Programme overview

All the times will be in Japan Standard Time (JST).

Before 4 July	Monday 4 July	Tuesday 5 July	Wednesday 6 July	Thursday 7 July
All presenters should register their LINC Biz account, access to the URL of the symposium and upload their presentation file on their own channel. All channels with presentations file will be released on 4 July and available on demand throughout the tenure of the symposium. Comments on videos and posters will be posted on the chat.			9:00 - 10:30 Ecology 2	
			10:30 - 11:00 Coffee break	
			11:00 - 12:30 Poster session 1	
		12:00 - 14:00 Poster session 2	12:30 - 14:00 Lunch	
	15:00 - 15:10 Opening	14:00 - 15:30 Taxonomy 1	14:00 - 15:30 Genomics / Phylogeny	
	15:30 - 16:30	15:30 - 16:00 Coffee break	15:30 - 16:00 Coffee break	15:30 - 16:30 Taxonomy
	The Honorary Thienemann	16:00 - 18:00 Taxonomy 2	16:00 - 17:30 Physiology	workshop 1
	Lecture 16:30 - 16:40			16:30 - 16:40 Short break
	Short break 16:40 - 18:30			16:40 - 17:40 Taxonomy workshop 2
	Ecology 1			18:00 - 19:30 Final forum

After 4 July, oral presentations will be also given on time through links to Zoom meetings.

Programme

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Monday, 4 July

- 15:00 15:10 Welcome and opening
- 15:30 16:30 The Honorary Thienemann Lecture Response of chironomids to climate change: evidence on cold, heat and chemical tolerance of cold-adapted species

Valeria Lencioni Chair: Richard Cornette

- 16:30 16:40 Coffee break
- 16:40 18:30 Ecology 1 Chair: Kenzi Takamura
 - 16:40 17:00 Chironomid community response on climate driven changes in a long-term study of a tufa barrier in Plitvice Lakes National Park Valentina Dorić
 - 17:00 17:20 Chironomids and the City Chironomidae diversity and distribution in urban water bodies Dubravka Čerba
 - 17:20 17:40 Brief review: impact of dams on non-biting midges (Diptera: Chironomidae) diversity and ecology in the rivers of the Šventoji and Žeimena sub-basins (Lithuania). Laurynas Stasiukynas
 - 17:40 18:00 Recent advances in the knowledge on the Chironomidae community from Pico da Neblina, Amazonas, Brazil. Erika Shimabukuro
 - 18:00 18:20 New Chironomidae records for the North Atlantic islands based on pupal exuviae Agnes Kreiling

Tuesday, 5 July

- 12:00 14:00 Poster session 2
- 14:00 15:30 **Taxonomy 1** Chair:Koichiro Kawai

14:00 - 14:20 Stictochironomus species can fold their gonostylus inwardly. Why? Masaru Yamamoto

- 14:20 14:40 **A Taxonomic Review of the Japanese** *Dicrotendipes* Daisuke Ozaki
- 14:40 15:00 Orthocladius (Orthocladius) montisdei sp. n. and O. (O.) queyrassianus sp. n., two new crenophilous species with reduced antennae from continental France (Chironomidae, Orthocladiinae) Joel Moubayed
- 15:00 15:20 *Limnophyes knispelae* sp. n. and *L. sartorii* sp. n., two new species from the Swiss Alps (Chironomidae, Orthocladiinae) Joel Moubayed
- 15:30 16:00 Coffee break
- 16:00 18:00 **Taxonomy 2** Chair: Peter Langton
 - 16:00 16:20 Fossils of non-biting midges illuminating reversible loss of blood-feeding Viktor Baranov
 - 16:20 16:40 **The use of artificial intelligence to determine the taxonomic classification of chironomid larvae.** Djuradj Milošević
 - 16:40 17:00 **DNA barcodes cast light on genetic diversity in the circumpo**lar species *Tanytarsus gracilentus* (Holmgren, 1883) Torbjørn Ekrem
 - 17:00 17:20 European Chironomidae barcode data joint efforts needed to improve the reference library for non-biting midges Elisabeth Stur
 - 17:20 17:40 **DNA barcoding reveals an unknown Chironomidae diversity from the freshwater biodiversity hot-spot** Piotr Gadawski

Wednesday, 6 July

- 9:00 10:30 Ecology 2 Chair: Will Bouchard
 - 9:00 9:20 **Temporal partitioning of emergence by Chironomidae in an insular tropical rainforest stream** Will Bouchard
 - 9:20 9:40 Diversity of Chironomidae (Diptera) from Saline and Freshwater Lakes in a Grass-Stabilized Sand Dune Region of North America Barbara Hayford

