

# FULL CONFERENCE PROGRAMME

**Monday 2nd September 2024**

Time	Session/Activity	Venue
14:00 - 16:00	Arrival, Registration and Welcome Refreshments	Great Hall
16:00 - 16:15	Opening Welcome - Alicia Hidalgo	Bramall
16:15 - 17:00	<p><b>Session 1 - Developmental and cellular neuroscience</b> Chairs: Guy Tear and Yun Fan</p> <p>16:15 - 16:30 - <b>Alicia Donoghue</b> - Precise spatio-temporal dynamics of Hedgehog and Notch signalling mediate cell-fate decisions (O1) 16:30 - 16:45 - <b>Adam Elkin</b> - How Neuronal Stem Cells Acquire and Maintain their Identity (O2) 16:45 - 17:00 - <b>Jeff Lee</b> - The Imp and Syp RNA interactomes reveal a network of temporal regulators of Drosophila brain development (O3)</p>	Bramall
17:00 - 17:45	<p><b>Plenary Talk 1 - Bassem Hassan - Time to Connect</b> The EMBO Keynote Lecture Chair: Guy Tear</p>	Bramall
18:00 - 20:00	Welcome Reception with Hot Food Included	Great Hall
17:30 - 22:00	Cashless Bar Open	Great Hall

**Tuesday 3rd September 2024**

Time	Session/Activity	Venue
8:30 - 9:00	Arrival Refreshments	Great Hall
9:00 - 9:45	<p><b>Plenary Talk 2 - Florence Besse - Regulating RNA in the spatial dimension in the Drosophila brain</b>            Chair: Matthias Soller</p>	Bramall
9:45 - 10:30	<p><b>Session 2 - Developmental and cellular neuroscience</b>            Chairs: Guy Tear and Yun Fan</p> <p>9:45 - 10:00 - <b>Samuel Vernon</b> - Spontaneous neurotransmitter release is regulated by Unc-5 (O4)            10:00 - 10:15 - <b>Dario Lasser</b> - Molecular mechanisms controlling microtubule organization and abundance at the Drosophila neuromuscular junction (O5)            10:15 - 10:30 - <b>Lora Fahdan</b> - A systematic exploration of the intrinsic mechanisms controlling axon growth during development (O6)</p>	Bramall
10:30 - 11:00	Refreshment Break	Great Hall
11:00 - 11:45	<p><b>Session 3 - Developmental and cellular neuroscience</b>            Chair: Yun Fan</p> <p>11:00 - 11:15 - <b>Johann Markovitsch</b> - Never too late to get it right: Dynamic adhesion between lineage-related neurons organizes Drosophila brain circuit asymmetry. (O7)            11:15 - 11:30 - <b>Elisabeth Kamper</b> - The role of thioredoxin peroxidase in the developing Drosophila CNS during oxidative stress (O8)            11:30 - 11:45 - <b>Suchet Nanda</b> - Kon-RTK crosstalk controls the development of axon wrapping glia in Drosophila (O9)</p>	Bramall

11:45 - 12:30	<p><b>Session 4 - Brain Homeostasis &amp; Metabolism</b> Chairs: Yun Fan and Gaynor Smith</p> <p>11:45 - 12:00 - <b>Celia Barredo</b> - The conserved AstA/Ptth neuroendocrine axis is required for starvation resistance in adult Drosophila (O10) 12:00 - 12:15 - <b>Diana Knoblochova</b> - Ecdysteroid signaling in energy metabolism and obesity development in flies on high-calorie diets (O11) 12:15 - 12:30 - <b>Thomas Vaccari</b> - Hecw controls neuronal homeostasis by promoting the liquid state of ribonucleoprotein particles and autophagy (O12)</p>	Bramall
12:30 - 14:00	Lunch and Posters	Great Hall
13:00 - 14:00	<p><b>Early Career Workshop</b> Chairs: Carolina Rezaval and Natalia Sanchez Soriano</p> <p><b>Anissa Kempf</b> (Universität Basel) <b>Andrew Lin</b> (University of Sheffield) <b>Lisa Scheunemann</b> (Freie Universität Berlin)</p>	Bramall
14:00 - 14:45	<p><b>Plenary Talk 3 - Irene Miguel-Aliaga - Gut feelings</b> Chair: Yun Fan</p>	Bramall
14:45 - 15:30	<p><b>Session 5 - Brain Homeostasis &amp; Metabolism</b> Chairs: Matthias Landgraf and Gaynor Smith</p> <p>14:45 - 15:00 - <b>Pierre-Yves Plaçais</b> - Diverting glial glycolytic flux towards mushroom body neurons: a memory-fuelling role of CRH-like neuropeptide signalling (O13) 15:00 - 15:15 - <b>Joseph Bateman</b> - The neurological basis of mitochondrial stress signalling (O14) 15:15 - 15:30 - <b>Jingyi Long</b> - A conserved epilepsy-associated gene co-expression module in Drosophila converges on increased AMPK signaling (O15)</p>	Bramall

