

Poster Session I: Monday, 17 June 2024 (4 pm - 6 pm) & Short Talks



The Brain Conferences 2024 - Circuits for Movement

Runastedaaard, 16-19 June 2024

			Rungstedgaard, 16-19 June 2024	Founded by the Lundbeck Foundation
No	First name	Surname	Abstract Title	Institution
1	Pegah	Abedi	An experimental staircase to study the contribution of spinal sensory feedback to motoneuronal drive during stair climbing in able bodied humans.	Aalborg University
2	Iris	Adam	Daily vocal exercise is necessary for peak performance singing in a songbird	University of Southern Denmark
3	Omar	Alhady	Neuronal IFNβ Signalling Regulates Neurogenesis through Mitochondrial Homeostasis in Familial Form of Parkinsonism	University of Copenhagen, Biotech Research Innovation Centre
4	Ilary	Allodi	Spatial transcriptomics reveals early changes in inhibitory synaptic transmission in Amyotrophic Lateral Sclerosis	University of St Andrews
5	Joaquim	Alves da Silva	Movement initiation reveals a hyperactive direct pathway in a mouse model of dystonia	Champalimaud Research
6	Sufyan	Ashhad	PreBötzinger Complex subthreshold synchronization dynamics underlie instantaneous switch in breathing modes	National Centre for Biological Sciences
7	Mihai	Atudorei	Chemogenetic Stimulation of Cortico-Striatal Intratelencephalic Neurons Impedes Locomotor Activity in Mice	Copenhagen University Hospital Hvidovre
8	Carmelo	Bellardita	Macrophages reside in the muscle spindle to control sensorimotor function at millisecond timescale	University of Copenhagen
9	Rune	Berg	An attractor network with rotational properties generates locomotion in the mammalian spinal cord	University of Copenhagen
10	Salil	Bidaye	Deconstructing a turn: The neural, mechanical and kinematic components of a stereotypical turn in walking Drosophila.	Max Planck Florida Institute for Neuroscience
11	Urs	Böhm	Optical recording of spinal cord dynamics using voltage imaging	Institut de Psychiatrie et Neurosciences de Paris
12	Evgeny	Bondarenko	Burstlets underlie preBötzinger Complex rhythm generation in vivo	University of California, Los Angeles
13	Madelaine C. A.	Bonfils	Motor arrest by stimulation of the pedunculopontine nucleus disrupts perception of visual cue in a visuospatial cue task	University of Copenhagen
14	Dario	Campagner	A cortico-collicular circuit for orienting to shelter during escape	University College London
15	Bingdong	Chang	A Novel Neural Stimulation Mechanism on Cellular Level without Faradaic Current	Technical University of Denmark
16	Pedro Daniel	Coelho	Acting or reacting? Studying cued vs self-paced initiations and underlying neuronal circuits in a Parkinson's disease animal model	Champalimaud Foundation
17	Corinna	Gebehart	Transforming self-motion information into body state estimation for steering control in walking Drosophila	Champalimaud Foundation
18	Chris	Dallmann	Descending pathways that control the initiation, speed, and halting of locomotion in Drosophila	University of Würzburg
19	Christopher	Del Negro	Inspiratory and sigh breathing rhythms depend on distinct cellular signaling mechanisms in the preBötzinger complex	William & Mary Applied Science & Neuroscience
20	Stephan	Dietrich	Input and Output Connectivity Matrix of Chx10-PPN Neurons	University of Copenhagen
21	Courtney	Dobrott	The role of cerebellar output in motor coordination and learning	University of Colorado Anschutz Medical Campus
22	Erica	Ehrhardt	Wing motoneuron morphology and role in behavior in Drosophila melanogaster	University of Cologne
23	Coen	Elemans	Voice production and motor control in songbirds	University of Southern Denmark
24	Christian	Ethier	Ventral tegmental area outputs to motor cortex in rats : a mesocortical pathway to drive motor cortical activity and shape plasticity	Université Laval
25	Gustavo	Fernandes	The Role of Striatal Parvalbumin Interneurons in the locomotor sensitization to cocaine	Federal University of São Paulo
26	Sofie Let	Frandsen	Early α -Synuclein pathology in mice leads to motor dysfunction, differential microglia clusters and altered immune signaling	DANDRITE/Dept. of Biomedicine, Aarhus University