- 9:40 10:00 The influence on the taxonomic sufficiency of the Chironomidae on the outcome of a biomonitoring study of urban prairie streams of differing flow regimes Megann Harlow
- 10:00 10:20 Genetic differentiation within species in two Nanocladius species phoretic on Megaloptera and Plecoptera Natsuko Kondo
- 10:30 11:00 Coffee break
- 11:00 12:30 **Poster session 1**
- 12:30 14:00 Lunch
- 14:00 15:30 Genomics / Phylogeny Chair: Richard Cornette
 - 14:00 14:20 High quality genome assembly of the anhydrobiotic midge provides insights on a single chromosome-based emergence of extreme desiccation tolerance Yuki Yoshida
 - 14:20 14:40 Genome skimming provides new insights in evolutionary history of Chironomidae Xiao-Long Lin
 - 14:40 15:00 Evolutionary relationships between chironomid hemoglobins Koichiro Kawai
 - 15:00 15:20 Evolutionary studies on *Chironomus* hemoglobin using phylogenetic approach Bimalendu Nath
- 15:30 16:00 Coffee break
- 16:00 17:30 **Physiology**

Chair: Valeria Lencioni

- 16:00 16:20 Evaluation of rearing efficiency and characterization of developmental stages of the anhydrobiotic midge *Polypedilum vanderplanki* in laboratory conditions Richard Cornette
- 16:20 16:40 Fate-determining metabolic pathways in a tropical chironomid midge under physiological water unavailability Leena Thorat
- 16:40 17:00 Chironomid Eating Disorder alteration in digestive system of Chironomus riparius (Diptera, Chironomidae) exposed to magnetic nanoparticles Jelena Stojanović
- 17:00 17:20 Gene Expression Analysis of Tire Rubber Microparticles and Leachate in Freshwater Organism Chironomus riparius. Patricia Caballero-Carretero

Thursday, 7 July

- 15:30 16:30 **Taxonomy workshop 1** Chair:Torbjørn Ekrem
- 16:30 16:40 Short break
- 16:40 17:40 **Taxonomy workshop 2** Chair:Richard Cornette
- 18:00 19:00 **Final forum** Chair:Richard Cornette

In Memoriam Presentation of CHIRONOMUS journal and publication of symposium proceedings Torbjørn Ekrem Vote and announcement of 22nd ISC Closing Discussion and farewell

Poster session

- P01 **Comparative genome and transcriptome analyses provide insights into molecular mechanisms of adaptation to acidic environments in chironomids** Eita Nakanishi
- P02 **Combinatorial omics approaches to study control of circalunar clock genes** Danila Voronov
- P03 Development of Trans-membrane protein expression system using Pv11 cells from the sleeping chironomid (*Polypedilum vanderplanki*) Hiroto Fuse
- P04 Histological characterization of *Chironomus riparius* (Diptera, Chironomidae) larvae Aleksandra Milovanovic
- P05 Visualization Using Zinc Ion Probe of Zinc Uptake from Different Route of Exposure and Tissue Distribution in Chironomidae Larvae Ashok Kumar Shrestha
- P06 High temperature tolerance of *Chironomus sulfurosus* and its molecular mechanisms Pamela Tettey
- P07 Relationship between the distribution of mosquito larvae and chironomid larvae in water and their hemoglobin gene expression Jing -Yao Tsai
- P08 Larval oogenesis in the Antarctic midge, *Belgica antarctica* Mizuki Yoshida
- P09 New chironomid species (Diptera, Chironomidae) from a mountain stream, a contribution to the Croatian checklist

Viktorija Ergović

- P10 Bryophaenocladius adigensis sp. n., a new crenophilous species from the middle basin of Adige River, NW-Italy (Diptera, Chironomidae) Joel Moubayed
- P11 An Evaluation of Chironomid pupal exuviae as indicators of changing environmental quality in stormwater retention ponds along an urban gradient Kaitlynn Davis

- P12 The optimum water temperature and degree days for the *Chironomus riparius* (Meigen, 1804) growth Sorour Hemati
- P13 Annual and seasonal trends of density, biomass, and secondary production of chironomid midges (Diptera : Chironomidae) in the middle reaches of the Chikuma River during April 2015 to March 2019 Kimio Hirabayashi
- P14 Chironomidae collected at the seashore in Kume Island Goro Kimura
- P15 **Seasonal variation in chironomid communities in two Faroese streams** Agnes Kreiling
- P16 **Population dynamics of Qeshlagh River Chironomidae, Kurdistan, Iran** Pegah Mirbeigi
- P17 Gut living fungi of Chironomidae larvae recently collected in Japan, a preliminary study Hiroki Sato
- P18 Chironomid-Plant Relationships of Lake Austin and Lady Bird Lake James Shugart