28th EDRC Alicante 2025

European Drosophila Research Conference

PROGRAM

European Drosophila Research Conference

28th EDRC Alicante 2025

25th 28th september

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ZANTIKS

behaviour, simply

Zantiks units enable researchers to measure Drosophila adult and larval behaviour, simply. Our reasonably priced units provide multiple stimuli options including temperature control, vibration, lighting, audio, and food/liquid & odour delivery. The compact units run standardised behavioural assays; locomotor, climbing, circadian rhythm, sleep studies, olfactometers (both passive diffusion and active, and switched, flow), toxicology screening, startle, habituation, & PPI. Units are fully automated, and feature live tracking; annotated data is available for statistical analysis immediately.

INILAB
TODO PARA SU LABORATORIO

Inilab is your trusted partner in Drosophila melanogaster research. We provide a comprehensive range of innovative equipment such as Mediaclave, Tubefiller, and incubators, together with premium consumables like Drosoflipper and other specialized accessories. Our mission is to make daily laboratory work easier, faster, and more reliable by optimizing processes and ensuring consistent results. With solutions designed for efficiency, safety, and precision, we empower researchers to focus on what truly matters: driving scientific progress with confidence.

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Fly Gear

Introducing our AI-powered FlyGear robot for developmental time tracking—engineered to transform insect screening and phenotypic analyses. By leveraging 24/7 high-resolution video tracking and advanced machine learning, with a smart design, this robot delivers reliable, reproducible data without human intervention. Free your research from manual bottlenecks while reducing error and labour costs. Experience a new standard in insect phenotyping: smarter, faster, and fully automated — join us at the conference.

WG
WELLGENETICS

WellGenetics is dedicated to providing professional research services in microinjection and gene knockout/knockin in fly. We are experts in molecular biology and in microinjection for generating a variety of genetic tools, such as gene deletion; point mutation; gene reports; tag knockin and RMCE knockin to level up your research quality.

HYBRIGENICS SERVICES

Hybrigenics Services, born from the Pasteur Institute in Paris, empowers life science innovation with cutting-edge platforms to reveal protein interactions and unlock therapeutic insights. From comprehensive interactome mapping with ULTImate Y2H™ to drug discovery solutions (ULTImate YChemH™, Y2HChem™), we help uncover targets, mechanisms, and novel molecular strategies. Our Hybribody™ platform delivers custom Nanobodies® for research, diagnostic, and therapeutic applications, offering flexible, animal-free solutions that accelerate discovery and drive breakthroughs across academia and industry.

OBJECTIVE BIOTECHNOLOGY

Objective Biotechnology produces an affordable benchtop robot that will enable fully automated walk-away microinjection in Drosophila and other common model organisms with minimal human training requirements. The Autoinjector will increase productivity and output while reducing the overall costs and training burden for research labs and enable novel applications based on large-scale generation of transgenes or gene edited organisms.

PROGRAM

THURSDAY, SEPTEMBER 25th

08:00 – 10:00 **EDB MEETING**

10:00 - 11:45 Sala Sinfónica

WORKSHOP: A TOUCH OF CELL DEATH AND THE UNEXPECTED NON-LETHAL ROLES OF DEATH-RELATED PROTEINS

Organizers: Kim McCall, Hila Toledano, Andreas Bergmann, Eli Arama, Luis Alberto Baena

STEP-WISE DESTRUCTION OF NURSE CELLS DURING DEVELOPMENT CELL DEATH IN THE DROSOPHILA OVARY
Kim McCall

LIPID DROPLETS ACCUMULATE AND DELAY REGULATED CELL DEATH EXECUTION
Bertrand Mollereau

DECIPHERING MOLECULAR REGULATION OF APOPTOSIS-INDUCED PROLIFERATION
Yun Fan

CASPASE UBIQUITINATION PROMOTES NF-KB ACTIVATION BY PROTECTION OF THE IKKK COMPLEX
Annika Meinander

DRONC A TRAFFIC COP ON DUTY WITHIN THE DROSOPHILA NERVOUS SYSTEM
Luis Alberto Baena López

THE HOMEODOMANI-INTERACTING PROTEIN KINASE HIPK PROMOTES APOPTOSIS BY STABILIZING THE ACTIVE FORM OF DRONC
Juan Manuel García Arias

TRANSCRIPTION-DEPENDENT AND -INDEPENDENT FUNCTIONS OF DROSOPHILA P53 ISOFORMS IN THE INDUCTION OF APOPTOSIS AND SENESCENE-ASSOCIATED TUMORIGENESIS
Carlos Estella

10:00 - 11:45
Sala Cámara

WORKSHOP: THE EXTRACELLULAR MATRIX

Organizers: Franck Pichaud, Brian Stramer

PATTERNING AN ECM
David Bilder

INTEGRINS AND MECHANICAL HETEROGENEITY OF THE BASEMENT MEMBRANE INFLUENCE SIMPLE EPITHELIA ARCHITECTURE
Lourdes Rincón-Ortega

MECHANICAL COUPLING BETWEEN DORSAL AND VENTRAL SURFACES SHAPES THE HALTERE
José Carlos Pastor-Pareja

SHAPING GROWING TISSUES BY BASEMENT MEMBRANE MECHANICS
Stefan Harmansa

BASEMENT MEMBRANE PATTERNING GUIDES CELL SHAPE REMODELLING IN THE DEVELOPING DROSOPHILA RETINA
Rhian Walther

BASEMENT MEMBRANE CONTRIBUTES TO GROWTH CONTROL IN DROSOPHILA WING IMAGINAL DISCS
Christian Dahmann

GENERATION OF NEW TOOLS TO STUDY BASEMENT MEMBRANE STABILITY DURING DEVELOPMENT
Besaiz J. Sánchez-Sánchez

10:00 - 11:45
Sala Conferencias

WORKSHOP: EPITRANSCRIPTOMICS

Organizers: Jean-Yves Roignant, Matthias Soller

THE NUCLEAR M^6A PATHWAY REGULATES A COGNITIVE BRAIN FUNCTION VIA NEURONAL CIRCUIT HOMEOSTASIS
Eric Lai

METTL3 MEDICATED M6A-MODIFICATION IS REQUIRED FOR THE DEVELOPMENT AND FUNCTION OF INDIRECT FLIGHT MUSCLE IN DROSOPHILA
Maria Spletter

