Organizers
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Invited Speakers
T. Pozzan (Padua), C. Montecucco (Padua), A. Giangrande (Strasbourg), J.F. Ferveur (Dijon), S.N. Fry (Zurich), C. Desplan (New York), S. Sigrist (Berlin), F. Giorgini (Leicester)

Meeting site
Centro Congressi “Papa A. Luciani”, Padua

Date
September, 3-7, 2012

Under the patronage of:
University of Padua, Comune di Padova, Provincia di Padova

Sponsors:
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Final Program

Monday, 3
Downtown Padua

Palazzo del Bo (Main University Building) and Palazzo della Ragione (Main Medieval City Hall).

14.00-17.30  Arrival and Registration (Palazzo della Ragione)

17.30   Aula Magna Palazzo del Bo. Opening Remarks.

18.00 - 18.45  PLENARY LECTURE: Spying second messenger dynamic changes in living cells. (T. Pozzan, Padua, Italy)

18.45 Transfer back to Palazzo della Ragione. Welcome by the Mayor of the City of Padua.

19.00  Welcome Party - Palazzo della Ragione
Tuesday, 4

Centro Congressi “Papa A. Luciani”

8.15 Shuttle bus from Hotels (see list of the Hotels served by bus shuttle)

8.45-9.00 OVERVIEW OF MEETING ORGANIZATION

Session 1 - SYNAPSE

Chair: C. Montecucco

9.00-9.45 PLENARY LECTURE: Tetanus and Botulinum Neurotoxins, Flies and the Neuroexocytosis Nanomachine. (C. Montecucco, Padua, Italy)

9.45-10.00 Opportune wiring of motor circuits. (J.F. Evers, University of Cambridge, U.K.)

10.00-10.15 Postsynaptic Ca2+ regulates synaptic strength at the Drosophila larval neuromuscular junction. (G. Lnenicka, University of Albany, NY, U.S.A.)

10.15-10.30 Elongator Protein 3-dependent Bruchpilot acetylation in ALS. (K. Miskiewicz, KU Leuven, Belgium)

10.30-10.45 Drosophila Syndapin regulates synaptic growth and is required for synaptic vesicle endocytosis at neuromuscular junctions. (I. Robinson, University of Exeter, Plymouth, U.K.)

10.45-11.15 COFFEE BREAK

11.15-11.30 Hierarchical control of presynaptic microtubule cytoskeleton by distinct giant Ankyrins ensures synapse organization and function. (R. Stephan, Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland)

11.30-11.45 The role of ESCRTIII proteins in clearance of excess neuronal material at the neuromuscular junction. (B. Sutcliffe, University of Plymouth, U.K.)

11.45-12.00 Antiporter JhI-21 modulates strength of glutamatergic signal transmission at the NMJ and induces age dependent behavioral changes. (A. B. Ziegler, Université de Bourgogne, Dijon, France)

12.00-14.00 LUNCH

14.00-15.30 POSTER SESSION 1
Session 2 - DEVELOPMENT AND DIFFERENTIATION

Chair: A. Giangrande

15.30-16.15 PLENARY LECTURE: The glide/Gcm developmental pathway. (A. Giangrande, Strasbourg, Belgium)

16.15-16.30 Glial micromanagement in Drosophila neural stem cells. (J. Morante, Universidad Miguel Hernandez, San Juan de Alicante, Spain)

16.30-16.45 Fragile X Protein is required for inhibition of insulin signaling and regulates glial-dependent neuroblast reactivation in the developing brain. (D. Zarnescu, University of Arizona, Tucson, United States)

16.45-17.00 Toll-6 and Toll-7 function as neurotrophin receptors in the Drosophila central nervous system. (A. Hidalgo, University of Birmingham, U.K.)

