Programme

International Insect Hormone Workshop 2025

15 Jun 2025

18:00 - 21:00 **Welcome reception**

Venue: Hotel Scandic Falkoner

Join us in the hotel restaurant for tapas and drinks, and mingle with your fellow insect hormone enthusiasts.

You can also pick up your name badge.

16 Jun 2025

08:45 - 09:00 **Welcome**
Speaker: Kim Rewitz

09:00 - 09:40 **Remarks from the Royal Academy**
Speaker: Tobias Wang

09:45 - 10:45 **"Mapping ligand-receptor pairs involved in inter-organ communication"**
Speaker: Norbert Perrimon

09:45 - 10:45 **Nutrient sensing and inter-organ crosstalk in homeostasis, part 1**
Chair: Fumiaki Obata

10:45 - 11:15 **Break**

11:15 - 11:40 **Connectomics of the fly vagus nerve: the organization of the enteric nervous system in Drosophila**
Speaker: Michael J. Pankratz

11:15 - 12:30 **Nutrient sensing and inter-organ crosstalk in homeostasis, part 1 (Continued)**
Chair: Fumiaki Obata

11:40 - 12:05 **Gut-to-brain regulation of Drosophila aging through neuropeptide F, insulin, and juvenile hormone**
Speaker: Marc Tatar

12:05 - 12:30 **Protein-responsive gut hormone Tachykinin modulates food choice and longevity via AKH signaling**
Speaker: Nadja Ahrentløv

12:30 - 13:30 **Lunch**

13:30 - 13:55 **Measurement of Neuropeptide F (NPF) titer in Drosophila melanogaster hemolymph using a novel sandwich ELISA system**
Speaker: Maki Higashida

13:30 - 14:20 **Nutrient sensing and inter-organ crosstalk in homeostasis, part 2**
Chair: Julien Colombani

13:55 - 14:20 **Cholesterol activates TOR/Insulin signaling through orphan nuclear receptor Hr3 to modulate systemic growth**
Speaker: Mette Lassen

14:20 - 14:50 **Break**

14:50 - 15:50 **Neuroendocrine compartmentalization of the Drosophila midgut and its implications to intestinal regeneration**
Speaker: Julia Cordero

14:50 - 16:40 **Epithelial organs and systemic homeostasis**
Chair: Ditte S. Andersen

15:50 - 16:15 **Pvf1-Pvr-mediated crosstalk between the trachea and the gut guides intestinal stem-cell migration to promote gut regeneration**
Speaker: Ditte S. Andersen

16:15 - 16:40 **Metabolic and physiological homeostasis maintained by the Malpighian tubules**

Speaker: Fumiaki Obata

16:40 - 18:40 **Poster session**

17 Jun 2025

09:00 - 10:00 **Circulating hormone levels regulate sex differences in development and physiology**
Speaker: Elizabeth Rideout

09:00 - 10:25 **Hormones and reproduction, part 1**
Chair: Kenneth Halberg

10:00 - 10:25 **Sex-dependent variation in gut hormone signaling drives systemic differences in physiology and behavior**
Speaker: Michael Texada

10:25 - 10:55 **Break**

10:55 - 11:20 **Amino-acid dynamics and their regulation after blood feeding in Aedes aegypti**
Speaker: Yusuke Kato

10:55 - 12:10 **Hormones and reproduction, part 1 (Continued)**
Chair: Kenneth Halberg

11:20 - 11:45 **Dumpless1 regulates mature follicle rupture by integrating ecdysone and octopamine signaling in Drosophila**
Speaker: Huimin Deng

11:45 - 12:10 **Too much of a good thing: restricted juvenile hormone signaling is required for male and female fertility in Drosophila melanogaster**
Speaker: Lacy Barton

12:10 - 13:10 **Lunch**

13:10 - 13:35 **A putative role for ecdysteroid conjugation in mosquito reproduction**
Speaker: Mackenzie Yedlin

