

2025 ANNUAL CONFERENCE
ANTWERP
8 - 11 JULY 2025

SEBIOLOGY.ORG
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ANTWERP 2025



SESSION TOPICS WILL INCLUDE:

ANIMAL BIOLOGY SESSIONS

- Multiscale Musculoskeletal Mechanics and Modelling
- Experimental Palaeobiology - Bringing Fossils "Back to Life"
- Functional Morphology of Locomotion and Feeding: A Tribute to Peter Aerts
- Kinematics and Robotics - state of the arts kinematics and their transfer to robotics
- Innovative Methods and Techniques in Biomechanics
- Phenotype and Evolution
- General Biomechanics
- Comparative Endocrinology
- Stress as a Driver of Neural Plasticity: From Brains to Behaviour
- Animal Responses to a Changing World: What About Cognition?
- Going Beyond Death: Understanding Ecologically and Physiologically Relevant Impacts of Environmental Toxicants
- Innovating for a Sustainable Future: Mitigating the Environmental Risks of High-Tech Solutions
- Pollution, Osmoregulation and Energy Use
- Riding The Wave: Insights Into Plastic and Evolutionary Animal Responses to Temperature Challenges
- Vertebrate Cardiovascular and Respiratory Physiology
- Metabolic Reprogramming Across Time Scales
- Open Water: The Biology of Pelagic Fishes
- Who gets to get hooked? Experimental biology to

understand the impact of selective harvesting on phenotypic and genotypic diversity

- Biotic Interactions in Freshwater Ecosystems Under Anthropogenic Environmental Change
- The Environmental Causes and Consequences For Offspring of Parental Effects
- The Effect of Early Life Stress on Adult Phenotypes: Mechanisms and Fitness Consequences
- Embryos In A Changing World
- Growing In A Changing Environment: The Importance Of Integrating Development Into The Challenges Imposed By Dynamic Environments Of The Herpetofauna.

PLANT BIOLOGY SESSIONS

- Accelerating progress in plant science via AI approaches.
- Poisonous Plants
- PEPG - Bridging the gap: connecting photosynthesis research from controlled environments to the field
- Cytoplasmic Genetics: From shaping plant traits to driving speciation
- From the Micro to the Macro: Fine Tuning Stomata to Maximise Global Crop Resilience
- Shared challenges and diverse approaches to physiology in ex situ conservation across taxonomic boundaries.
- Plant Phenomics: beyond the platforms (alternative title: Plant phenomics for impact)

CELL BIOLOGY SESSIONS

- Proteostasis in *C. elegans*, Proteostasis in mammalian systems, Proteostasis and aging , Proteostasis in plants
- Biomolecular Condensates in Plants
- Tip growth in Plant Biology
- Open Cell

SCIENCE ACROSS BOUNDARIES BIOLOGY SESSIONS

- Physiological Genomics

OUTREACH, EDUCATION AND DIVERSITY SESSIONS

- Plant architecture in model and crop plants
- Academic Peer review, first steps best practices, and future challenges
- Intersectionality: Impacts on academic staff and their students
- Embedding SDGs in the Curriculum

WORKSHOPS

- Creativity in Higher Education
- Getting your educational research published
- Enabling learning in a digital world
- Inclusive Doctoral Education
- Quick Wins – Celebrating implementable innovations in HE Teaching and Scholarship
- Collaborative curriculum design for experimental biology practical classes
- Biology as an experimentally-taught science
- Reward and recognition for outreach, education and diversity (OED)
- Responsible Aquatic Animal Research