27	Carlos	Gomez	Positive allosteric modulators for glutamate receptors rescue the phenotype of STXBP1 encephalopathy	University of Copenhagen
28	Martyna	Gorkowska	Real-time imaging of dopamine release and neuronal	Jagiellonian University in Krakow
29	Theanne	Griffith	Differential Encoding of Mammalian Proprioception by Voltage Gated Sodium Channels	University of California, Davis
30	Sophie	Grutzner	Navigating Dreams: the representation of locomotion in motor thalamus during REM sleep	University of California, San Francisco
31	Mahan	Hosseini	AutoGaitA - Automated Gait Analysis in Python	Forschungszentrum Juelich
32	Li-Ju	Hsu	A key population of reticulospinal neurons controlling posture	Karolinska Institute
33	Stephen	Huston	Fly neck motor neurons neurons generate convergent movements through proprioceptive sculpting	Columbia University
34	Se Hee	Jung	Moderate-to-high intensity group exercise improves function of stroke survivors	Seoul National University College of Medicine
35	Naama	Kadmon Harpaz	Neural mechanisms governing stability and flexibility in motor sequence learning in rats	Harvard University
36	Harsh	Kanodia	Dissecting the organization and function of basal ganglia to brainstem interactions for forelimb movements	Friedrich Miescher Institute for Biomedical Research, Basel
37	Ryan	Kast	Differential Roles of Zona Incerta Neuron Subtypes in Arbitrating Action Under Conflict	Massachusetts Institute of Technology
38	Anna Mathia	Klawonn	Midbrain astrocyte activation reduces taurine and serine levels and leads to de- creased compulsive behavior	DANDRITE/Dept. of Biomedicine, Aarhus University.
39	Salif	Komi	The spatial projectome of spinal neurons provides a new model of locomotion	University of Copenhagen
40	Minoru	Koyama	Long-rage synaptic connectivity between spinal V2a neurons and axial motoneurons revealed by single-cell precision optogenetics assisted circuit mapping in larval zebrafish	University of Toronto
41	Nathalie	Krauth	Excitatory lateral hypothalamic projections to the midbrain execute movement in defensive behavior	University of Copenhagen
42	Victor	Larsen	Morphological Changes in Cortical Basket Cells Induced by STXBP1-Encephalopathy	University of Copenhagen
43	Silas	Larsen	Astrocytes provide the temporal dynamic required for theta driven memory formation in the hippocampus	University of Copenhagen
44	Manuel	Levy	Neural correlates of pain behaviors in the primary somatosensory cortex	Massachusetts Institute of Technology
45	Yuhe	Li	Exploring Signal Processing Compartmentalization in the Cerebellar Circuit using a High-Density Multielectrode Array	University of Pavia
46	Xiyuan	Liu	Development and Evaluation of Single and Multi-Channel Micro-Coil Probes for In-Vivo Neurostimulation	Technical University of Denmark