NUCLEAR YTHDC1 IS THE MAIN M^6A CYTOPLASMIC READER FOR MATERNAL MRNA DECAY DURING THE MATERNAL-TO-ZYGOTIC TRANSITION
Martine Simonelig

ATAXIN2: MECHANISMS IN MRNP CONDENSATION
Joern Huelsmeier

NAT10 GOVERNS DEVELOPMENT VIA RIBOSOME ASSEMBLY AND ISR RATHER THAN MRNA ACETYLATION
Dong Yan

THE PTCH/SPOUT1 METHYLTRANSFERASE DEPOSITS AN M3U MODIFICATION ON 28 S RRNA FOR NORMAL RIBOSOMAL FUNCTION IN FLIES AND HUMANS
Yikang S. Rong

LOSS OF 2'-O-METHYLATION AT THE TRNA WOBBLE POSITION DISRUPS AGO2-MEDIATED SILENCING: ARE TRNA FRAGMENTS TO BLAME?
Nassim Meziane

12:00 - 14:15
Sala Sinfónica

WORKSHOP: INTERORGAN COMMUNICATION IN THE ERA OF OMICS

Organizers: Francesca Di Cara, Ditte Skovaa Andersen

REGIONAL DIFFERENCES IN INTESTINAL LIPID HANDLING
Irene Miguel Aliaga

UNDERSTANDING FEMALE-SPECIFIC PREDISPOSITION TO GENETICALLY INDUCED INTESTINAL TUMORS
Renald Delanoue

INTESTINAL TISSUE MECHANICS REGULATE ANGIOGENESIS VIA VASCULAR PIEZO
Jade A. Phillips

LACTATE AND GLYCEROL-3-PHOSPHATE REGULATE DEVELOPMENT PLASTICITY DURING LARVAL GROWTH
Madhulika Rai

SEX DIFFERENCES IN NEUROPEPTIDE-PRODUCING CELLS REGULATE THE MALE-FEMAILE DIFFERENCE IN BODY FAT
Elizabeth Readout

PROTEOMIC MAPPING OF ORGAN SECRETOMES USING IN VIVO PROXIMITY LABELING
Justin Bosch

ADIPOCYTE-DERIVED AMINO ACID STORAGE PROTEINS ARE REQUIRED FOR GERMLINE STEM CELL MAINTENANCE IN DROSOPHILA FEMALES
Lesley Weaver

GUT-BODY CROSSTALK VIA PROTEIN-RESPONSIVE HORMONE TACHYKININ REGULATES FOOD CHOICE AND LIFESPAN
Kim Rewitz

12:00 - 14:15
Sala Cámara

WORKSHOP: IT'S ALL ABOUT MITOCHONDRIA

Organizers: Tiina S. Salminen, Laura Vesala, Yuliya Basikhina

MITOCHONDRIAL PERTURBATIONS ENHANCE CELL-MEDIATED IMMUNITY
Tina S. Salminen

MITONUCLEAR INTERACTIONS IN A CHANGING WORLD: ENVIRONMENTAL AND GENETIC DETERMINANTS OF MITOCHONDRIAL FUNCTION AND FITNESS IN DROSOPHILA POPULATIONS
Stefano Bettinazzi

LIFESPAN RESPONSES TO ANTI-AGING INTERVENTIONS ARE SHAPED INTERACTIVELY BY MTDNA AND NDNA VARIATION
Adam Dobson

ALTERNATIVE OXIDASE-DRIVEN REPROGRAMMING OF THE LARVAL MITOCHONDRIAL ELECTRON TRANSPORT SYSTEM PROMOTES GROWTH IN DROSOPHILA MELANGASTER
Geovana S. Garcia

MECHANISMS OF CELL- AND TISSUE-SPECIFIC VULNERABILITY TO MITOCHONDRIAL DISEASE
Jelle van den Ameele

NEURONAL FATTY ACID OXIDATION FUELS MEMORY AFTER INTENSIVE LEARNING
Alice Pavlowsky

THE CELLULAR BASIS OF MITOCHONDRIAL STRESS SIGNALLING IN THE BRAIN
Joseph M. Bateman

PANEL DISCUSSION WITH THE PRESENTERS

12:00 - 14:15
Sala Conferencias

WORKSHOP: GENE EXPRESSION IN THE 3D NUCLEAR SPACE: FROM MICRO-CONDENSATES TO NUCLEAR STRUCTURES AND BEYOND

Organizers: Thomas Gregor, Samir Merabet

DYNAMIC TRANSCRIPTION HUBS AS INTEGRATORS OF SIGNALING PATHWAY ACTIVITES
Sara Bray

SPATIO-TEMPORAL CONTROL OF TRANSLATION IN EARLY DROSOPHILA EMBRYOGENESIS
Pierre Bensidoun

ENHANCER-PROMOTER COMMUNICATION DURING EMBRYOGENESIS
Yad Ghavi-Helm

SPATIAL CHROMATIN TRACING REVEALS CELL-TYPE-SPECIFIC 3D STRUCTURES IN ADULT FLY NEURONS
Marcelo Nollman

CHROMATIN REGULATION OF DROSOPHILA EARLY EMBRYOGENESIS
Francesco Cardamone

THE LINC COMPLEX SUPPRESSES CHROMATIN REPRESSION AND REGULATES THE SPATIAL ORGANIZATION OF CHROMATIN-RNAPII COMPLEXES
Talila Volk

