## Poster Session I: Thursday, 19 October 2023 (4:45 pm - 7:15 pm) &



## Short Talks (Thursday)



The Brain Conferences 2023 - Establishment and Maintenance of Brain Cell States

## Rungstedgaard, 23-26 April 2023

No	First name	Surname	Abstract Title	Institution
1	Lorena	Andreoli	Availability of allocentric cues influence the learning of different navigational strategies, but not the preferred strategy in a dual solution plus-maze	Otto-von-Guericke University
2	Yui	Asaoka	Neurobehavioral Mechanisms of Kleptomania	Kyoto University
3	Dan	Bang	Sub-second dopamine and serotonin signalling in human striatum during perceptual decision-making	Aarhus University
*	Tania	Barkat	Neural computation underlying transfer of learning	Basel University
4	Diba	Borgmann	Brainstem integration of sensory information to guide neural control of appetitive behavior	Center for Physical Activity Research (CFAS), Rigshospitalet
5	Mingbo	Cai	Learning 3D object-centric representation from images through prediction	University of Tokyo
6	Julia	Czurylo	Chronic Chemogenetic Manipulation of the Anterior Cingulate Cortico-Medial Dorsal Striatal Projection: Behavioral and Functional Manifestations in Rats	Southern Denmark University
7	Daniel	Dobolyi	Neural computations underlying the generalization of information for adaptive behaviour	University College London
8	Hoda	Fares	Towards Brain Inspired- Brain Computer Interfaces (BI_BCIs)	Aarhus University
*	Angelo	Forli	Hippocampal Representation During Collective Spatial Behavior in Bats	UC Berkeley
9	Christoffer	Gahnstrom	Predictive representation utilizing episodic reactivations explain human behavior in a complex multigoal environment	University of Pennsylvania
10	Giuseppe Pietro	Gava	Organizing the coactivity structure of the hippocampus from robust to flexible memory	University of Oxford

11	Yoav	Ger	Harnessing the flexibility of neural networks to predict dynamic theoretical parameters underlying human choice behavior	Tel Aviv University
12	Amin	Ghaderi Kangavari	Integrative Joint Modeling of Neuroimaging Data, Behavior and Cognition in Single Trials	The Danish Research Centre for Magnetic Resonance (DRCMR)
13**	Leonie	Glitz	Curriculum learning for cognitive maps	University of Oxford
14	Avital	Hahamy	Binding information by reactivating the neural representations of past events: a candidate mechanism for understanding narratives in humans	University College London
15	Mairead	Healy	Interplay of Neurochemical and Functional Brain Mechanisms Underpinning Goal-Directed vs. Habitual Behaviour in Obsessive Compulsive Disorder	University of Cambridge
16	Leah	Holm-Mercer	Neural replay, disrupted cognitive maps and cognitive features of early human prion disease	University College London
17	Wen-Hsien	Hou	Nitric oxide expressing GABAergic neurons of the basolateral amygdala bridge sleep homeostasis and emotional memory	Aarhus University
18	Gabriela	Iwama	Seeing What You Believe: Neurophysiological Mechanisms of Flexible Integration of Priors in Visual Decisions	University of Tuebingen
19	Vitaly	Klyachko	Circuit mechanisms contributing to flexibility deficits in a model of autism	Washington University
20	Elisabeth	Kolesnik	Binding affinity and dose occupancy of psychedelic tryptamines towards 5-HT2A/2C receptors in rats	Neurobiology Research Unit, Rigshospitalet
21	David- Levente	Kovacs	Eye information privacy and security	IT University of Copenhagen
22	Vytautas	Labanauskas	Prospect of reward modulates the vigor of action in a precision grip task	Hvidovre Hospital
23	Jindřiška	Leischner Fialová	A novel microcephaly gene, RRP7A, mediates canonical TGFB/BMP signaling via trafficking at the primary cilium in the developing brain	University of Copenhagen
24	Ali	Mahmoodi	Distinct roles of human hippocampus and medial frontal cortex in solving credit assignment problem	University of Oxford

