, M.M., Hof, P.R., Morrison, J.H., McEwen, B.S., & Quirk, G.J. (2006, October). The effects of chronic and acute restraint stress on extinction of conditioned fear. Presented at SFN, Atlanta, GA.
- Lonergan, M. E., & Helmstetter, F.J. (2008, November). Acute corticosterone treatment following fear memory retrieval has divergent results dependent upon the length of the retrieval session. Presented at SFN, Washington, DC.
- Madsen, T. E., Guillory, L.C., Mayberg, H.S., & Rainnie, D.G. (2008, November). Deep brain stimulation targeting the rat infralimbic cortex modulates neuronal activity and local field potential oscillations in the basolateral amygdala. Presented at SFN, Washington, DC.
- Marcus, J. N., Caniga, M., Dillon, G., Menon, M.K., & Dodart, J.C. (2008, November). Age-dependant cognitive and histopathological deficits in rTg4510 mice. Presented at SFN, Washington, DC.
- Micheli, T., Burns, A., Fitzgerald, A., & Flinn, J. (2007, May). Cognitive deficits associated with enhanced zinc consumption, and the role of copper. Presented at the Association for Psychological Science, Washington, D.C.
- Micheli, T. L., Mozgova, O.I., Freese, A.L., Coleman, K., Nguyen, T., Railey, A.M., & Flinn, J.M. (2008, November). Behavioral and histological assessment following pre- and post-natal zinc. Presented at SFN, Washington, DC.
- Milad, K., Novales, J., Contero, A., Pitman, R.K., Klibanski, A., Rauch S., Goldstein, J.M., & Milad, M.R. (2008, November). Sex differences in conditioned fear extinction: rat and human studies. Presented at SFN, Washington, DC.
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- Railey, A. M., Smith, L.N., Morgan, K., Veejay, M., Fitzgerald, A., Micheli, T.L., Flinn, J.M., Wanschura, P., Jones, B.F., & Chrosniak, L.D. (2006, October). Cognitive effects of long term enhanced dietary zinc consumption: Modulation by copper. Presented at SFN, Atlanta, GA.
- Santini, E., Quirk, G.J., & Porter, J.T. (2006, October). Extinction reverses the conditioning-induced depression of infralimbic neuronal excitability. Presented at SFN, Atlanta, GA.

## (8) PrimateScan

### Journal Papers

Can V.M., Hori E., Rafael M., Ono T., Nishijo H.: A primate model of schizophrenia using chronic PCP treatment. Rev Neurosci, 19: 83-89, 2008.

### Presentations

Nishijo, H., Mao, C.V., Hori, E., Maior, R., Suzuki, M., Tuda, M., & Ono, T. (2007, June), A role of the amygdala in onset of schizophrenia: Neurophysiological and pharmacological analyses. Paper presented at the Satellite Symposium "Primate Models for Psychiatric Disorder", International Behavioral Neuroscience, Joao Pessoa, Brazil.

## (9) SeizureScan

### Journal Papers

Ermolinsky, B., Arshadmansab, M. F., Pacheco Otalora, L. F., Zarei, M. M., & Garrido-Sanabria, E. R. (2008). Deficit of Kcnma1 mRNA expression in the dentate gyrus of epileptic rats. *Neuroreport*, 19(13), 1291-1294.

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Garrido-Sanabria, E. R., Otalora, L. F., Arshadmansab, M. F., Herrera, B., Francisco, S., & Ermolinsky, B. S. (2008). Impaired expression and function of group II metabotropic glutamate receptors in pilocarpine-treated chronically epileptic rats. *Brain Research*, 1240, 165-176.

Pacheco Otalora, L. F., Hernandez, E. F., Arshadmansab, M. F., Francisco, S., Willis, M., Ermolinsky, B., et al. (2008). Down-regulation of BK channel expression in the pilocarpine model of temporal lobe epilepsy. *Brain Research*, 1200, 116-131.

Pacheco Otalora, L. F., Moffett, J.R., & Garrido-Sanabriaam, E.R. (2007). Selective vulnerability of hippocampal NAAGergic neurons in experimental temporal lobe epilepsy. *Brain Research*, 1144, 219-230.

### SeizureScan Poster Presentations

Ali, A., Grabenstatter, H., & Dudek, F.E. (2007, November). A video based real-time automated seizure detection and classification system: An accuracy analysis. Paper presented at the AES Annual Meeting, Philadelphia, PA.

## (10) AnnoStar

### Poster Presentations

Dana L. Helmreich, Daniel Tylee, Thyroid hormone regulation by stress and behavioral differences in adult male rats, *Hormones and Behavior*. Volume 60, Issue 3, August 2011, Pages 284-291.

Hohmann, C., & Hodges, A. (2007, June), Interactions of neonatal stress and maternal care behavior: Development of the corticosterone response system and possible modulation via serotonin. Presented at the IBNS, Rio de Janeiro, Brazil.

Krasnova, I. N., Hodges, A.B., Ladenheim, B., Rhoades, R., Ogbonna, E.I., Huntley, P., Hohmann, C.F., & Cadet, J.L. (2007, November), Neurotoxic doses of methamphetamine cause cognitive abnormalities in mice. Presented at SFN, San Diego, CA.

## (11) GroupScan

John Chen, Roshni Patel, Theodore C. Friedman, and Kevin S. Jones, The Behavioral and Pharmacological Actions of NMDA Receptor Antagonism are Conserved in Zebrafish Larvae, *Int J Comp Psychol*. 2010; 23(1): 82–90.

Pedro Fernandez-Funez, Yan Zhang, Sergio Casas-Tinto, Xiangzhu Xiao, Wen-Quan Zou, and Diego E. Rincon-Limas, Sequence-dependent Prion Protein Misfolding and Neurotoxicity, *J. Biol. Chem.*, Nov 2010; 285: 36897 - 36908.

## (12) System Development

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Liang, Y., Bai, X., & Kobla, V. (2005, July). New Behavior Paradigms, New Parameters, and New Technologies. Paper presented at the 7th Annual NIH SBIR/STTR Conference, Washington, DC.

Liang, Y. (2007, July). Complex and Stereotypic Behavior and Behavior Recognition. Paper presented at the Collaborative Knowledge Extraction (CoKE): Sequencing Animal Behavior, Edinburgh, UK.

Liang, Y. (2007, June). Complex and Stereotypic Behaviors and Neurological Diseases. Paper presented at the Mouse Neurological and Behavioral Forum, St. Catherine's College: Oxford, UK.

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## (13) Miscellaneous

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