SHAPING THE NUCLEUS FOR TRANSCRIPTIONAL AND DEVELOPMENTAL ROBUSTNESS
Albert Tsai

A NUCLEAR PORE-INSULATOR AXIS REORGANIZES THE GENOME FOR OOCYTE SPECIFICATION
Prashanth Rangan

NUCLIEAR MECHANOSTABILITY EMERGES FROM SATELLITE DNA CONDENSATION
Franziska Brändle

15:00 – 17:15
Sala Sinfónica

WORKSHOP: GUT

Organizers: Allison Bardin, Lucy O'Brien

EXPLORING THE EFFECTS OF MUSCLE-GENERATED MECHANICAL CONSTRAINTS ON THE ADULT INTESTINE
Allison Bardin

MECHANO-OSMOTIC EXTRUSIONS SHRINK THE GUT FOLLOWING FOOD WITHDRAWAL
Emile Magny

THE ROLE OF NUCLEAR FACTOR NF-Y IN NUTRIENT-MEDICATED TISSUE TURNOVER
Tetiana Strutynska

A MATERNAL HORMONE GATES A REPRODUCTIVE CHECKPOINT VIA ENTERIC NEURONS
Bryon Silva

MAKING AN EMBRYONIC MIDGUT-DISSECTING THE ROL OF THE GATA FACTOR SERPENT IN EMT
Kyra Campbell

INTESTINAL STEM CELLS ARE SPATIO-TEMOPRALLY SPECIFIED BY NOTCH SUPPRESSION AND WNT ACTIVATION
Zheng Guo

A NOTCH-BHLH CONNECTION IN ADULT INTESTINAL STEM CELLS: EVIDENCE FOR MUTUAL INHIBITION
Joaquín de Navascues

DAMAGE RECOGNITION BY INTESTINAL STEM CELLS VIA DRAPER-SRC-SHARK-STAT SIGNALLING PROMOTES ADULT DROSOPHILA MIDGUT REGENERATION
Martina Legido

REGULATION OF MIDGUT REGENERATION BY XRP1 AND THE ISR
Bruce Edgar

15:00 – 17:15
Sala Cámara

WORKSHOP: BIOLOGY OF SEX WORKSHOP

Organizers: Elisabeth Rideout, Jenny Regan, Bruno Hurdy

MULTIMODAL NANOSCOPY OF LIPID METABOLIC CHANGES IN AGING DROSOPHILA
Lingyan Shi

ENTEROKINES ARE DRIVERS OF SEX-DEPENDENT METABOLIC AND BEHAVIORAL VARIATION
Michael Texada

SEX-SPECIFIC DEVELOPMENT OF THE GONAD STEM CELL SYSTEMS
Mark Van Doren

SEX DIFFERENCES FOLLOWING DNA VIRUS INFECTION IN DROSOPILA
Ali Somerville

THE IMPACT OF SEX ON SOCIAL MODULATION OF DEFENCE BEHAVIOURS
Clara Ferreira

THE SEX AND REPRODUCTIVE PLASTICITY OF INTESTINAL MUSCLES
Alessandro Mineo

SEXUAL DIMORPHISM IN DROSOPHILA GUT INFECTION OUTCOMES
Marko Rubinic

SEX, DRUGS, AND PRECISION TOXICOLOGY – PERVASIVE SEX-SPECIFIC RESPONSES IN CHEMICAL SAFETY TESTING
Jason Tennessen

15:00 – 17:15
Sala Conferencias

WORKSHOP: STRESS AND THE BRAIN: IMPACT OF STRESS ON BRAIN HEALTH

Organizers: Christa Rhiner, Erik Storkebaum

INTEGRATED STRESS RESPONSE ACTIVATION IN CHARCOT-MARIE-TOOTH DISEASE
Erik Storkebaum

DETERMINANTS OF THE SELECTIVE LOSS OF DOPAMINERGIC NEURONS IN GENETIC AND CHEMICAL RISK FACTORS FOR PARKINSON'S DISEASE
Emi Nagoshi

IMMUNE ACTIVATION DURING CRITICAL NEURODEVELOPMENTAL PERIODS AS A CAUSATIVE FACTOR IN INHERITED DYSTONIA
Simon Lowe

STUDYING LOW NAD+ INDUCED NEURODEGENERATION IN DROSOPHILIA
Lukas Neurkomm

SLEEP DEPRIVATION INPAIRS PATTERNS SEPARATION BY DISRUPTING SK CHANNEL-REGULATED SPARSE CODING IN DROSOPHILA
Sha Liu

INHIBITING GLIAL PHAGOCYTOSIS PREVENTS NEURONAL LOSS IN TWO DISTINCT DROSOPHILA MODELS OF NEURODEGENERATION
Naden Khateb

AUTOPHAGY AND RELATED PROCESSES ORCHESTRATE GLIAL RESPONSES TO NERVOUS SYSTEM INJURY
Áron Szabó

FROM ROS TO REPAIR: GLIA-MEDIATED OXIDATIVE STRESS IN INJURY-INDUCED BRAIN PLASTICITY
Christina Rhiner

NOVEL CONNECTION BETWEEN NEUROPATHY TARET ESTERASE, DEFECTIVE LYSOSOMES, FATTY ACIDS, AND INFLAMMATION
Mariana Tsap

18:00 – 18:10
Sala Sinfónica

WELCOME ADDRESS

18:10 – 18:40
Sala Sinfónica

EVOLUTION OF NEURAL CIRCUITS
EMBO Young Investigator Lecture
Plenary speaker: Lucía Prieto-Godino, The Crick (UK)

