



MetaZooGene Symposium Program of Presentations



New insights into biodiversity, biogeography, ecology, and evolution of marine zooplankton based on molecular approaches

Aviva Stadium, Dublin, Ireland - September 23, 2022

Convenors: Ann Bucklin (University of Connecticut, USA); Katja Peijnenburg (Naturalis Biodiversity Center, NL); Leocadio Blanco-Bercial (Bermuda Institute of Ocean Sciences, BM); Silke Laakmann (Helmholtz Institute for Functional Marine Biodiversity at the University of Oldenburg, DE)

Sponsor: Scientific Committee for Ocean Research (SCOR); MetaZooGene Working Group (SCOR WG157)
Hybrid format (in-person and online); Pre-registration required for all attendees

<https://metazoogene.org/symposium2022>

09:00	Welcome & Introduction to the MetaZooGene Symposium Ann Bucklin, Katja Peijnenburg, Silke Laakmann
	Session I. Diversity of the Pelagic Assemblage
09:15	Yebra, Lidia, Isabel Ferrera, Ana María Cabello, Miriam Domínguez, Jessica Vannini, Genuario Belmonte, Nerea Valcárcel-Pérez, Candela García-Gómez, Francisco Gómez-Jakobsen, Rowena Stern, Jesús M. Mercado. Characterization of microzooplankton communities in a polluted coastal area integrating high-throughput sequencing and microscopy
09:30	Ohnesorge, Alica, Stefan Neuhaus, Lucie Kuczynski, Sarah Taudien, Uwe John, Bernd Krock, Silke Laakmann. A view on zooplankton diversity in temperate waters inferred from organismal and environmental DNA metabarcoding
09:45	Laakmann, Silke, Astrid Cornils, Katja Metfies, Julian Koplín, Stefan Neuhaus, Carina Bunse, Barbara Niehoff, Hauke Flores. Integrative approach to study diversity and quantity of zooplankton in the Nansen Basin
10:15	Bucklin, Ann, Paola-Batta-Lona, Jennifer M. Questel, Mary Reid, Vickie You, Peter H. Wiebe. Population genetic diversity, structure, and connectivity of Euphausiacea based on COI barcodes: Implications for biodiversity and biogeography
10:30	Coffee Break
	Session II. Resources & Methods for Integrative Analysis
11:00	Fitzgerald, Catherine L., James J. Pierson, Louis V. Plough. How methods influence results: comparing morphological vs molecular identification of zooplankton in the water column and in the stomachs of fish
11:15	Ershova, Elizaveta A., Tone Falkenhaus. Resolving biases in diversity estimates and quantitative interpretation of zooplankton metabarcoding data
11:30	van der Pouw Kraan, Dennis, Conor Graham, Fiona Kavanagh, Luca Mirimin. Magnifying the resolution of (photo)microscopy with high-throughput molecular screening of important shellfish species in Irish coastal waters
11:45	Choo, Le Qin, G. Spaggiardi, E. Goetze, Milan Malinsky, Darshika Manral, Erik van Sebille, Galice Hoarau, Jef Huisman, Katja Peijnenburg. Genome-wide SNPs reveal distinct population structure in the holoplanktonic snail <i>Limacina bulimoides</i>
12:00	Lunch Break - On site
	Session III. Understanding pelagic communities & food webs
13:00	Hirai, Junya, Seiji Katakura, Satoshi Nagai. Interactions between marine viruses and planktonic copepod <i>Pseudocalanus newmani</i>
13:15	Zhou, Fanyu, Junya Hirai, Koji Hamasaki, Atsushi Tsuda. Feeding ecology of three euphausiid species in the low-latitude Eastern Indian and South Pacific Oceans inferred from 18S V9 metabarcoding
13:30	Maud, Jacqueline L., Kevin Xu Zhong, Colleen Kellogg and Brian P.V. Hunt. Disentangling food webs: combining CRISPR with metabarcoding to understand zooplankton diets
13:45	Batta-Lona, Paola G., Joel K. Llopiz, Peter H. Wiebe, Ann Bucklin. DNA metabarcoding of diet diversity of <i>Salpa aspera</i> in the mesopelagic food web of the NW Atlantic