15:30 - 16:00	Refreshment Break	Great Hall
16:00 - 16:15	<p><b>Talks by Sponsors</b> Chairs: Thomas Riemensperger and Gaynor Smith</p> <p>16:00 - 16:05 - <b>Biologix Limited</b> 16:05 - 16:10 - <b>Qidong Fungene Biotechnology Co., Ltd</b> 16:10 - 16:13 - <b>Andor</b> 16:13 - 16:16 – <b>BFKLab</b></p>	Bramall
16:15 - 17:00	<p><b>Session 6 - Brain Homeostasis &amp; Metabolism</b> Chairs: Thomas Riemensperger and Gaynor Smith</p> <p>16:15 - 16:30 - <b>Pierre-yves Musso</b> - Taste regulation of immunity (O16) 16:30 - 16:45 - <b>Ellen McMullen</b> - Metabolic regulation of the central nervous system during infection (O17) 16:45 - 17:00 - <b>Nina Surina</b> - A novel trehalose sensor to study carbohydrate transport kinetics in the nervous system (O18)</p>	Bramall
17:00 - 17:30	<p><b>Business Meeting – All Welcome</b></p> <p>17:00 - 17:15 - Presentation and voting on future Neurofly Meetings 17:15 - 17:30 – Presentation by European Drosophila Society</p>	Bramall
17:00 - 19:30	<p><b>Poster Session with Refreshments</b></p> <p><a href="#">Click here</a> to view today's posters</p>	Great Hall

**Wednesday 4<sup>th</sup> September 2024**

<b>Time</b>	<b>Session/Activity</b>	<b>Venue</b>
8:30 - 9:00	Arrival Refreshments	Great Hall
9:00 - 9:45	<b>Plenary Talk 4 - Fen-Biao Gao - Pathogenic Mechanisms of Frontotemporal Dementia and ALS: Insights from Drosophila and iPSC Models</b> Chair: Richard Tuxworth	Bramall
9:45 - 10:30	<b>Session 7 - Brain disease, injury, ageing</b> Chairs: Richard Tuxworth and Lukas Neukomm  9:45 - 10:00 - <b>Mirjam Adams</b> - Unravelling the role of insulin signalling in a Drosophila model of Gaucher and Parkinson's diseases (O19) 10:00 - 10:15 - <b>Haifa Alhadyian</b> - Understanding neuronal vulnerability during ageing: the central roles of microtubules (O20) 10:15 - 10:30 - <b>Marije Been</b> - A forward genetic screen implicates the RAS/MAPK pathway attenuator Pebbled in motor neurodegeneration (O21)	Bramall
10:30 - 11:00	Refreshment Break	Great Hall
11:00 - 11:45	<b>Session 8 - Brain disease, injury, ageing</b> Chairs: Richard Tuxworth and Lukas Neukomm  11:00 - 11:15 - <b>Christa Rhiner</b> - Unravelling conserved repair circuits in the fly brain (O22) 11:15 - 11:30 - <b>Federico Marcello Tenedini</b> - Axon length-dependent synapse loss is mediated by inflammatory cytokine unpaired 3 via phagocytic glia recruitment (O23) 11:30 - 11:45 - <b>Bente Winkler</b> - Macrophage invasion into the Drosophila brain requires JAK/STAT dependent MMP activation in the blood-brain barrier (O24)	Bramall

11:45 - 12:30	<p><b>Session 9 - Brain disease, injury, ageing</b>  Chairs: Natalia Sanchez-Soriano and Lukas Neukomm</p> <p>11:45 - 12:00 - <b>Abigail Wilson</b> - Enhanced cholinergic tone restores motor circuit functionality in Drosophila and mouse models of paroxysmal dyskinesia (O25)  12:00 - 12:15 - <b>Michael Gallo</b> - ILP4 and Inr differentially regulate Paclitaxel-induced nociceptive hypersensitivity in Drosophila larvae (O26)  12:15 - 12:30 - <b>Teresa Niccoli</b> - Xbp1 modulates neuronal vulnerability to C9orf72-linked repeat expansion toxicity (O27)</p>	Bramall
12:30 – 13:15	<p><b>Plenary Talk 5 - Hongyan Wang - Waking up "sleeping" neural stem cells</b>  Chair: Natalia Sanchez-Soriano</p>	Bramall
13:15 - 14:15	Lunch	Great Hall
14:15 - 22:30	Outing to Stratford-upon-Avon - Dinner not included	