18:40 – 19:10
Sala Sinfónica

TOWARD A PREDICTIVE UNDERSTANDING OF EPITHELIAL CELL DEATH: FROM COLLECTIVE EFFECTS TO SINGLE CELL DECISION
Plenary speaker: Romain Levayer, Institut Pasteur (France)

19:10 – 19:40
Sala Sinfónica

CELLULAR, GENETIC AND MOLECULAR MECHANISMS UNDERLYING THE MORPHOGENESIS OF TUBULAR ORGANS
Plenary speaker: Marta Llimargas, Institut de Biologia Molecular de Barcelona-CSIC (Spain)

19:40 – 20:30
Exhibitor Hall

WELCOME COCKTAIL

28th EDRC Alicante 2025 European Drosophila Research Conference 25th-28th september

PROGRAM

FRIDAY, SEPTEMBER 26th

09:00 - 09:30
Sala Sinfónica

EVOLUTION OF CYTOPLASMIC DETERMINANTS: LESSONS FROM THE DROSOPHILA GERM LINE
Plenary speaker: Cassandra Extavour, Hardvard University (USA)

09:30 - 10:00
Sala Sinfónica

SPYING ON NEUROMODULATOR DYNAMICS IN VIVO BY CONSTRUCTING MULTI-COLOR GENETICALLY-ENCODED SENSORS
Plenary speaker: Yulong Li, Peking University (China)

10:00 - 10:30
Exhibitor Hall

COFFEE BREAK

10:30 - 13:00
Sala Sinfónica

DISEASE MODELS
Chairs: Thomas Vaccari, Mar Ruiz

TOWARDS UNDERSTANDING HOW THE BRAIN REWARD SYSTEM MAY PROMOTE RESILIENCE AND HEALTH
Mario Aguilar Aragón

THE PARKINSON DISEASE-ASSOCIATED PROTEIN DJ-1 PARTICIPATES IN ENERGY METABOLISM BY MODULATING BOTH MITOCHONDRIAL AND AUTOPHAGIC ACTIVITY
Marco Bisaglia

ELUCIDATING INTER-ORGAN COMMUNICATION BETWEEN EPITHELIAL TUMOR AND *DROSOPHILA* LARVAL LYMPH GLAND DURING CANCER-INDUCED CACHEXIA
Ujjayita Chowdhury

A DROSOPHILA MODEL FOR DENT'S DISEASE REVEALS IMPAIRED ER EXPORT OF CUBILIN AS PATHOGENIC MECHANISM
Salómon Christer

LOSS OF DROSOPHILA PACS DISRUPTS GOLGI ARCHITECTURE AND CAUSES CYTOKINESIS FAILURES AND SEIZURE-LIKE PHENOTYPE
Maria Grazia Giansanti

THE ROLE OF LAMP1 IN THE NON-CELL AUTONOMOUS REGULATION OF ENDO-LYSOSOMAL ACIDIFICATION
Andreas Jenny

DROSOPHILA MELANOGASTER AND HUMAN CELL MODELS OF POLYGLUTAMINE-BASED DISORDERS REVEAL MODULATION OF GLUTAMATE METABOLISM AS A TRANSLATIONAL THERAPEUTIC APPROACH
Juan Antonio Navarro

AGEING EXACERBATES TUMOUR GROWTH AND PROGRESSION IN A DROSOPHILA COLORECTAL CANCER MODEL
Nsikan Nsek

TUSC3/OSTG, A COMPONENT OF THE OST COMPLEX, MEDIATES ENDOPLASMIC RETICULUM TRIAGE OF SIGNALING GLYCOPROTEINS
Thomas Vaccari

STORAGE PROTEINS SUSTAIN TUMOR GROWTH AND ORCHESTRATE HOST DEVELOPMENTAL PROGRAMS
Luca Valzania

10:30 - 13:00
Sala Cámara

CELL BIOLOGY

Chairs: Jordan Raff, Kyra Campbell

ASYMMETRIC MICROTUBULE NUCLEATION FROM GOLGI STACKS PROMOTES OPPOSITE MICROTUBULE POLARITY IN AXONS AND DENDRITES
Yagoubat-Merah Akila

PRONEURAL DYNAMICS AND FATE SELECTION IN EARY DROSOPHILA NEUROGENESIS
David Green

HOW DO DIFFERENT ASTROCYTE MORPHOLOGIES ARISE?
Inês Lago-Baldaia

HOW DO CELLS BUILD COMPLICATED NANOMACHINES?
Jordan Raff

DRP1 REGULATED STEM CELL PRIMING OF DROSOPHILA MELANOGASTER GERMLINE STEM CELLS INVOLVES LIGHT AND DIET CUES INTEGRATED BY CRY
Yoshita S.

DROSOPHILA CHITINASE-LIKE PROTEINS ACT AS NECROTIC OPSONINS TO ENHANCE THE CLEARANCE OF DAMAGED CELLS DURING WOUND REPAIR
David Salvador-García

ANIMAL DEVELOPMENT REQUIRES A PROGRAMMED SWITCH IN EXTRACELLULAR MATRIX STABILITY
Besaiz Sánchez-Sánchez

COORDINATED CYTOSKELETAL DYNAMICS OF MEMBRANE PROTRUSIONS ORCHESTRATE 3D MORPHOGENESIS IN THE DROSOPHILA PUPAL WING
Osamu Shimmi

NUCLEAR MECHANICS DURING MESODRM INVAGINATION

Magali Suzanne

OPTO-E-CADHERIN REVEALS DIFFERENT KEY ROLES OF CELL-CELL ADHESIONS DURING COLLECTIVE CELL MIGRATION WITHIN THE TISSUE
Xiaobo Wang