25	Elena	Menichini	Learning and exploiting sensory statistics in a sound categorisation task	University College London
26	Krithika	Mohan	Understanding how the primate brain composes visual representations	University of California, Berkeley
*	Jean-Paul	Noel	Context invariant beliefs in closed-action perception loops are supported by dynamic reconfiguration of single unit functional connectivity	New York University
27	Mikael	Novén	A language of movements: grammar learning in a serial reaction time test	University of Copenhagen
28	Peter	Petersen	BrainSTEM: A collaborative electronic lab notebook for experimental neuroscience	University of Copenhagen
29	Reidar	Riveland	Generalization in Sensorimotor Networks Configured with Natural Language Instructions	University of Geneva
30	Cesar Ramon	Romero Leguizamon	Organotypic Brain Slices; a promising tool in pharmaceutical studies	Region Hovedstadens Psykiatri
31	Rajlakshmi	Sawale	Functional development of the enteric nervous system	Aarhus University
32	Anna	Shpektor	A hierarchical representation of sequences in human entorhinal cortex	University of Oxford
33	Maria	Shujah	Development of categorization ability in the auditory cortex	University of Basel
34	Simrandeep Kaur	Sidhu	Recovery of Turning Gaits in Parkinsonian Mice by Targeted Stimulation of Brainstem Neurons	Neuroscience Academy Denmark
35	Henry	Soldan	The impact of semantic information on memory for temporal sequences	Ruhr-University Bochum
36	Simon	Steinkamp	Integrating Cognitive Models In The Modeling Of fMRI Data: Computational Parametric Mapping	Copenhagen University Hospital
37	Homa Priya	Tarigopula	Model-based meta-reinforcement learning for Alchemy	University of Oslo
38	Anna	Vannucci	Neural meaning making of early caregiving experiences: the developmental neurobiology of affective semantic knowledge	Columbia University
39	Eliska	Waloschkova	Molecular profiling of the entorhinal cortex using patch- seq	University of Copenhagen

40	Xiaowen	Wang	Liver-secreted fluorescent blood plasma markers enable chronic imaging of the microcirculation	Center for Translational Neuromedicine, SUND, University of Copenhagen
41	Emma	Ward	Does an unexpected observation lead to a perceptual boost?	Birkbeck, University of London
42	Charlie	Wilson	Learning to learn about feedback and about uncertain feedback	Stem Cell & Brain Research Institute, INSERM U1208
43	Tsz Fung	Woo	Orthogonality dynamics promote choice history updating and integration in the anterior cingulate cortex	Aarhus University
44	Pardis	Zarifkar	Beside communication in brain injury: evaluating tongue motor imagery via fNIRS	Department of Neurology, Rigshospitalet
45	Xiaochen	Zheng	The neural architecture of compositional generalization: how do we infer the meaning of "un-reject-able-ish"	Donders Institute for Brain, Cognition and Behaviour

Poster Session II: Friday, 20 October 2023 (5:45 pm - 8:15 pm) &

Short Talks (Friday & Saturday)

No	First name	Surname	Abstract Title	Institution
46	Samia	Afzal	Orexinergic modulation on chronic jet lag-induced deficits in mouse cognitive flexibility	Otto-von-Guericke University
47	Mohammed	Al-Onaizi	Impaired hippocampal-dependent spatial representation and cognitive flexibility in Type 2 Diabetes	Kuwait University
48	Joanna	Aloor	Behavioural and neural mechanisms for learning mixed strategies in a multi-agent environment	University College London
49	Jacob	Bakermans	Constructive reasoning through program synthesis – a model for probing compositional neural representations	University of Oxford
50	Dilorom	Begmatova	Maternal immune activation and adolescent delta-9- tetrahydrocannabinol alters exploratory behavior and sociability of submissive mice	Ariel University
51	Dorothée	Bentz	Mapping the trigger landscape of obsessive-compulsive symptoms	University of Basel
52	Lukasz	Bijoch	DRD1- and DRD2-positive neurons in the central nucleus of the amygdala for natural and pharmacological reward processing	Nencki Institute of Experimental Biology PAS
*	Jerry	Chen	Perirhinal cortex learns a predictive map of the task environment	Boston University

