

Posters of 2023 Annual Meeting of SPP1991 Taxon-Omics

The presenting scientist of each poster is underlined.

	Poster title	Authors	Project
1	New kid on the block - proteomic fingerprinting as quick and easy molecular tool for species identification in monitoring of marine communities	<u>Janna Peters</u> ¹ , Sven Rossel ¹ , Pedro Martinez Arbizu ² , Silke Laakmann ³ , Sabine Holst ¹ , Sahar Khodami ² , Jasmin Renz ¹	Proteomic fingerprinting for species identification – discriminatory power and optimal analyses procedures for integrated molecular and morphological datasets in zooplankton biodiversity assessments
2	Phylogeny and species delimitation in <i>Albinaria</i> from western Crete (Gastropoda: Clausiliidae) using genomic markers	<u>Elisa Becher</u> ⁴ and Bernhard Hausdorf ⁴	Exploring genomic methods for delimiting species in radiations of terrestrial snails
3	Mining <i>Hypoxylon</i> Genome Data for Total Biosynthesis	<u>Russel Cox</u> ⁵ , Yunlong Sun ⁵ , Katharina Schmidt ⁵ , Henrike Heinemann ⁵ , Eric Kuhnert ⁵ , Kevin Becker ⁵ , Dong-Song Tian ⁵	
4	Coprophilous fungi: a source of biological and chemical diversity	Karen Harms ⁶ , Esteban Charria-Giron ⁶ , <u>Yasmina Marin-Felix</u> ⁶	
5	Evolution in the Taxonomy of <i>Hypoxylon</i> - from Morphological Species Concept to Phylogenomics	<u>Marjorie Cedeño-Sanchez</u> ⁶ , Bart Verwaaijen ⁷ , Marc Stadler ⁶	Phylogenomics of the genus <i>Hypoxylon</i> based on 50 new high-quality genomes and with special emphasis on the <i>H. rubiginosum</i> complex
6	A genomic sequencing effort to expand the Phylogeny of the genus <i>Hypoxylon</i> – Phase 2	<u>Bart Verwaaijen</u> ⁷ , Eric, Kuhnert ² , Marjorie Cedeño ⁶ , Tian Cheng ⁶ , Tobias Busche ⁷ , Russell Cox ⁵ , Marc Stadler ⁶ , Jörn Kalinowski ⁷	

7	A novel target-enriched multilocus assay for sponges (<i>Porifera</i>)	Joëlle van der Sprong ⁸ , Nicole J. de Voogd ⁹ , Grace P. McCormack ¹⁰ , Kenneth Sandoval ¹⁰ , Simone Schätzle ⁸ , Oliver Voigt ⁸ , Dirk Erpenbeck ⁸ , Gert Wörheide ⁸ , Sergio Vargas ⁸	Sponge TaxonOMICs V2
8	The phylogenetic relationships and wing-pattern evolution of burnet moths (<i>Zygaena</i>) using museum specimens	Eduardo Marabuto ^{11,12} , Sneha Bhansali ¹² , Franziska Patzold ¹² , Lars Podsiadlowski ¹¹ , Axel Hofmann ¹³ , Anna K. Hundsdoerfer ¹² , <u>Marianne Espeland</u> ¹¹	
9	Wing pattern and phylogenomics in the Lepidoptera genus <i>Hyles</i> - status quo	<u>Anna K. Hundsdoerfer</u> ¹² , Franziska Patzold ¹² , Ilyos Amirov ⁴² , Ozodbek Turg'unboye ⁴² , Bakhtiyor Kholmatov ⁴² , Eduardo Marabuto ^{11,12} , Lucas Langer ¹² , Michael San Jose ¹⁴ , Dan Rubinoff ¹⁴ , Alberto Zilli ⁴⁴ , Jean Haxaire ⁴³ , Claudia Paetzold ¹²	Comparative and experimental wing pattern genomics in Lepidoptera
10	Integrative species delimitation in <i>Xanthium</i> sect. <i>Acanthoxanthium</i>	<u>Salvatore Tomasello</u> ¹⁵ , Eleonora Manzo ¹⁵ , Diego G. Gutiérrez	
11	The decline of the native <i>Xanthium strumarium</i> L. and the invasiveness of the American <i>X. orientale</i> L. Are competition and allelopathy triggering factors?	<u>Eleonora Manzo</u> ¹⁵ , Chiara-Sophie Epifanio, Julius Friedemann Pahl, Salvatore Tomasello ¹⁵	Resolving intricate taxonomies by using type material, Hyb-Seq and geometric morphometrics. – A proof-of-concept from the nasty <i>Xanthium</i> L.
12	Molecular evidence for sectional classification of shrub willows (<i>Salix</i> L. subg. <i>Chamaetia/Vetrix</i>) based on RAD sequencing data	<u>Pia Marincek</u> ¹⁵ and Natascha Wagner ¹⁵	Molecular evidence for sectional classification of shrub willows (<i>Salix</i> L. subg. <i>Chamaetia/Vetrix</i>) based on RAD sequencing data
13	The CARRARA approach: species delimitation in intensively hybridising plant genera based on herbarium specimens	<u>Marco Dorfner</u> ¹⁶ , Lara Escherich ¹⁷ , Frank H. Hellwig ¹⁷ , Robert Vogt ¹⁸ , Christoph Oberprieler ¹⁶	The CARRARA pipeline: Using machine-learning techniques for automated species delimitation in intensively hybridising plant genera based on herbarium specimens