IMMUNITY & SYMBIOSIS

10:30 - 13:00
Sala Conferencias

Chairs: Mark Hanson, Michele Crozatier

FUNCTIONAL CHARACTERIZATION OF WOLBACHIA-MEDIATED CYTOPLASMIC INCOMPATIBILITY IN D. MELANOGASTER
Loppin Benjamin

UNRAVELLING THE PLASTICITY AND DIVERSITY OF HEMOCYTES IN DROSOPHILA
Pierre Cattenoz

PEROXISOME-MEDIATED REGULATION OF IMD-AMYLOID FORMATION: CHASING THE BUILDING BLOCK OF INFLAMMATION
Francesca di Cara

A BACTERIAL MORPHOLOGY CHANGE TRIGGERED BY SENSING N-ACETYL-GLUCOSAMINE DETERMINES THE RESISTANCE OF PSEUDOMONAS AERUGINOSA TO A SPECIFIC SET OF DROSOPHILA ANTIMICROBIAL PEPTIDES IN SYSTEMIC INFECTION
Dominique Ferrandon

INFECTION-INDUCED ELEVATION OF GUT GLYCOSAMINOGLYCANS FOSTERS MICROBIOTA EXPANSION IN DROSOPHILA MELANOGASTER
Igor Iatsenko

MOBILIZING LIPOPROTEINS TO SAVE THE HOST: HOW AN INFECTION-INDUCED POLARIZATION OF MACROPHAGES TRIGGERS SYSTEMIC METABOLIC REWIRING VIA IMPL2 PRODUCTION
Gabriela Krejcova

SEROTONERGIC NEURONS REGULATE THE DROSOPHILA VASCULAR NICHE TO CONTROL IMMUNE STRESS HEMATOPOIESIS
Liu Xiaohui

TASTE REGULATION OF IMMUNITY
Pierre-Yves Musso

SEX DIFFERENCES IN DROSOPHILA INTESTINAL METABOLISM CONTRIBUTE TO SEXUALLY DIMORPHIC INFECTION OUTCOME AND ALTER GUT PATHOGEN VIRULENCE
Marko Rubinic

DROSOPHILA COMPLEMENT-LIKE MCR ACTS AS A WOUND-INDUCED INFLAMMATORY CHEMOATTRACTANT
Alessandro Scopelliti

LUNCH BREAK

13:00 – 15:00
Exhibitor Hall

ELIFE SESSION: EVOLUTION OF PUBLISHING

Speaker: Alessio Bolognesi

14:00 – 15:00
Sala Conferencias

NEURAL DEVELOPMENT, CIRCUITS & BEHAVIOUR

Chairs: Nikos Konstantinides, Emi Nagoshi

15:00 – 16:15
Sala Sinfónica

NEUROSECRETORY SIGNATURE OF NON-NEURONAL INKA CELLS IN THE INSECT TRACHEAL SYSTEM: A COMPARATIVE AND FUNCTIONAL INSIGHT
Shreejita Chatterjee

FER2 BHLH TRANSCRIPTION FACTOR CONTROLS MIGRATION AND TARGETING OF LAWF NEURONS IN THE DROSOPHILA OPTIC LOBE
Sergio Córdoba Casado

MAINTAINING THE METABOLIC STATE: FUNCTIONAL AND CONNECTOMIC ANALYSIS OF A SENSORY CIRCUIT BRIDGING LARVAL METABOLICS AND BRAIN IN DROSOPHILA MELANOGASTER
Damian Demarest

RECEPTOR ATTP AT THE C-TERMINUS (REACT): FUNCTIONAL AND SPATIAL CHARACTERISATION OF CHEMOTRANSMISSION RECEPTORS AT THE SUBCELLULAR LEVEL
Miranda Dyson

MAPPING NEURONAL CIRCUITS UNDERLYING OVIPOSITION SUBSTRATE PREFERENCE SHIFT IN DROSOPHILA SUZUKII
Loris Garino

TRANSCRIPTION & CHROMATIN

Chairs: Marcelo Nollmann, Anne Marie Martínez

15:00 – 16:15
Sala Cámara

EPIGENETIC CROSS-TALK: POLYCOMB PRC2 COMPLEX AND THE PIWI-PIRNA PATHWAY IN TRANSPOSON SILENCING IN DROSOPHILA OVARIES
Abdou Akkouche

HOX PROTEINS AS MODULATORS OF CELLULAR COMPETENCE FOR FATE REPROGRAMMING
Raul González

SINGLE-CELL EPIGENETIC LANDSCAPES THROUGH DROSOPHILA EMBRYOGENESIS
Mattias Mannervik

LARGE-SCALE CHANGES IN THE BINDING OF THE SWI/SNF CHROMATIN REMODELLING COMPLEX ARE ASSOCIATED WITH TUMOUR FORMATION IN A MODEL OF IDH WILD-TYPE GLIOBLASTOMA
Jake Newland

HETEROGENEITY OF CHROMOSOME-SCALE GENOME LOOPS IN THE DROSOPHILA BRAIN
Aleena Patel

SIGNALLING

Chairs: Marc Amoyel, Estee Kurant

15:00 – 16:15
Sala Conferencias

MULTIPLE SIGNALLING INPUTS INTEGRATE TO REFINE MORPHOGEN GRADIENT FORMATION AND INSTRUCT PRECISE CELL FATE DECISIONS
Alicia Donoghue

FEEDBACK REGULATION OF RAS SIGNALLING IN TUMOURIGENESIS
Shijun Fang

DECIPHERING THE ROLE OF RAB18 SMALL GTPASE IN HEDGEHOG SECRETION
Tamas Matusek

PRIMITIVE SCALING AND DEATH TRAITS
Marisa Merino

REGULATION OF NUCLEAR TRANSLOCATION OF B-CATENIN UPON WNT-SIGNALING ACTIVATION: MECHANISTIC INSIGHTS INTO A NOVEL MICROTUBULE MEDIATED NUCLEAR TRANSPORT PROCESS
Marek Mlodzik