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	Session IV. Virtual presentations (10 min each)
14:00	O'Brien, Todd D., on behalf of SCOR WG157 members and participants. The MetaZooGene Database (MZGdb): What we did, what we discovered, and where we are going next
14:10	Koh, Marc, Ilha Byrne, Iva Popovic, Sharon Appleyard, Stephanie Venables, Cynthia Riginos, and Julian Uribe-Palomino. First barcoding of copepod Monstrilloids from two locations in Australian coastal waters (Coral Bay WA and Southern Great Barrier Reef)
14:20	Liu, Weiwei, Xiaofeng Lin, Yehui Tan. Biodiversity of aloricate oligotrich ciliates in typical coastal habitats of southern China and phylogenetic evolution
14:30	McCartin, Luke, Annette F. Govindarajan, Jill McDermott, Santiago Herrera. Zooplankton environmental DNA community composition is structured by depth in the epipelagic Gulf of Mexico
14:40	Maathuis, M.A.M., Polling M., Nijhuis E.H., Voorhuijzen M.M., Keur M.C., Vorst, H.V. van der, Thijssen M.M.A., Sakinan, S, Jak R.G. Development of zooplankton monitoring in the shallow and turbid Dutch Wadden Sea integrating DNA metabarcoding and automatic image analysis
14:50	Stedman, Gabrielle, Oliver Kersten, Craig R. Smith, Jeffrey C. Drazen, Erica Goetze. Community ecology and spatial patterning of abyssal benthopelagic plankton in the CCZ.
15:00	Rauch, Cessa, Francisca C. Carvalho, Jon A. Kongsrud, Anders Hobæk and Tone Falkenhaug. Hyperbenthic Copepods (HYPCOP) in Norwegian waters
15:10	Coffee Break
	Poster Speed Talks (3 min each)
15:30	van Wijk, Danique, Iliana Bista, Daniëlle van der Burg, Geert-Jan Brummer, Katja T.C.A. Peijnenburg. Identifying pteropod diversity through metabarcoding of different types of environmental samples
	Schouten, Bo A., Lotte J. Bouwman, Catharina de Weerd, Jaap de Boer, Erica Goetze, Katja T.C.A. Peijnenburg. Integrative taxonomic approach uncovers hidden diversity within the elusive <i>Peracle</i> genus (Pteropoda)
	Spagliardi, Giada, Le Qin Choo, Erica Goetze, Katja Peijnenburg. Species boundaries in the <i>Limacina</i> species complex
	Kamchev, Pane, Le Qin Choo, Milan Malinsky, Erica Goetze and Katja Peijnenburg. Using a targeted SNP panel to assess species boundaries in a pteropod from the Atlantic Ocean
	Dénes, Marcell, Gábor Endre Tóth, Rade Garič, Marijana Hure. Building the Adriatic Calanoid Database with the help of Oxford's MinION system.
	Garič, Rade, Mirna Batistić, Marcell Dénes. New species of Doliolida (Tunicata, Thaliacea) from the Adriatic Sea
	Lian, Xiping, Jiaying Liu, Chaolun Li, Yehui Tan. Effects of coastal current and upwelling on the distributions of <i>Calanus sinicus</i> in the northern South China Sea and its response to the environment
	Lavrador, Ana S., Fábio G. Amaral, Jorge Moutinho, Pedro E. Vieira, Filipe O. Costa, and Sofia Duarte. Detection and monitoring of non-indigenous invertebrate species in recreational marinas through DNA metabarcoding of zooplankton communities in the North of Portugal
16:15	Open Discussion
17:00	Poster Session and Reception

**This symposium is associated with International Council for the Exploration of the Sea (ICES)
2022 Annual Science Conference (19-22 September 2022), Dublin, Ireland**

See: <https://www.ices.dk/events/asc/ASC2022/Pages/default.aspx>

For additional information: Scientific Committee for Ocean Research: <https://scor-int.org/>

MetaZooGene SCOR WG157: <https://scor-int.org/group/157/> and <http://www.metazoogene.org/>