13:10 - 14:00 **Hormones and reproduction, part 2**
Chair: Lacy Barton

13:35 - 14:00 **Integrated transcriptomic and miRNA profiling reveals multifaceted roles of E74 isoforms in Aedes aegypti reproduction**
Speaker: Sourav Roy

14:00 - 14:30 **Break**

14:30 - 14:55 **A clock-related neuropeptide is essential for the photoperiod- dependent reproductive switch in the pea aphid**
Speaker: Francesca Sara Colizzi

14:30 - 15:45 **Hormones and reproduction, part 2 (Continued)**
Chair: Lacy Barton

14:55 - 15:20 **A mating responsive hormonal program supports female reproductive success during periods of dietary restriction in Drosophila**
Speaker: Takashi Koyama

15:20 - 15:45 **Regulatory role of non-coding RNAs in juvenile hormone- stimulated female reproduction in locusts**
Shutang Zhou

15:45 - 16:15 **Break**

16:15 - 17:15 **Has social evolution co-opted a conserved neuroendocrine toolkit?**
Speaker: Sarah Kocher

16:15 - 18:30 **Ecological roles of juvenile hormone**
Chair: Naoki Yamanaka

17:15 - 17:40 **Non-canonical action of circadian clock genes controls diapause entry via the NuA4/Tip60 acetyltransferase complex**
Speaker: Wen Liu

17:40 - 18:05 **Juvenile hormone and social context jointly shape queen pheromone production in sweat bees**
Speaker: Callum Kingwell

18:05 - 18:30 **The role of workify in specifying gyne development in response to juvenile hormone in the pharaoh's ant, Monomorium pharaonis**
Speaker: Ruyan Li

18:30 - 20:30 **Dinner at the Royal Academy**
All guests are welcome to attend dinner at the Royal Academy

18 Jun 2025

09:00 - 09:25 **Deep dive into the PAS-A of a JH receptor: what keeps the complex together?**
Speaker: Marek Jindra

09:00 - 10:40 **Juvenile Hormone Pathways and Activity**
Chair: Kirst King-Jones

09:25 - 09:50 **The integration of multiple modulatory pathways controls juvenile hormone synthesis**
Speaker: Fernando Noriega

09:50 - 10:15 **Possible another pathway of juvenile hormone biosynthesis in Bombyx mori**
Speaker: Toru Togawa

10:15 - 10:40 **Juvenile hormone acts during development and postmating to suppress innate immunity in Drosophila melanogaster**
Speaker: Scott Keith

10:40 - 11:10 **Break**

11:10 - 11:35 **Membrane-associated Met activates PVR to mediate juvenile-hormone signaling in Aedes aegypti**
Speaker: Jinsong Zhu

11:10 - 12:50 **Juvenile Hormone Pathways and Activity (Continued)**
Chair: Kirst King-Jones

11:35 - 12:00 **Juvenile-hormone degradation enzymes have shared and unique requirements in Drosophila development**
Speaker: Rebecca Spokony

12:00 - 12:25 **Is there a feedback of JH titer on the CA biosynthetic activity?**
Speaker: Marcela Nouzova

12:25 - 12:50 **Juvenile hormone acts via a membrane protein to promote vitellogenin secretion from fat body cells to hemolymph**
Speaker: Baojuan Zeng

12:50 - 13:50 **Lunch**

15:00 - 16:00 **Canal Tour - Sightseeing of Copenhagen**
Boat leaves from Gammel Strand

19 Jun 2025

09:00 - 10:00 **Steroid hormone-dependent glial-neuronal interaction promotes brain development during Drosophila metamorphosis**
Speaker: Naoki Yamanaka

09:00 - 10:25 **Hormonal regulation of development, part 1**
Chair: Michael Texada

10:00 - 10:25 **Timing the transition: how polyploidy in the prothoracic gland shapes metamorphosis**
Speaker: Josefa Cruz