COFFEE BREAK

NEURAL DEVELOPMENT, CIRCUITS & BEHAVIOUR

Chairs: Nikos Konstantinides, Emi Nagoshi

16:15 – 16:45
Exhibitor Hall

16:45 – 18:00
Sala Sinfónica

DECIPHERING DISTINCT SIGNALING NETWORKS THAT REGULATE DOPAMINE-MEDIATED LEARNED AND INNATE BEHAVIOURS
Dana Guhle

EVOLUTION OF NEURONAL DIVERSITY IN THE INSECT OPTIC LOBE
Nikos Konstantinides

NIMA PROMOTES CELL ADHESION AT THE BLOOD BRAIN BARRIER OF DROSOPHILA NERVOUS SYSTEM
Sara Monticelli

SEGREGATION OF GLUTAMATERGIC AND GABAERGIC NEUROTRANSMITTER RELEASE IN DROSOPHILA MOTOR NEURONS
Rebecca Smith

MAPPING THE SENSORIMOTOR CONNECTOME UNDERLYING PROTEIN-SPECIFIC APPETITES IN DROSOPHILA MELANOGASTER
Ibrahim Tastekin

TRANSCRIPTION & CHROMATIN

Chairs: Marcelo Nollmann, Anne Marie Martínez

16:45 – 18:00
Sala Cámara

QUANTIFYING THE SPATIAL ORGANISATION OF OPEN CHROMATIN IN SITU DURING EARLY STAGES OF EMBRYOGENESIS
Blanca Pijuan-Sala

FOXO - A TRANSCRIPTION FACTOR IVOLVED IN THE PRC1 TUMOR SUPPRESOR FUNCTION
Ana-Maria Popmihavlova

ULTRABITHORAX (UBX) COOPERATES WITH LAMIN-C TO MEDIATE TRANSCRIPTIONAL REPRESSION OF AUTOPHAGY IN SPECIFIC NUCLEAR REGIONS
Merabet Samir

NOTCH ACTIVITY COORDINATES DYNAMIC MASTERMIND HUBS TO INSTRUCT TRANSCRIPTION
Carmen Santa Cruz Mateos

THE DENSE REGULATORY LANDSCAPE OF A DEVELOPMENTAL ENHANCER
Yunhan Xie

SIGNALLING

Chairs: Marc Amoyel, Estee Kurant

16:45 – 18:00
Sala Conferencias

LOSS OF CLASS 3 PI3K COMPLEX LEADS TO RETENTION OF WG AT THE APICAL MEMBRANE IN POLARIZED TISSUE
Bojana Pavlovic

ROLE OF CELL MORPHOLOGY IN SHAPING NOTCH SIGNALLING DYNAMICS DURING EARLY NEUROGENESIS
Prachi Richa

EXTRACELLULAR MATRIX REMODELLING PROMOTES TGF-B-MEDIATED REGENERATIVE RESPONSE IN THE DROSOPHILA ADULT BRAIN AFTER INJURY
Juan Sánchez

NOTCH IS A LIGAND OF DRAPER MEDIATING SPERMATOGONIA CELL DEATH
Hila Toledano

AUTOPHAGY REGULATES NOTCH LEVELS DURING *DROSOPHILA* HEMATOPOIESIS
Pablo Wappner

POSTER SESSION AND WINE & CHEESE

18:00 – 20:00
Exhibitor Hall

PROGRAM

SATURDAY, SEPTEMBER 27th

09:00 – 09:30
Sala Sinfónica

EVOLUTION AND DIVERSIFICATION OF MIMICRY AND MASQUERADE IN BUTTERFLIES

Plenary speaker: Wei Zhang, Peking University (China)

09:30 - 10:00
Sala Sinfónica

FROM FLIES TO DRUGS: BEATING THE ODDS

Plenary speaker: Rubén Artero, Universidad de Valencia (Spain)

10:00 - 10:30
Exhibitor Hall

COFFEE BREAK

10:30 - 13:00
Sala Sinfónica

PHYSIOLOGY & METABOLISM

Chairs: David Owald, Helena Cocheme

MAPPING METABOLIC PROGRAMS IN A WHOLE-ANIMAL AT SINGLE-CELL RESOLUTION
Rita Cardoso-Figueiredo

MICROBIOME INDUCED REPROGRAMING OF NITROGEN METABOLISM COUNTERACTS THE DELETERIOUS EFFECTS OF AMINO ACID IMBALANCED DIETS
Silvia F. Henriques

A GENETICALLY-ENCODED METHOD FOR *IN VIVO* TAGGING AND TRACING OF LIPIDS FROM CELL-TO-CELL
Victor Girard

TIC AND TAC MICROPROTEINS ENCODED BY A BICISTRONIC RNA CONTROL DROSOPHILA REPRODUCTION
Jennifer Zanet

GUT MICROBE-DERIVED LACTIC ACID OPTIMIZES HOST ENERGY METABOLISM DURING STARVATION
Jason William Millington

INTERSECTING EXPERIMENTAL EVOLUTION AND CRISPR SCREENS TO IDENTIFY NOVEL INSECTICIDE RESISTANCE LOCI
Richard Benton

INSULIN/INSULIN-LIKE GROWTH FACTOR SIGNALING PATHWAY PROMOTES HIGHER FAT STORAGE IN *DROSOPHILA* FEMALES
Elizabeth Rideout

SOMATIC GLYCOLYSIS SUSTAINS GERM CELL SURVIVAL THROUGH SHUTTLING OF LACTATE IN THE DROSOPHILA TESTIS
Diego Sainz de la Maza