Poster Session II: Tuesday, 18 June 2024 (4 pm - 6 pm) & Short Talks

No	First name	Surname	Abstract Title	Institution
47	Timothy	Machado	Corticobulbar neural circuitry for controlling licking	University of Pennsylvania
48	André	Marques	Optimal-like Visuomotor Integration for Self-motion Estimation in Circuits Controlling Steering in Drosophila	Champalimaud Foundation
49	Mercè	Masana	Differential contribution of direct and indirect pathways from dorsolateral and dorsomedial striatum to motor symptoms in Huntington's disease mice	University of Barcelona
50	Briee	Mercier	Exploring NMDA and Dopamine interactions within the spinal locomotor circuit using optogenetic induced locomotion	University of Minnesota
51	Alice	Mosberger	Learning to reach for reward	Columbia University
52	Caroline Sadolin	Muushardt	Effects of acute exercise and sleep on consolidation following motor skill learning	University of Copenhagen
53	Atiyeh	Nezhadebrahim	Dopamine modulator shapes locomotor patterns through ion channel conductance within Central Pattern Generators	Denmark Technical University
54	Cassandra	Nyerges	Charting organization and function of basal ganglia to brainstem interactions for forelimb movements	University of Basel
55	Esra	Öncel	Gaze-stabilization and postural adaptation after acute vestibular injuries in the lamprey	Karolinska Institutet
56	Celia	Palomo Tamayo	Generation of Ventral Spinal Motor Interneurons from Human Embryonic Stem Cell as an approach to cure paralysis after Spinal Cord Injury	NeumiRNA Therapeutics
57	Stavros	Papadopoulos	Development and Evolution of Spinal Cord Rostrocaudal	Institute of Science and
58	Rodrigo	Paz	Architecture Striatal Adaptations to Chronic Levodopa Therapy	Technology Austria University of California, San Francisco
59	Vincent	Prevosto	Identifying brainstem oscillator circuits controlling rhythmic feeding movements	Massachusetts Institute of Technology
60	Nima	Raman	Studying the function of long-range projecting VIP- expressing neurons in the Facial Motor Nucleus	The University of Ottawa
61	Divya	Rao	Dual role of the Mesencephalic Locomotor Region in modulating visually evoked escape response	University of Copenhagen
62	Omar	Refy	Investigations of Spinal Reflex Gain Dynamics during Human Locomotor Adaptation	Carnegie Mellon University
63	Júlia	Rey Vilches	Simulation of a Musculoskeletal Model and Machine Learning Analysis for Future Personalized Healthcare	Technical University of Denmark
64	Angelina	Ruthe	Task-specific activity of motor neurons and non-spiking interneurons of an insect leg	University of Cologne
65	Dimitri	Ryczko	Dopamine-sensitive neurons in the mammalian Mesencephalic Locomotor Region control locomotor initiation, stop and turns.	Université de Sherbrooke
66	llkem Aysu	Sahin	Convergent Basal Ganglia Pathways Associated with Clinical Improvement Following Tourette Deep Brain Stimulation	Charite Universitatsmedizin Berlin
67	Michelle	Sánchez Rivera	Corticospinal Neurons in the Selective Execution of Learned Actions	University of Edinburgh
68	Ioanna	Sandvig	Reverse engineered neural circuit motifs as computational substrates	Norwegian University of Science and Technology
69	Ayushi	Sangoi	fMRI Isolation of Motor Component of Oculomotor Vergence System	New Jersey Insititute of Technology
70	Kajana	Satkunendrarajah	Sensory cortical control of locomotion after spinal cord injury	Medical College of Wisconsin
71	Kazuhiko	Seki	Beyond the cerebral cortex: A spinal reflex module for regulating muscle output in primate hand movements.	National Institute of Neuroscience, NCNP
72	Simrandeep Kaur	Sidhu	Recovery of Turning Gaits in Parkinsonian Mice by Targeted Stimulation of Brainstem Neurons	University of Copenhagen
73	Giacomo	Sitzia	Basal ganglia output control of caudal PPN Targeting activity of botulinum toxin type A on motor	University of Copenhagen
74	Petra	Šoštarić	pools-central vs peripheral action	University Of Zagreb School Of Medicine
75	Victor	Stimpfling	NeuroMechFly 2.0, a framework for simulating embodied sensorimotor control in adult Drosophila	Swiss Federal Institute of Technology Lausanne (EPFL)
76	Beck	Strohmer	Modeling spinal circuit degeneration and stabilization in ALS conditions	University of Copenhagen
77	Shreyas	Suryanarayana	Evo-devo diversification of cortical output channels	Duke University

78	Ibrahim	Tastekin	Mapping the sensorimotor connectome underlying protein- specific appetites in Drosophila melanogaster	Champalimaud Foundation
79	William Scott	Thompson	Motor cortex projects monosynaptically to GABAergic neurons of the Substantia Nigra pars Reticulata	Karolinska Institutet
80	Carolina	Thorn Perez	Distinct functionality between molecularly defined subdivisions of N/Z interneurons	Salk Institute for Biological Studies
81	Klaudia	Tokarska	Locus coeruleus, sleep and aging	University of Copenhagen
82	Lena	Veit	Distinct recurrent pathways contribute to birdsong sequencing and syllable structure	University of Tübingen
83	Thomas	Wheatcroft	Forelimb-related input and coding in superior colliculus	Harvard Medical School
84	Oren	Wilcox	Defining the contributions of the cerebellar nuclei to skilled forelimb movement refinement	Salk Institute for Biological Studies & University of California, San Diego
85	Steffen	Wolff	Basal Ganglia pathways for regulating motor skill variability	University of Maryland School of Medicine
86	Haohao	Wu	Brainstem cell type census for forelimb movement control	University of Basel
87	Helen	Yang	Fine-grained descending control of steering in walking Drosophila	Harvard Medical School
88	Ben	Yang	Striatal Control of Action Selection	Northwestern University
89	Jianing	Yu	Chronic and acute effects of striatum perturbation on reaction time behavior	Peking University
90	Aref	Zarin	A dedicated premotor circuit drives forward locomotion- specific protopodium movement in Drosophila larvae.	Texas A&M University
91	Mei	Zhen	A tonically active master neuron continuously modulates mutually exclusive motor states at two-time scales.	Lunenfeld-Tanenbaum Research Institute