

Poster Session – Monday 31 March 2025, afternoon

Goncalo Antunes	Corrugated channels can filter ciliated microorganisms based on the metachronal wavelength
Markus Baer	Hydrodynamic synchronization of elastic cilia: The impact of surface effects and unsteady viscous flow on the characteristics of metachronal waves
Rafał Błaszkiwicz	Ciliary cooperation and transport in unsteady Stokes flows
Alexander Boggon	Complexity in the ciliary dynamics of a swimming microorganism
Christoph Brenker	Human fertilization in vivo and in vitro requires the CatSper channel to initiate sperm hyperactivation
Bin Cai	Structure and assembly of A-C linker connecting microtubule triplets in centrioles
Viridiana Carmona Sosa	How cilia beating affects the swimming of exogenous bodies in airways?
Rodrigo E. Catalan	A flavin-based photoreceptor controls the photoactivation of ciliary adhesion in <i>Chlamydomonas</i>
Michał Czerepaniak	Curves and currents: modelling the effects of surface curvature on ciliary flows
Sophia Fochler	Axonemal dynein contributions to the symmetric and asymmetric waveforms in <i>Leishmania</i> .
Meurig Gallagher	Driving Curvature: The influence of sperm head shape on Flagellar Kinematics
Sebastian George	Developments of the invitro ciliary transport assay for the diagnosis of Primary Ciliary Dyskinesia
Leonie Herrmann	Chemosensory signaling in human sperm is controlled by Ca^{2+} influx via CatSper and Ca^{2+} clearance via plasma membrane Ca^{2+} ATPases

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Lara Melanie Hoepfner	Unwrapping the ciliary coat: high-resolution structure and function of the ciliary glycocalyx in <i>Chlamydomonas reinhardtii</i>
Yameng Huang	ARL13 and ARL3 regulate the unloading of ODA16 from IFT in motile cilia
Meiqin Jiang	Human IFT-A complex structures provide molecular insights into ciliary transport
Kei Jokura	Neuronal coordination of Gravity-Sensing Cilia in the ctenophore apical organ
Olivia Kendall	Soluble adenylyl cyclase (sAC) in non-mammalian sperm is directly controlled by pH, not HCO_3^- or Ca^{2+}
Friedrich Kleiner	Role of mastigonemes in the green alga <i>C. reinhardtii</i>
Julia Koenig	A range of 30%-62% of functioning multiciliated airway cells is sufficient to maintain ciliary airway clearance
Elijah Lee	The wavelength of the ciliary beat in wild-type and mutant <i>Chlamydomonas reinhardtii</i> saturates at ciliary lengths above 15 μm
Hakon Leffler	Galectins and Cilia
Girish Ram Mali	Molecular basis for the activation of outer dynein arms in cilia
Mariana Medina Sanchez	Cilia & Flagella: Bio-inspired solutions for microrobotics
Yasmin Magdy Emadeldin Mohamed Abdelghaffar	Stochastic modeling of a two-component polymer engine
Adrian Nievergelt	The energetics of swimming motility in <i>Chlamydomonas</i>
Xiaoyi Ouyang	Identification of force-generating dynein states in reactivated <i>Chlamydomonas</i> axonemes

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Andrea Perna	Relationship between movement, feeding and the energy budget of the ciliate <i>Tetrahymena pyriformis</i>
Nunziana Pezzella	The role of OFD1 in motile cilia
Emmie Pohjanen	Subcellular protein architecture of human sperm
Arun Ravi	Synchronization driven flows and motility of spherical ciliates
Xiaomeng Ren	Fluid flow reconstruction around a free-swimming sperm in 3D
Lea Rupprecht	Ciliary Adhesion of <i>Chlamydomonas reinhardtii</i> on Charge-Functionalized Surfaces
Daniel Tam	Phase sensitivity of flagellar beating to external forces
Darren Teo	Fantastic LCs and what do they do?
Alina Wilken	Primary ciliary dyskinesia associated disease-causing variants in CCDC39 and CCDC40 cause axonemal absence of inner dynein arm heavy chains DNAH1, DNAH6, and DNAH7
Kai Wohlgemuth	Pathogenic variants in CFAP46, CFAP54, CFAP74 and CFAP221 cause primary ciliary dyskinesia with a defective C1d projection of the central apparatus
Hengxi Zhang	In situ arrangement of CatSper Ca^{2+} channels in CATSPER2-deficient human sperm