53**	Alison	Comrie	Dynamic engagement of non-local spatial representations in the hippocampus during value-guided foraging decisions	University of California San Francisco
54	Tal	Dalal	A neural substrate for encoding the probability of sensory inputs	Bar-Ilan University
55	William	Dorrell	Optimal Representations of Internal Models: A Story of Grid Cells and Music Boxes	University College London
56**	Lucile	Favero	A theoretical framework for studying sensorimotor learning during goal-directed tasks in water-restricted mice	University of Geneva
57	Prashanti	Ganesh	Uncertainty-driven integration of visual and reward information for economic decision making and reward learning	Freie Universität Berlin
58	Mark Christian	Guinto	Local activity principle as a normative theory on the emergence of grid cells	Fujita Health University
59	Elena	Gutierrez	Value-coding rapidly emerges in frontal neurons during novel choice	University College London
60	Morio	Hamada	Neural implementation of dynamic behavioural rule switching	University College London
61	Balazs	Hangya	Neuromodulatory signals in flexible learning paradigms	Institute of Experimental Medicine, Budapest
62	Mattias	Horan	Flexible representations of spatial connectivity in the hippocampal-entorhinal circuit of mice navigating virtual 2D environments	University College London
63	Ekin	Kaya	Metabolic and mnemonic interactions across the hippocampal-hypothalamic circuit	University of Michigan, Ann Arbor
64	Casper	Kerrén	The neural geometry of concept space	Max Planck Institute for Human Cognitive and Brain Sciences
65	Ruchella	Kock	Neural states and state transitions accompanying real- world behavior	Leiden University
66**	Samuel	Lippl	Statistical learning principles yield generalization and naturalistic behaviors in transitive inference	Columbia University

67	Michael	Lohse	Parallel frontal cortico-basal ganglia networks balance impulsivity and sensory evidence integration during decision-making	Sainsbury Wellcome Centre, UCL
*	Mariana	Lomeli Fernandez	Prefrontal Cortex and Hippocampus jointly guide Flexible Working Memory	University of Nottingham
68	Elena	Mainetto	Quantifying the flexibility of knowledge structures in language	Donders Institute for Brain, Cognition and Behaviour
69	Giulio	Matteucci	Cortical sensory processing across motivational states during goal-directed behavior	University of Geneva
70	Sara	Mederos	Brain circuits for experience-dependent suppression of fear responses	University College London
71	Kyriakos	Nikolaidis	Noise, Aging, and Inhibition of Return	Paris Lodron Universität Salzburg
72**	Ioanna	Pandi	Investigating the Synaptic Dynamics of Adaptive Behavior in the mouse frontal cortex	Institute of Molecular Biology and Biotechnology (IMBB-FORTH)
73	Chongyu	Qin	Compositional planning with routes in mice	University College London
74	Isabel	Raposo	The Aperiodic Temporal Structure of Human Attention	Hertie Institute for Clinical Brain Research
75	Xiangjuan	Ren	Fine- and coarse-grained learning systems with dynamic competition underlie network learning	Max Planck Institute for Human Development
76	Maria	Ribeiro	Ageing affects the way decision confidence and response accuracy modulate the arousal responses to performance feedback	University of Coimbra
77**	Conor	Robinson	Using representations to bypass complexity constraints in cognitive reasoning	QIMR Berghofer
78	Mathias	Sablé-Meyer	Two neural mechanisms of geometric shape perception in humans	University College London
79	Thomas	Sainsbury	Visually guided virtual reality tasks to study continuous adaptation of motor strategies	EPFL
80	Beatriz	Simoes Godinho	Hippocampal representations in a complex route planning task	University of Oxford
81	Pablo	Tano	Adaptive Behavior through Predictive Representations of Compositional Syllables	University of Geneva

82	Tianyuan	Teng	The bounded expansion of probability distribution models in the brain	Peking University
83	Minou	Verhaeg	Flexibility of learning via food reward task in dystrophin deficient mouse models of Duchenne muscular dystrophy	Leiden University Medical Centre
84	Sebastijan	Veselic	Generalized syntactic codes in compositional replay	University College London
85	Muzhi	Wang	Priming higher-order structure facilitates network learning in humans	Peking University
86	Min	Xu	REM sleep is associated with distinct global cortical dynamics and controlled by occipital cortex	Institute of Neuroscience, Chinese Academy of Sciences
87**	Qianli	Yang	Language of Problem-Solving: Uncovering the Structure and Hierarchy in Sequential Decision Making	Institute of Neuroscience, Chinese Academy of Sciences
88	Xin	Zhang	Towards a computational understanding of the breakdown of structured knowledge for flexible behaviour in dementia	University College London
89	Lei	Zhang	Attenuated flexible behaviour through the lens of reinforcement learning across diagnoses	University of Birmingham
90	Jiali	Zhang	Hierarchical replay in the anterior temporal lobe reflects different information layers in an episodic memory	University of Oxford
91	Carina	Zoellner	The neural basis of constructive episodic memory retrieval	Ruhr University Bochum
92	Mona	Garvert	Hippocampal spatio-predictive cognitive maps adaptively guide reward generalization	Julius-Maximilians- University Würzburg

\* short talk without poster presentation \*\* short talk with poster presentation