
20th Annual Meeting of the Society for Biological Systematics (Gesellschaft für Biologische Systematik, GfBS)

Supported by the DFG, SPP 1991: Taxon-Omics

24 – 27 February 2019 in Munich

Program

Monday, 25 February

- 09:00 – 09:10** Introduction to the meeting by Michael Ohl, president of the GfBS
- 09:10 – 09:45** Dr. Hernán A. Burbano (invited speaker), Group Leader - Ancient Genomics and Evolution Department of Molecular Biology, Max Planck Institute for Developmental Biology, Tuebingen: "*Reinforcing plant evolutionary genomics using ancient DNA*"
- 09:45 – 10:15** Coffee break
- Climate Change**, Chair: Andreas Fleischmann
- 10:15 – 10:30** Patricia Lang, Franziska Willems, Oliver Bossdorf and Hernán A Burbano: "*Using herbaria to track global environmental change*"
- 10:30 – 10:45** Franziska M. Willems, J.F. Scheepens and Oliver Bossdorf: "*Mining herbaria and roaming the forests: Plant phenology advances since the industrial revolution*"
- 10:45 – 11:00** Michael Schmitt: "*Leaf beetle (Coleoptera: Chrysomelidae s.l.) decline and range changes in Central Europe as represented in data from private and museum collections*"
- 11:00 – 11:15** Marcus A. Koch: "*Early-Mid Pleistocene genetic differentiation and range expansions as exemplified by Eurasian *Bunias orientalis* (Brassicaceae): The Caucasus as key region*"
- 11:15 – 11:30** Axel Hausmann, Jérôme Morinière and Laura Hardulak: "*Insect monitoring 2.0 based on metabarcoding*"
- 11:30 – 11:45** Photo call
- 11:45 – 13:00** Lunch

Monday, 25 February

Typification and Molecular Methods, Chair: Marc Gottschling

- 13:00 – 13:15** Florian Melzer, Bastian Brenzinger, Katharina M. Jörger, Timea P. Neusser: "*Taxonomic re-evaluation of tiny, interstitial slugs in the cryptic family Pseudunelidae based on anatomical and molecular data*"
- 13:15 – 13:30** Michael Gruenstaeudl: "*Under careful analysis, the monophyly of the water lilies remains uncertain – How standardized data collection and automated bioinformatic processing are key to plastid phylogenomics of early-diverging angiosperms*"
- 13:30 – 13:45** Juliana Bahia and Ira Richling: "*Re-discovery and designation of type material of Brazilian Polycladida: treasures found in a museum*"
- 13:45 – 14:00** Jens Boenigk: "*The search for the correct species delimitation in protists: from Monas to Poteriospumella and beyond*"
- 14:00 – 14:15** Thomas Pauli, Ralph S. Peters, Karen Meusemann, Manuela Sann and Oliver Niehuis: "*Combining RNA-seq, target DNA enrichment, and Sanger sequences results in a strongly supported comprehensive cuckoo wasp phylogeny*"
- 14:15 – 16:15** Break and poster session

Speciation and Hybridisation, Chair: Susanne S. Renner

- 16:15 – 16:30** Kathleen C. Webster: "*Morphologically Diskinkt: Comparing Island Populations of Skinks in the Comoros Archipelago*"
- 16:30 – 16:45** Ricardo J. Pereira: "*Divergence and gene flow during radiations of cryptic species: insights from Chorthippus grasshoppers*"
- 16:45 – 17:00** Franziska Patzold, Tomasz Suchan and Anna K. Hundsdoerfer: "*Hybrid species recognition using 'Next Generation Sequencing' (NGS) of museum specimens*"
- 17:00 – 17:15** Natascha D. Wagner and Elvira Hörandl: "*Dealing with reticulate evolution and polyploidy in times of big data – evolution of Eurasian shrub willows (Salix, subg. Chamaetia/Vetrix)*"
- 17:15 – 17:30** Mareike Daubert, Kevin Karbstein, Ladislav Hodač, Salvatore Tomasello, Elvira Hörandl: "*Delimitation of sexual species in the Ranunculus auricomus complex (Ranunculaceae): evidence from RAD-seq and morphological data*"
- 17:30 – 19:00** Dinner
- 19:00 – 19:45** Öffentlicher Vortrag von Prof. Dr. Johannes Vogel, Direktor des Berliner Naturkunde-Museums: "*Innovation mit Partizipation*"

Tuesday, 26 February

09:00 – 09:45 Dr. Gudrun Kadereit (invited speaker), Institut für Molekulare Physiologie, Biodiversität und Evolution der Pflanzen, Johannes Gutenberg-Universität Mainz, Mainz: "*The evolution of carbon-concentrating mechanisms and C4 and CAM photosynthesis in a changing world*"

09:45 – 10:15 Coffee break

Natural History Collections, Chair: Carolin Haug

10:15 – 10:30 Joachim T. Haug: "*Thinking beyond the adult paradigm benefits from thinking beyond the taxonomic paradigm, or: the long path towards new approaches for understanding diversity*"