**Thursday 5<sup>th</sup> September 2024**

Time	Session/Activity	Venue
8:30 - 9:00	Arrival Refreshments	Great Hall
9:00 - 9:45	<p><b>Plenary Talk 6 - Lars Chittka - Social insects - ancient civilisations?</b> Chair: Carolina Rezaval</p>	Bramall
9:45 - 10:30	<p><b>Session 10 - Gene expression and molecular neuroscience</b> Chairs: Matthias Soller and Natalia Sanchez-Soriano</p> <p>9:45 - 10:00 - <b>Aaron Allen</b> - Transcriptional diversity of rare cell types underlying sexually dimorphic behaviours. (O28) 10:00 - 10:15 - <b>Guiyi Li</b> - The Toll adaptor Wek is a partner of Yki driving adult neurogenesis and gliogenesis (O29) 10:15 - 10:30 - <b>Francisco Antonio Martin</b> - Searching for a conserved transcriptional memory trace (O30)</p>	Bramall
10:30 - 11:00	Refreshment Break	Great Hall
11:00 - 11:45	<p><b>Session 11 - Gene expression and molecular neuroscience</b> Chairs: Matthias Soller and Natalia Sanchez-Soriano</p> <p>11:00 - 11:15 - <b>Julie Secombe</b> - Transcriptional regulation of neuronal development and function by the histone demethylase KDM5 (O31) 11:15 - 11:30 - <b>Sophie Waldron</b> - Single cell transcriptomics reveal molecular correlates of protein hunger. (O32) 11:30 - 11:45 - <b>Lukas Neukomm</b> - Local translation sustains synaptic function in impaired Wallerian degeneration (O33)</p>	Bramall

11:45 - 12:30	<p><b>Session 12 - Neural circuits &amp; behaviour</b> Chairs: Carolina Rezaval and Moshe Parnas</p> <p>11:45 - 12:00 - <b>Megan Day</b> - Competition Fuels Risk-Taking by Inhibiting Threat-Induced Serotonin Pathways (O34) 12:00 - 12:15 - <b>Anna Hobbiss</b> - Actively Frozen - a novel pattern of leg muscle activity reveals flexible freezing states and anticipates movement onset in <i>Drosophila melanogaster</i> (O35) 12:15 - 12:30 - <b>Dennis Goldschmidt</b> - Multiple navigational strategies contribute to balancing exploration and exploitation during local search (O36)</p>	Bramall
12:30 - 14:00	Lunch and Posters	Great Hall
13:00 – 14:00	<p><b>Practical workshop: Bridging Connectomics and transcriptomics</b> David Osumi-Sutherland</p> <p>For more information on this workshop, please click <a href="#">here</a></p>	G30
14:00 – 14:45	<p><b>Plenary Talk 7 - Bruno Van Swinderen - The predictive fly brain</b> Chair: Thomas Riemensperger</p>	Bramall
14:45 – 15:30	<p><b>Session 13 - Neural circuits &amp; behaviour</b> Chairs: Carolina Rezaval and Moshe Parnas</p> <p>14:45 - 15:00 - <b>Marion Silies</b> - Heterogeneous synaptic connectivity in the visual system – causes and consequences (O37) 15:00 - 15:15 - <b>Tihana Jovanic</b> - Neural circuit mechanisms underlying flexible sensorimotor decisions in <i>Drosophila</i> (O38) 15:15 - 15:30 - <b>Marta Costa</b> - Comparing male and female connectomes to quantify stereotypy and sexual dimorphism (O39)</p>	Bramall



15:30 – 16:00	Refreshment Break	Great Hall
16:00 – 16:15	<p><b>Talks by Sponsors</b> Chairs: Carolina Rezaval and Moshe Parnas</p> <p>16:00 - 16:03 - <b>Cairn Research</b> 16:03 - 16:06 - <b>DroBot Biotechnology Co., Ltd.</b> 16:06 - 16:09 - <b>RxCelerate</b> 16:09 - 16:12 - <b>Novogene Co., Ltd.</b></p>	Bramall
16:15 – 17:00	<p><b>Session 14 - Neural circuits &amp; behaviour</b> Chairs: Carolina Rezaval and Moshe Parnas</p> <p>16:15 - 16:30 - <b>Davide Raccuglia</b> - Sensory filtering in the tired and sleeping brain (O40) 16:30 - 16:45 - <b>Cheng Huang</b> - Dopamine-mediated interactions between short- and long-term memory dynamics in Drosophila Mushroom Body (O41) 16:45 - 17:00 - <b>Ishaan Kapoor</b> - Distributed Octopamine signalling prioritises expression of recently learned information (O42)</p>	Bramall
17:00 – 17:05	Prizes Awarded for NeuroFly Bags and T-Shirts	Great Hall
17:05 – 19:00	<p><b>Poster Session with Refreshments</b></p> <p><a href="#">Click here</a> to view today's posters</p>	Great Hall
19:15 – 00:00	Conference Dinner	Botanical Gardens