17.00-17.30 COFFEE BREAK

17.30-17.45 Dendrite development and degeneration. (C-T. Chien, Academia Sinica, Taipei, Taiwan, Province Of China)

17.45-18.00 Subcellular dynamics of cAMP/PKA signaling in single Drosophila mushroom body neurons matured in low-density cultures. (A. Gaffuri, ESPCI-ParisTech, Paris, France)

18.00-18.15 Loss of lola results in the de-differentiation of neurons and the development of tumours in Drosophila. (T. Southall, University of Cambridge, U.K.)

18.15-18.30 Axon Regeneration During Development and Following Injury Share Molecular Mechanisms. (S. Yaniv, Weizmann Institute of Science, Rehovot, Israel)

19.00 Shuttle bus to Hotels
**Wednesday, 5**

8.15 *Shuttle bus from Hotels*

Session 3 - CIRCUITS AND BEHAVIOUR (A)

Chair: J.F. *Ferveur*

9.00-9.45 **PLENARY LECTURE**: Three decades of pheromonal research in *Drosophila*: some answers and many questions. (*J.F. Ferveur, Dijon, France*).

9.45-10.00 Speed control of larval peristalsis by segmentally-arrayed local inhibitory interneurons. (*H. Kohsaka, University of Tokyo, Chiba, Japan*).

10.00-10.15 Branch-specific outputs from mushroom body mediate cold avoidance in *Drosophila*. (*H-W. Shih, National Tsing Hua University, Hsin Chu, Taiwan, Province Of China*).

10.15-10.30 Layered reward signaling through octopamine and dopamine in *Drosophila*. (*C. Burke, University of Massachusetts Medical School, Worcester, U.S.A.*).

10.30-10.45 Role of the two histamine receptors in light entrainment of the *Drosophila* circadian clock. (*A. Saint Charles, Université Paris Sud, 91405 Orsay, Gif-sur-Yvette, France*).

10.45-11.15 **COFFEE BREAK**

11.15-11.30 Control of food-related behaviours and metabolism by interactions between insulin-producing neurons and the tracheal system. (*G.A. Linneweber, University of Cambridge, U.K.*).

11.30-11.45 Song Choice is Modulated by Female Movement in *Drosophila* Males. (*A. Ejima, Kyoto University, Kyoto, Japan*).

11.45-12.00 Functional gustatory receptors in *Drosophila* wings reveal their role in guidance and exploration associated to flight. (*H. Raad, Institut Sophia Agrobiotech, Sophia Antipolis, France*).

12.00-14.00 **LUNCH**

14.00-16.30 **POSTER SESSION 2**
16.30-17.00 COFFEE BREAK

FLIES AND ROBOTS: BEYOND NEUROBIOLOGY

17:00-17.45 Plenary Lecture: Flies and robots: beyond neurobiology (S. Fry, Zurich) and open discussion.

18.30 Shuttle bus to downtown

Evening: Banquet

Thursday, 6

8.15 Shuttle bus from Hotels

Session 5 - SENSORY SYSTEMS

Chair: C. Desplan


9.45-10.00 Triacylglycerides (TAGs) – a novel class of courtship-related compounds in a Drosophila species complex. (J. Chin, National University of Singapore, Singapore)

10.00-10.15 Axonemal dyneins are required to promote and control ciliary force generation in Drosophila auditory neurons. (S. Karak, University of Göttingen, Germany)

10.15-10.30 Using optogenetics to explore the sensory representation of dynamic odor stimuli in Drosophila larvae. (A. Schulze, Universidad Pompeu Fabra, Barcelona, Spain)

10.30-10.45 Molecular and neuronal organisation of Ionotropic Receptor (IR) taste pathways in Drosophila. (A.K. Sivasubramaniam, University of Lausanne, Lausanne, Switzerland)

10.45-11.15 COFFEE BREAK

11.15-11.30 Smelling vibrations. (E. Skoulakis, Biomedical Sciences Research Centre "Alexander Fleming., Vari, Greece)