TRACHEAL CELLS ON DIET: HOW TRACHEAL NUTRITION SHAPES THE PHYSIOLOGY AND METABOLISM OF THE FRUIT FLY
Sohela Sarkar

METABOLIC PLASTICITY OF THE DROSOPHILA NERVOUS SYSTEM UPON COLD EXPOSURE
Nina Surina

10:30 - 13:00
Sala Cámara

MORPHOGENESIS & ORGANOGENESIS

Chairs: Daniel Rios, Maria Leptin

THE PATH TO (ALMOST) PERFECT SYMMETRY: INVESTIGATING GROWTH DYNAMICS AND MORPHOGENESIS IN DROSOPHILA WINGS
Ettore de Giorgio

SCALING OF MORPHOGENETIC FLOW EMERGES FROM GENETIC PATTERNING AND TISSUE MECHANICAL PROPERTIES
Julien Delpierre

DYNAMICS AND MOLECULAR REGULATION OF THREE-DIMENSIONAL PACKING OF EPITHELIA
María Gómez-Lamarca

BASEMENT MEMBRANE MECHANICS AND TISSUE-EXTRINSIC FORCES DRIVE SQUAMOUS MORPHOGENESIS IN THE GROWING DROSOPHILA WING DISC
Stefan Harmansa

DROSOPHILA EMBRYONIC NEURAL STROMA ORGANIZATION AND DYNAMICS
Katerina Karkali

PATTERNED CELL DEATH MODULATES NON-AUTONOMOUSLY WING SHAPE VIA A MECHANICAL FORCE
Alexis Matamoro-Vidal

COORDINATING CELL FATE SPECIFICATION AND TISSUE REMODELLING IN THE DROSOPHILA EMBRYONIC MIDGUT
Andrew Plygawko

QUANTIFYING AND MANIPULATING THE MOLECULAR ELASTICITY OF DROSOPHILA MUSCLE
Devam Purohit

COORDINATION OF DROSOPHILA TRACHEA AND EPIDERMIS DEVELOPMENT BY A SUBSET OF SPECIALIZED ADHESIVE CELLS
Daniel Ríos

CONTRACTILE-TO-EXPANDING STRESS FIBER SWITCH DURING DROSOPHILA OOGENESIS
Ningwei Sun

10:30 - 13:00
Sala Conferencias

STEM CELLS & REGENERATION

Chairs: Salvador Herrera, Christa Rhiner

A JAK/STAT-PDK1-S6K AXIS BYPASSES SYSTEMIC GROWTH RESTRICTIONS TO PROMOTE REGENERATION
Classen Anne-Kathrin

SPATIAL WNT SIGNALING FACILITATES MEF2 HETEROGENEITY TO MAINTAIN AN UNDIFFERENTIATED MUSCLE PRECURSOR POOL DURING DEVELOPMENT
Josephine Bageritz

TUMOUR-DERIVED ILP8 AND UPD3 CONTROL INTESTINAL PROGENITOR CELLS DEPLETION DURING CACHEXIA IN *DROSOPHILA* LARVAE
Alexandre Dijane

TRITHORAX BALANCES ISC FATE DECISIONS VIA PTX1-MEDIATED REPRESSION OF EE DIFFERENTIATION
Virginia Fasoulaki

UNRAVELLING THE CIRL/TOLL8 CODE IN ESTABLISHING SPATIAL CELLULAR PATTERNS IN THE *DROSOPHILA* ADULT MIDGUT EPITHELIUM
Alphy John

IMMUNE CELLS MEDIATE TRACHEAL RECRUITMENT AND ECM REMODELING TO PRESERVE MUSCLE INTEGRITY AND PROMOTE SURVIVAL
Ammar Nourhene

LIPID DROPLET ASSOCIATED PROTEINS REGULATE *DROSOPHILA* BLOOD PROGENITOR FATE AND FUNCTIONAL HETEROGENEITY
Yashashwinee Rai

A GLIA-DERIVED CYTOKINE REGULATING BRAIN-BODY COMMUNICATION UPON BRAIN INJURY
Anabel Rodriguez Simões