**Friday 6<sup>th</sup> September 2024**

<b>Time</b>	<b>Session/Activity</b>	<b>Venue</b>
8:30 - 9:00	Arrival Refreshments	Great Hall
9:00 - 9:45	<b>Plenary Talk 8 - Gaia Tavosanis - Exploring the landscape in the mushroom body calyx</b> Chair: Matthias Landgraf	Bramall
9:45 - 10:30	<b>Session 15 - Plasticity and Remodelling</b> Chairs: Matthias Landgraf and Christa Rhiner  9:45 - 10:00 - <b>Medha Raman</b> - Glutamate receptors interact with transcription factors to regulate synaptic scaling (O43) 10:00 - 10:15 - <b>Cathy Gouelle</b> - The putative monocarboxylate transporter CG8028 regulates synaptic activity through glutamate receptors at the postsynapse (O44) 10:15 - 10:30 - <b>Sayaka Eno</b> - Octopamine signaling regulates intracellular active zone heterogeneity depending on nutritional states (O45)	Bramall
10:30 - 10:45	<b>Talks by Sponsors</b> Chairs: Matthias Landgraf and Christa Rhiner  10:30 - 10:33 - <b>Pavel Itskov</b> 10:33 - 10:36 - <b>PHCbi</b> 10:36 - 10:39 - <b>WellGenetics</b> 10:39 - 10:42 - <b>Zanitiks</b> 10:42 - 10:45 - <b>Zeiss</b>	Bramall
10:45 - 11:15	Refreshment Break	Great Hall

11:15 - 12:00	<p><b>Session 16 - Plasticity and Remodelling</b> Chairs: Alicia Hidalgo and Christa Rhiner</p> <p>11:15 - 11:30 - <b>Maria Fernanda Ceriani</b> - (Ultra) structural plasticity in adult pacemaker neurons (O46) 11:30 - 11:45 - <b>Sofia Bandao</b> - Homeostatic feedbacks at central synapses support background invariant odor representations (O47) 11:45 - 12:00 - <b>Andrew C Lin</b> - Contradictory homeostatic plasticity in an inhibitory feedback circuit (O48)</p>	Bramall
12:00 – 12:45	<p><b>Session 17 - Plasticity and Remodelling</b> Chairs: Alicia Hidalgo and Christa Rhiner</p> <p>12:00 - 12:15 - <b>Chien-Chun Chen</b> - Sleep Deprivation Impairs Pattern Separation and Neural Coding in the mushroom body of <i>Drosophila melanogaster</i> (O49) 12:15 - 12:30 - <b>Büşra Coban</b> - Unlocking Visual Pathways: Enhanced Visual Learning Through Olfactory Deprivation in <i>Drosophila</i> (O50) 12:30 - 12:45 - <b>Anna Parsons</b> - The Toll adaptor Wek drives regenerative neurogenesis following CNS injury (O51)</p>	Bramall
12:45 – 13:00	<p><b>Closing Remarks and announcing Neurofly2026</b> Chair: Alicia Hidalgo</p>	Bramall
13:00 – 14:00	Neurofly2024 and Birmingham Centre for Neurogenetics Social <b>Lunch</b> - All Welcome	Great Hall

14:00 – 15:30	<p><b>Birmingham Centre for Neurogenetics launch</b></p> <p>14:00 - 14:15 - Opening Address by Prof Bill Bloss, Head of LES, to inaugurate the Centre.</p> <p>Scientific taster from across our community:</p> <p>14:15 - 14:35 - <b>Stephane De Brito</b> (School of Psychology): "Enhancing NeuroImaging Genetics through Meta-Analysis (ENIGMA)"</p> <p>14:35-14:55 - <b>Carolina Rezaval</b> (School of Biosciences): "Is love blind? Mating proximity blinds threat perception"</p> <p>14:55- 15:15 - <b>Zubair Ahmed</b> (Neuroscience &amp; Ophthalmology, Medical Health Sciences): "Inhibiting components of the DNA damage pathway promotes functional recovery after CNS injury in Drosophila and rodents"</p> <p>15:15-15:30 - Closing address by the Directors and keeping in touch: Alicia Hidalgo (Biosciences), Daniel Fulton (MDS) and Stephane De Brito (Psychology)</p>	Bramall
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