14	MUSEOMICS VERSUS THE TAXONOMIC GAP: Type-specimen explicit species delimitation to resolve cophyline taxonomy	<u>Alice Petzold</u> ^{19,20} , Clara Keusgen ¹⁹ , Michaela Preick ¹⁹ , Carl R. Hutter ²¹ , Frank Glaw ²² , Miguel Vences ²³ , Michael Hofreiter ¹⁹ , Mark D. Scherz ²⁴	FrogCap for the Taxonomic Gap: Harnessing Hybrid Enrichment for Next-Generation Taxonomy
15	Meristic co-evolution and genomic co-localization of the lateral line and vertebrae in Central American cichlid fishes	<u>Nicolas Ehemann</u> ²⁵ , Paolo Franchini ²⁵ , Axel Meyer ²⁵ , C. Darrin Hulsey ²⁵	Genomics of Hybridization and Species Delimitation in Cichlid Fishes
16	Sex-biased demographic patterns and migration of the big European firefly (<i>Lampyris noctiluca</i>)	<u>Ana Catalán</u> ⁸ and <u>Sebastian Höhna</u> ⁸	New approaches for species delimitation from genome data with examples to two widespread fireflies (<i>Lamprohiza splendidula</i> and <i>Photinus pyralis</i>)
17	Ophiuroid phylogenomics: Illuminating “dark” abyssal biodiversity	<u>Angelina Eichsteller</u> ² , Magdalini Christodoulou ²⁶ , Tim O’Hara ²⁷ , Pedro Martinez Arbizu ²	Ophiuroid phylogenomics: Illuminating “dark” abyssal biodiversity
18	Developing a Standardized Multilocus Marker Set - From Field to Museum: The First Experimental Marker Set	<u>Yannis Schöneberg</u> ²⁸ , Christoph Mayer ¹¹ , Stefan Prost ² , Henrik Krehenwinkel ²⁸ , Susan Kennedy ²⁸	From field to museum: Harnessing the power of third generation sequencing to establish a simple and cost-effective multiplex approach for spider taxonomy
19	Reference genomes greatly improve the resolution of GBS-analyses in Ukrainian Veronica.	<u>Mareike Daubert</u> ²⁹ , <u>Christoph Nehrke</u> ²⁹ , Dirk C. Albach ²⁹	Making efficient use of herbarium specimens – Hybrids in Veronica as case example
20	HybSeq or GBS for herbarium specimens? A battle of reduced representation datasets.	<u>Christoph Nehrke</u> ²⁹ , Mareike Daubert ²⁹ , Dirk C. Albach ²⁹	

21	AfriTTax: Innovative integration of high-throughput DNA barcoding, transcriptome-based constrained phylogenetics, hyperspectral imaging, and morphology to assess and characterize a poorly known fauna	<u>Ernesto Rázuri-Gonzales³⁰</u> , Roger J. Blahnik ³¹ , M. Francois Ngera, Oskar Schröder ³⁰ , Wolfram Graf ³² , Steffen U. Pauls ³⁰	Innovative integration of high-throughput DNA barcoding, transcriptome-based constrained phylogenetics, hyperspectral imaging, and morphology to assess and characterize a poorly known fauna
22	Resolving species diversity of marine loricate choanoflagellates using different taxonomical approaches	<u>Frank Nitsche³³</u> and Sabine Schiwitza ³³	New approaches for high throughput species discovery and delimitation within unicellular eukaryotes exemplified by choanoflagellates
23	Insights into the diversity of the <i>Vampyrellida</i> (Rhizaria) through culture-based, environmental sequencing and genomic approaches.	<u>Andreas Suthaus³³</u> , Lubomir Rajter ³³ , Justin Teixeira Pereira Bassiaridis ³³ , Sebastian Hess ³³	Exploring the hidden diversity of widespread predatory amoebae of the order <i>Vampyrellida</i> (Rhizaria)
24	Phylogenomics of the <i>Ranunculus auricomus</i> species complex in Southern Europe	<u>John Paul Bradican¹⁵</u> , Salvatore Tomasello ¹⁵ , Francesco Boscutti ³⁴ , Kevin Karbstein ¹⁵ , Elvira Hörandl ¹⁵	Species delimitation in the apomictic polyploid <i>Ranunculus auricomus</i> complex using an integrative TaxonOMICS approach
25	Comparative historical biogeography of Australian xerophytic Amaranthaceae	<u>Anže Žerdoner Čalasan⁸</u> , Kelly A. Shepherd ³⁵ , Gudrun Kadereit ⁸	TaxonOMICS of Australian Chenopods: a multifaceted study to resolve one of Australia's most challenging plant families
26	Hybrids blur subspecies delimitation in the highly polymorphic fire salamander	<u>Sven Gippner²³</u> , Christophe Dufresnes ³⁶ , Miguel Vences ²³	Hybrid zones among Palearctic amphibian lineages as a model to understand temporal patterns of species formation and refine methods of species delimitation