CALCIUM DYNAMICS AND OVARIAN STEM CELL NICHE AGEING
Helena Sánchez-Gómez

METABOLIC CROSSTALK BETWEEN THE GUT AND ITS

MICROENVIRONMENT SUPPORTS INTESTINAL STEM CELL ADAPTATION DURING TISSUE REGENERATION
Yuanliangzi Tian

13:00 – 14:30
Exhibitor Hall

LUNCH BREAK

13:30 – 14:30
Sala Sinfónica

EUROPEAN DROSOPHILA SOCIETY: GENERAL ASSEMBLY AND FLYBASE INFORMATION SESSION

14:30 – 15:45
Sala Sinfónica

CELL STRESS, GROWTH, PROLIFERATION AND DEATH I

Chairs: Gabor Juhasz, Catarina Homem

A NOVEL MODEL FOR LIVE-IMAGING TUMOUR CELL DEATH AND REVEALING ITS FUNDAMENTAL ROLE IN TUMOURIGENESIS
Andrew Davidson

A MOLECULAR SWITCH DOWNSTREAM OF TOLLS FROM INNATE IMMUNITY TO CELL PROLIFERATION IN THE BRAIN
Alicia Hidalgo

TUMORIGENESIS WITHOUT ONCOGENES: SEQUENTIAL STRESS REWIRES REGENERATION
Enrique Martin-Blanco

DEVELOPMENTAL DELAY ENSURES GLOBAL TISSUE SIZE ROBUSTNESS UPON LOCAL INDUCTION OF APOPTOSIS
Ralitza Staneva

MORBIUS, A NEW EF-HAND CALCIUM-BINDING PROTEIN, IS INVOLVED IN CELL COMPETITION
Katrin Strobel

14:30 – 15:45
Sala Cámara

METHODS

Chairs: Tony Southall, Suzanne Magali

A SPLIT DCAS12A PLATFORM FOR EPIGENOME REPROGRAMMING
James Johnson

TFTAG – A NOVEL LIBRARY OF ENDOGENOUSLY TAGGED *DROSOPHILA* TRANSCRIPTION FACTORS
Sebastian Kittelmann

MORPHOKIT: A SCALABLE PIPELINE FOR QUANTITATIVE MULTISCALE TISSUE MORPHODYNAMIC
Rémi Pigache

DIRECT CAPTURE OF CRISPR MUTATIONS AND TRANSCRIPTIONAL CHANGES WITHIN SINGLE CELLS IN VIVO

Siamak Redhai

A BIOORTHOGONAL METHOD TO TAG AND TRACE BRANCHED-CHAIN AMINO ACIDS AND THEIR METABOLITES
Sebastian Sorge

14:30 – 15:45
Sala Conferencias

RNA BIOLOGY

Chairs: Felipe Karam Teixeira, Valérie Hilgers

BRIDGING THE GAP BETWEEN DNA AND RNA WITH HOX TRANSCRIPTION FACTORS
Julie Carnesecchi

NOVEL STOP CODON READTHROUGH STIMULATORY ELEMENTS REVEALED BY HIGH THROUGHPUT SCREENING IN DROSOPHILA CELLS
Marco Mariotti

ANGEL WING: A CLASS OF ALTERNATIVE SPLICING REGULATORS IN ANIMALS
Yikang Rong

ELAV MEDIATES CIRCULAR RNA BIOGENESIS IN NEURONS
Mengjin Shi

RNA ARCHITECTURE AT THE TRANSLATION TERMINATION SITE DETERMINES VENTRAL VEINS LACKING/ DRIFTER (VVL/DFR) READTHROUGH RATES
Georg Wolfstetter

15:45 – 16:15
Exhibitor Hall

COFFEE TO GO TO AVAILABLE FOR THE POSTER SESSIONS

15:45 – 17:45
Exhibitor Hall

POSTER SESSION

17:45 – 18:15
Sala Sinfónica

INVERTEBRATE ONCOLOGY: TUMOR-HOST INTERACTIONS IN DROSOPHILA

Plenary speaker: David Bilder, University of California-Berkeley (USA)

18:15 – 18:45
Sala Sinfónica

EDS PhD PRIZE

FUNCTIONAL-METABOLIC COUPLING IN DISTINCT RENAL CELL TYPES COORDINATES ORGAN-WIDE PHYSIOLOGY
Plenary speaker: Jack Holcombe, University of Bristol (UK)

20:30 – 23:55

GALA DINNER

Dársena Restaurant.
Palacio de la Fuente, Muelle Pte., 6, 3033 Alicante

PROGRAM

SUNDAY, SEPTEMBER 28th

09:30 – 10:45
Sala Sinfónica

CELL STRESS, GROWTH, PROLIFERATION AND DEATH II

Chairs: Gabor Juhasz, Catarina Homem

BODY PRESSURE AND CONFINEMENT ENSURE WING GROWTH AND ALLOMETRY DURING PUPAL DEVELOPMENT
Dalmiro Blanco Obregón

POLYPLOID CELL CYCLE VARIATIONS IN DEVELOPMENT AND CANCER
Brian Calvi

HBS AND RST ADHESION MOLECULES CONTROL EPITHELIUM ARCHITECTURE VIA A REGIONAL CODE THAT REGULATES CELL ELIMINATION
Miquel Alexandre Ferreira Pinto

P53-INDUCED SENESCENCE CONTRIBUTES TO TUMORIGENESIS BY PROVOKING A HEIGHTENED RESPONSE TO ECDYSONE
Inés Kelleher López

TO GROW OR NOT TO GROW – CROSSTALK BETWEEN INTEGRATED STRESS RESPONSE AND MTOR SIGNALING IN REGULATING GROWTH DURING ENTEROBLAST DIFFERENTIATION
Terhi Rintakangas

09:30 – 10:45
Sala Cámara

POPULATION GENETICS & EVOLUTION

Chairs: Thomas Flatt, Luisa Pallares

HOST-DEPENDENT SEX RATIO PLASTICITY IN A SPECIALIST DROSOPHILID
Divyansh Mittal

DROSOPHILA GLUE AS A NEW MODEL TO UNDERSTAND ADAPTATION AND TO DEVELOP NEW BIOADHESIVES
Virginie Courtier-Orgogozo

THE EVOLUTION OF MUTATION RATES IN LIGHT OF DEVELOPMENT AND CELL-LINEAGE SELECTION
Paco Majic

TEMPORAL DYNAMICS OF GENE EXPRESSION DURING METAMORPHOSIS IN TWO DISTANT DROSOPHILA SPECIES
Aleksandra Ozerova

GENETIC AND ENVIRONMENT-DEPENDENT REGULATION OF TRANSCRIPTIONAL VARIANCE IN OUTBRED DROSOPHILA
Luisa Pallares

10:45 - 11:15 **COFFEE BREAK**
Exhibitor Hall

11:15 - 11:45 **WIRING REGULATORY ELEMENTS TO TARGET GENES**
Sala Sinfónica
David Ish-Horowicz early career group leader lecture
Plenary speaker: Maria Gambetta, Université de Lausanne (Switzerland)

11:45 - 12:15 **MECHANISMS OF SELF-CONSUMPTION AND SUPPORT OF TUMOR GROWTH**
Sala Sinfónica
Plenary speaker: Tor Erik Rusten, University of Oslo (Norway)

12:15 – 12:45 **UNDERSTANDING ODOR PROCESSING IN DROSOPHILA: CIRCUITRY, CODING, AND BEHAVIORAL INSIGHTS**
Sala Sinfónica
Plenary speaker: Silke Sachse, Max Planck for Chemical Ecology (Germany)

12:45 – 13:00 **CLOSING REMARKS**
Sala Sinfónica

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