10:30 – 10:45 Juliana Chacón, Marc Gottschling and 5 others: "*The use of environmental amplicon NGS sequencing, well-curated DNA databases from vouchered collections and type material in the discovery of the Dinophyte biodiversity in Bavarian lakes (Germany)*"

10:45 – 11:00 Sabine von Mering*, Walter G. Berendsohn and 15 others: "*The Global Caryophyllales Initiative – Towards dynamic monographing of a major group of plants*"

11:00 – 11:15 Christian Bräuchler*, Hanno Schäfer, Christian Lexer and Haimo Rainer: "*Opportunities and challenges for natural history collections in the 21st century*"

11:15 – 11:30 Jutta Buschbom: Bridging the gap to conservation genetic application: "*The importance of globally representative and versatile reference datasets for genetic inventory and monitoring initiatives*"

11:30 – 13:00 Lunch

Phylogenies, Chair: Stefan Schmidt

13:00 – 13:15 Thibaud F. E. Messerschmid*, Gudrun Kadereit and Joachim W. Kadereit: "*Phylogeny, evolution and classification of Sedum (Crassulaceae) and related genera*"

13:15 – 13:30 Alexandra Muellner-Riehl*, Laura Holzmeyer and 5 others: "*Battling the global antimicrobial crisis: the importance of collections for investigating the phylogenetic and spatial distribution of anti-infective metabolites in the flora of Java*"

13:30 – 13:45 Anze Zerdoner Calasan*, Juliana Kretschmann, and Marc Gottschling: "*They are young, and they are many: Dating freshwater lineages in unicellular dinophytes*"

13:45 – 14:00 Nicolai M. Nürk, Guy W. Atchison and Colin E. Hughes: "*Island woodiness accelerates disparification in plant radiations*"

14:00 – 15:15 Break and poster session, begin of parallel Symposium

Tuesday, 26 February

A: Ecology, Chair: Tanja Schuster

- 15:15 – 15:30, A** Dominique Zimmermann* and Volker Mauss: "*Behavioral and morphological adaptations to the use of a new nest substrate in the pollen wasp genus *Quartinia* (Masarinae, Vespidae)*"
- 15:30 – 15:45, A** Julien B. Bachelier, Olivier Maurin, and Jurriaan M. de Vos*: "*Heterostyly in Connaraceae - a first herbarium-phylogenomic analysis of an understudied tropical clade*"
- 15:45 – 16:00, A** Benedikt Wiggerring* and Matthias Glaubrecht: "*Independent evolution of viviparous modes: An overview of reproductive diversity of Cerithioidean snails with an emphasis on Australian freshwater Thiaridae*"
- 16:00 – 16:15, A** Gregor Christa: "*Are Sacoglossa sea slugs able to "live from the sun"?*"
- 16:15 – 17:00, A** Alexander Zizka (this year's recipient of the Bernhard Rensch Prize), Department of Biological and Environmental Sciences, University of Gothenburg, Gothenburg, Sweden: "*Big-data insights into the distribution and evolution of tropical diversity*"

B: Arbeitsgemeinschaft Kuratoren, 14:00 – 17:00, room 138

Contamination in Collections – Hazards and Handling

In the past, objects from museum collections were treated extensively with hazardous substances and materials, e.g. to protect them from pest infestation. The contamination of these objects often is persistent, and information on handling them in a safe and practical manner is needed.

- 14:00 – 14:15, B** Peter Giere, Museum für Naturkunde, Berlin: "*Welcome and introduction*"
- 14:15 – 14:45, B** Elise Spiegel, Care for Art, Munich: "*Hazardous materials in museums / modes of exposition / introduction to project "Development of a Recommendation for Risk Assessment and for Handling Pesticide Residues in Museum Collections"*"
- 14:45 – 15:15, B** Katherina Deering, Care for Art and Ludwigs Maximilian University, Munich: "*Ambient monitoring and results*"
- 15:15 – 15:45, B** Dennis Nowak, Ludwig Maximilians University, Munich: "*Biomonitoring in humans*"
- 15:45 – 16:15, B** Christiane Quaisser, Museum für Naturkunde Berlin: "*Protection measures – an overview and case study MfN*"
- 16:15 – 17:00, B** Open discussion
- 17:00 – 18:00** Business meeting and poster session
- 20:00 – ...** Starting at around 20:00 h, the meeting will end at the world-famous Augustiner-Keller, where we will reserve tables.

Wednesday, 27 February

09:00 – 12:00 Workshop 1 von Dr. Esther Schwarz-Weig: "*Wie kommt (m)ein Thema in die Medien?*"
Room 109,
first floor

09:00 – 12:00 Workshop 2 by Dr. Michael Grünstäudl: "*Efficient Strategies to Submit DNA Sequences to Public Sequence Repositories such as EMBL/ENA*"
Room 139,
first floor