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JOBS

Sr. Postdoctoral Fellow, University of Washington, Seattle, US. 2019-

- Investigating neural circuitry of social behavior using machine learning, computer vision, light-sheet microscopy, optogenetics and transgenic mouse models. PI: Prof. Sam A. Golden.

Research Scientist, NYU Langone Medical Center, Manhattan, US. 2017 – 2019

- Supporting the Rodent Behavioral Core. Design/manufacture/validation of equipment and code for automated behavioral testing in rodents. PI: Prof. Adam C. Mar.

Postdoctoral Research Associate, SUNY Binghamton, NY, US. 2015 – 2017

- Studied neural overlaps of decision making and substance abuse using transgenic mice (cFos-LacZ; cre lines), pharmacology, surgical, chemical techniques. PI: Prof. J. David Jentsch.

Postdoctoral Research Associate, University of Cambridge, UK. 2012 – 2015

- Studied models of chromosomal microdeletions with relevance to psychopathology as part of the NEWMEDS consortium. PIs: Profs. Trevor W. Robbins, Lisa M. Saksida, Tim J. Bussey.

EDUCATION

PhD Behavioural Neuroscience, University of Sussex / Eli Lilly, UK. 2008 - 2012

- Title: The neuropsychopharmacology of reversal learning. Awarded May 2013

Placement at Eli Lilly R&D, Windlesham, UK. PhD thesis: http://sro.sussex.ac.uk/45215/

BSc Psychology /w Neuroscience, University of Sussex, UK. 2004 – 2008

- Awards: Best Overall Degree Mark (out of a cohort ≈ 250). Best Research Project (out of a cohort of ≈ 250). Highest degree mark awarded for at least the previous 5 years.

TECHNIQUES, IT, CODE

see https://github.com/sronilsson

- ✶Design rodent tests of cognition
- ✶Stereotaxic surgery / microinfusions
- ✶IHC
- ✶colony management
- ✶histology
- ✶PCR / rtPCR
- ✶fiber photometry
- ✶fluorescence microscopy
- ✶Fluorojade
- ✶medstate notation
- ✶Python / R
- ✶UNIX
- ✶awk
- ✶xGal
- ✶3D modeling/printing (see Github link)
- ✶network management (ansible)
- ✶Arduino development (C/C++)
- ✶markdown/html
- ✶SPSS
- ✶ImageJ
- ✶Ethovision
- ✶GraphPad Prism
- ✶JWatcher
- ✶Familiar with Matlab and VB

GRANTS

SUNY New York - Developmental Exposure Alcohol Research Centre Pilot Grant 2016 – $54,000 (co-investigator); Amgen Scholarship 2014 – £3,500; Wellcome Biomedical Scholarship 2014 – £2,000.

PUBLICATIONS

Sala-Bayo J, Fiddian L, Nilsson SRO et al. (2019) Dorsal and ventral striatal dopamine D1 and D2 receptors differentially modulate distinct phases of reversal learning. *Submitted.*

Alsiö BJ, Phillips BU, Bayo J, Nilsson SRO et al. (2019) Dopamine D2-like receptor stimulation selectively blocks learning from negative outcomes in visual and spatial reversal learning tasks: behavioural and computational evidence in the rat. Psychopharmacology.

Nilsson SRO et al. (2019) Serotonin and cognitive flexibility. Book Chapter: The Serotonin System: History, Neuropharmacology, and Pathology. 1st ed, *Academic Press.*

Phillips BU, Lopez-Cruz L, Tkotz J, Nilsson SRO et al. (2019) Delay discounting in mice using the touchscreen operant testing system: modulation of performance by dopaminergic drugs. *In revision.*

Nilsson SRO et al. (2018) Continuous performance test impairment in a 22q11.2 microdeletion mouse model: improvement by amphetamine. Translational Psychiatry, (8)247.

Hvoslef-Eide M, Nilsson SRO et al. (2018) Effects of anterior cingulate cortex lesions on performance in a continuous performance task for mice. Brain & Neuroscience Advances, 2:1-12.