10:25 - 10:55 **Break**

10:55 - 11:20 **Hormonemes are essential for ecdysone release**
Speaker: Nuria Romero

10:55 - 12:10 **Hormonal regulation of development, part 1 (Continued)**
Chair: Michael Texada

11:20 - 11:45 **Decoding the information within hormone pulses**
Speaker: Christen Mirth

11:45 - 12:10 **Regulation of developmental programs of distinct cell types by juvenile hormone in developing Drosophila larvae**
Speaker: Matej Milacek

12:10 - 13:10 **Lunch**

13:10 - 13:35 **Repress and conquer: E93-mediated silencing of broad governs adult wing differentiation in Drosophila**
Speaker: David Martín

13:10 - 14:50 **Hormonal regulation of development, part 2**
Chair: Nuria Romero

13:35 - 14:00 **Functional expansions of E93 underlie the evolutionary origin of insect metamorphosis**
Speaker: Kei Inada

14:00 - 14:25 **N-alpha-acetyltransferase-mediated chromatin remodeling modulates ecdysteroid action in Tribolium castaneum**
Speaker: Subba Reddy Palli

14:25 - 14:50 **Ecdysone at metamorphosis: a cellular stress factor**
Speaker: Jordi Casanova

14:50 - 15:20 **Break**

15:20 - 15:45 **The specificity and selectivity of JH receptor signaling**
Speaker: Sarka Tumova

15:20 - 17:00 **Hormonal signaling across the arthropods**
Chair: Marek Jindra

15:45 - 16:10 **Mapping of peptidergic cells in the gut of the ship tick Ixodes ricinus**

Speaker: Ladislav Roller

16:10 - 16:35 **Insight Into the Tick Neurosecretory System**

Speaker: Ladislav Šimo

16:35 - 17:00 **Common and distinct features in Taiman evolution**

Speaker: Vlastimil Smykal

18:30 - 21:00 **Banquet at Feed Bistro**

We invite you to an exquisite 3-course dinner at Feed Bistro (Vesterbrogade 1p, 1620 Copenhagen)

20 Jun 2025

09:00 - 10:00 **Karlson Lecture**
Speaker: Rysuke Niwa

10:00 - 10:30 **Break**

10:30 - 10:55 **A switch in the mode of tissue growth extends the growth phase of Drosophila wing primordia during early pupal development**
Speaker: Laura Boulan

10:30 - 12:10 **Hormonal regulation of organ growth and remodeling**
Chair: Christen Mirth

10:55 - 11:20 **Trachea orchestrate Drosophila abdomen remodeling via ecdysone biosynthesis and Pvf1/PvR signaling**
Xavier Franch-Marro

11:20 - 11:45 **Imaginal discs produce neuropeptide-like precursor 1 to alleviate ER stress in response to warm temperature**
Speaker: Do-Hyoung Kim

11:45 - 12:10 **Steroid hormone signaling regulates the death of hepatocyte-like cells**
Speaker: Neha Agrawal

12:10 - 13:10 **Lunch**

13:10 - 13:35 **Ion transport peptide: a glucagon-like regulator of Drosophila energy homeostasis**
Speaker: Martina Gáliková

13:10 - 14:50 **Energy and ion homeostasis**
Chair: Naoki Okamoto

13:35 - 14:00 **Ion transport peptide (ITP) acts on the hindgut via the receptor guanylyl cyclase Gyc76c in Drosophila**
Akira Watanabe

14:00 - 14:25 **Neuroendocrine regulation of calcium homeostasis in the fruit fly**
Speaker: Naoki Okamoto

14:25 - 14:50 **DH31/CGRP+ enteroendocrine cells act as peripheral osmosenors to control systemic osmoregulation via a gut-brain-renal axis in Drosophila**
Speaker: Kenneth Halberg

14:50 - 15:20 **Break**

15:20 - 15:55 **Business meeting**

15:55 - 16:05 **Closing remarks**
Speaker: Kim Rewitz