27	Publishing taxonomic data via the GFBio Submission System	<u>Barbara Wagner</u> ³⁷ , Ivaylo Kostadinov ³⁷ , Miguel Vences ²³ , Marc Weber ³⁷	Concepts, tools and support for managing, archiving, mobilizing and integrating taxonomic data
28	Metazoan-level universal single-copy orthologs (mzl-USCOs) as markers for animal taxonomy.	<u>Lars Dietz</u> ¹¹ , Jonas Eberle ³⁸ , Christoph Mayer ¹¹ , Lars Podsiadlowski ¹¹ , Bernhard Misof ¹¹ , Oliver Niehuis ¹¹ , Dirk Ahrens ¹¹	Establishing a standardized and universally applicable set of nuclear-encoded markers for genome-wide multi-locus species delimitation of metazoans
29	Fungal Phylogenomics of Freshwater Helotiales	<u>Daniel Vasconcelos Rissi</u> ³⁹ , Maham Ijaz ³⁹ , Christiane Baschien ³⁹	Molecular taxonomy of aquatic hyphomycetes by safeguarding of historical collections
30	<i>Alatospora</i> Genus Concept: Tidying up a mess	<u>Maham Ijaz</u> ³⁹ , Daniel Vasconcelos Rissi ³⁹ , Christiane Baschien ³⁹	
31	Deep molecular characterization of microorganisms' diversity and community composition in the canopy region using a metatranscriptomic approach	<u>Jule Freudenthal</u> ³³ , Kenneth Dumack ³³ , Martin Schlegel ⁴⁰ , Michael Bonkowski ³³	Continuing the deep molecular characterization of eukaryotic microorganisms' diversity and community composition in forest soils and the canopy region using a metatranscriptomics approach (micDiv II)
32	Digging treasures: Museomics for targeted sequencing in Orthosiinae (Apocynaceae) yields undescribed diversity	<u>Yam Melissa Pineda</u> ⁴¹ , Ulrich Meve ⁴¹ , Sigrid Liedt-Schumann ⁴¹ , Nicolai M. Nürk ⁴¹	Elevational replacement, higher tropical mountain passes and isolated sky islands: untangling neutral and adaptive processes driving radiation of Andean Apocynaceae
33	Hybridisation in the Ustilaginales - an update	<u>Dominik Begerow</u> ⁴	The genomic basis of host specificity as tool for species recognition and delimitations in Ustilaginales - a parasite group with high gene flow
34	Understanding the evolution of effectors in Anthracoideaceae by long read WGS	<u>Nils Hassel</u> ⁴ and Martin Kemler ⁴	

- 1 - Senckenberg am Meer, Hamburg
- 2 - Senckenberg am Meer, Wilhelmshaven
- 3 - Helmholtz Institute for Functional Marine Biodiversity at the University of Oldenburg
- 4 - University of Hamburg
- 5 - Leibnitz University Hannover
- 6 - Helmholtzzentrum für Infektionsforschung Braunschweig
- 7 - University of Bielefeld
- 8 - Ludwig-Maximilian University Munich
- 9 - Naturalis Biodiversity Center
- 10 - University of Galway
- 11 - Leibnitz ZFMK
- 12 - Senckenberg Dresden
- 13 - University of Bonn
- 14 - University of Hawaii
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- 16 - University of Regensburg
- 17 - Friedrich-Schiller-Universität Jena
- 18 - Botanischer Garten Berlin
- 19 - University of Potsdam
- 20 - Leibniz Institute for Evolution and Biodiversity Science, Berlin
- 21 - University of Kansas
- 22 - Zoologische Staatssammlung München (ZSM-SNSB)
- 23 - Technical University of Braunschweig
- 24 - University of Copenhagen
- 25 - University of Konstanz
- 26 - Biologiezentrum Linz
- 27 - Museums Victoria
- 28 - University of Trier
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- 30 - Senckenberg, Frankfurt am Main
- 31 - University of Minnesota
- 32 - University of Vienna
- 33 - University of Cologne
- 34 - University of Udine
- 35 - Western Australian Herbarium
- 36 - Nanjing Forestry University
- 37 - GFBio - Gesellschaft für Biologische Daten e.V.
- 38 - University of Salzburg
- 39 - DSMZ
- 40 - University of Leipzig
- 41 - University of Bayreuth
- 42 - Academy of Sciences of the Republic of Uzbekistan
- 43 - Muséum National d'Histoire Naturelle
- 44 - Natural History Museum, London