11.30-11.45 Feeding response to amino acids and its modulation by internal nutritional state in Drosophila. (N. Toshima, Kyushu University, Fukuoka, Japan)
11.45-12.00 Real-time imaging of the plastic response in an odorant receptor neuron for olfactory pheromone habituation. (S-I Tachibana, Kyoto University, Japan)

12.00-14.00 LUNCH

14.00-15.30 POSTER SESSION 3

Session 6 - CHANNELS AND RECEPTORS
Chair: S. Sigrist

15.30-16.15 PLENARY LECTURE: Shedding light on the assembly of synapse structure and function. (S. Sigrist, Berlin, Germany)

16.15-16.30 KCNQ channels show conserved ethanol block and function in ethanol behaviour and age-related memory impairment. (J. Hodge, University of Bristol, U.K.)

16.30-16.45 Alternative splicing of a voltage-gated sodium channel contributes to seizure. (W-H. Lin, University of Manchester, U.K.)

16.45-17.00 Synaptic Homeostasis Mediated by nAChRs in the Drosophila CNS Triggers Up-Regulation of Shal K+ Channels to Modulate Synaptic Potentials. (S. Tsunoda, Colorado State University, Fort Collins, U.S.A)

17:00-17.30 COFFEE BREAK

17.30-17.45 Synchronization of the Drosophila circadian clock by temperature, humidity and mechanical stimulation. (W. Wolfgang, Queen Mary College, University of London, U.K.)

17.45-18.00 Spiroindolines Identify the Vesicular Acetylcholine Transporter as a Novel Target for Insecticide Action. (J. Pennack, Syngenta, Bracknell, United Kingdom)

18.00-18.15 Reduced insulin signaling prevents age-associated decline of the neuronal function in the escape-response pathway of D.melanogaster. (H Augustin, University College London, United Kingdom)

18.15-18.30 A new blue light sensitive photopigment influences light adaptation in Drosophila. (R Grebler, University of Würzburg, Germany)

19.00 Shuttle bus to Hotels
Friday, 7

Session 7 - DISEASE

Chair: F. Giorgini

9.00-9.45 PLENARY LECTURE: Targeting the kynurenine pathway in Drosophila models of neurodegeneration. (F. Giorgini, Leicester, U.K.)

9.45-10.00 A Drosophila Model for Charcot-Marie-Tooth 2B Disease. (P.R. Hiesinger, UT Southwestern, University of Texas, Dallas, U.S.A)

10.00-10.15 Muscular dystrophy-associated protein Dystroglycan is regulated by the miR-310 family of microRNAs via an alternative 3'UTR in the Drosophila nervous system. (H. Shcherbata, Max Planck Institute for biophysical chemistry, Goettingen, Germany)

10.15-10.30 Similarities between Drosophila wall following and mammalian anxiety-related behaviors (F. Mohammad, Agency for Science Technology and Research (A-STAR), Singapore)

10.30-10-45 First large-scale assessment of intellectual disability gene function validates Drosophila as a model for human disease networks and phenomics. (M.A.W. Oortveld, Radboud University Nijmegen Medical Centre, Netherlands)

10.45-11.15 COFFEE BREAK

11.15-11.30 Pathogenic pathways of Single- and Double-Stranded RNA toxicity in Dominant Expanded Repeat Neurodegenerative Diseases. (L. O'Keefe, The University of Adelaide, Australia)

11.30-11.45 Regulation of stress sensitivity and synaptic development by lysosomal proteins associated with childhood neurodegenerative disease. (M. O'Hare, King's College London, London, U.K.)

11.45-12.00 Mitochondrial dysfunction in pink1 mutants is rescued by improved activity of the electron transport chain (ETC). (S. Vilain, VIB and KU Leuven, Belgium)

12.00-12.15 Drosophila – a useful model for anti-amyloid drug development. (D. Segal, Tel Aviv University, Tel Aviv, Israel)

12.15 Closing Remarks

12.30-14.00 LUNCH