Phillips BU, Dewan S, Nilsson SRO et al. (2018) Selective effects of 5-HT2C receptor modulation on performance on probabilistic reversal learning in mice. Psychopharmacology, 235:2101-2111

Mar AC., Nilsson SRO et al. (2017) MAM-E17 rat model impairments on a novel continuous performance task: effects of potential cognitive enhancing drugs. Psychopharmacology 234:2837–2857.

Didriksen M., Fejgin K., Nilsson SRO et al. (2017) Persistent gating deficit and increased sensitivity to NMDA receptor antagonism after puberty in a novel mouse model of the human 22q11.2 microdeletion syndrome: a study in male mice, Journal of Psychiatry and Neuroscience, 42:48–58.

Nilsson SRO et al. (2016) Assessing the cognitive translational potential of a mouse model of the 22q11.2 microdeletion syndrome, Cerebral Cortex, 26, 3991-4003

Nilsson SRO et al. (2016) A mouse model of the 15q13.3 microdeletion syndrome shows prefrontal neurophysiological dysfunctions and attentional impairment, Psychopharmacology, 11, 2151-2163

Hvoself-Eide M, Mar AC, Nilsson SRO et al. (2015) The NEWMEDS rodent touchscreen test battery for cognition relevant to schizophrenia, Psychopharmacology, 21, 3853-3872

Hvoslef-Eide M, Nilsson SRO et al. (2016) The rodent touchscreen operant chamber as a translational tool. Book Chapter: Current Topics in Behavioral Neuroscience, 28, 443-447

Nilsson SRO et al. (2015) The rat is not for turning: dissociating the psychological components of cognitive inflexibility, Neuroscience & Biobehavioral Reviews, 56, 1-14

Alsiö BJ, Nilsson SRO et al. (2015) The role of 5-HT_{2C} receptors in touchscreen visual reversal learning in the rat: a cross-site study, Psychopharmacology, 21, 4017-4031

Kim CH, Johnson MR, Nilsson SRO et al. (2015) The continuous performance test (rCPT) for mice: a novel operant touchscreen test of attentional function. Psychopharmacology, 21, 3947-3966

Mar AC, Alsio BJ, Nilsson SRO et al. (2013) The touchscreen operant platform for rodents: tests of executive function. Nature Protocols, 8, pp. 1985-2005

Horner AE, Heath CJ., Hvoself-Eide M, Kent BA, Kim CH, Nilsson SRO, et al. (2013) The touchscreen operant platform part 1: assessing learning and memory in rats and mice. Nature Protocols, 8, 1961-1984

Nilsson SRO et al. (2013) Dissociable effects of 5-HT2C receptor KO and 5-HT2C receptor antagonism upon perseverance and learned non-reward in a egocentric spatial reversal task. PLOS One, 8, e77762

Nilsson SRO et al. (2012) Reduced activity at the 5-HT2C receptor enhances reversal learning by decreasing the influence of previously non-rewarded associations. Psychopharmacology, 224, pp. 241-254

Morris HV, Nilsson SRO et al. (2009) α1- and α2-containing $GABA_A$ receptor modulation is not necessary for benzodiazepine-induced hyperphagia. Appetite, 52, pp. 675-683.

CONFERENCE PRESENTATIONS

see https://sronilsson.github.io/conferencesdocs/

EBPS, Amsterdam 2011; BAP, Harrogate UK 2011; SfN, San Diego 2013; SfN, Washington DC 2014; FENS, Milan 2014; CINP, Vancouver 2014; NEWMEDS/Servier, Paris 2014; NEWMEDS/Roche, Basel 2014; NEWMEDS/Eli Lilly, London 2014; Eli Lilly, London 2013 and 2015; Heidelberg 2013; EBPS/EBBS, Verona 2015; SfN, Washington DC 2017; EBPS/EBBS, Crete 2017; RSA, San Diego 2018; FENS, Berlin 2018.