

## Poster Session 2 - 14:00-15:30 on July 22, 2025 (Tuesday)

### Symposium 3: Experimental evolution: studying evolution in action

Poster No.	Abstract ID	Presenter Name	Abstract Title
S3-P01	1313	Jigar Trivedi	Mutation rate assessment uncovers cooperation and conflict dynamics between mitochondrial and nuclear genomes in <i>Daphnia pulex</i>
S3-P02	1072	Piaopiao Chen	The loci of environmental adaptation in a model eukaryote
S3-P03	1464	Mitchell Reynolds	Just Keep Swimming - Using motility rescue as a model system to determine whether Sigma factor control or genetic background is a bigger driving force influencing bacterial evolution
S3-P04	99	Ya-Nan Zhen	Evolution temperature predicts lower, but not upper, temperature limits for growth in experimental populations of two bacteria
S3-P05	125	Hongan Long	Contribution of the SOS response and the DNA repair systems to norfloxacin induced mutations in <i>E. coli</i>
S3-P06	202	Yang Qian	Gene expression plasticity in the antibiotic environment is predominantly adaptive in the budding yeast
S3-P07	410	Anna Toidze	Hiking the Peaks and Valleys of GFP Fitness Landscapes for Data-Driven Protein Design
S3-P08	848	Shichun Wang	The relative contributions of mutation types to adaptation in changing environments
S3-P09	859	Li-Jun Ma	Mechanisms driving adaptive evolution in the cross-kingdom fungal pathogen <i>Fusarium oxysporum</i>
S3-P10	915	Xifang Zong	Evolutionary features of sexual reproduction loss in rice-derived <i>Magnaporthe oryzae</i>
S3-P11	967	Lu Yang	Phenotypic Plasticity and Distinct Adaptive Strategies of Cancer Cells Under r- and K-Selection
S3-P12	1078	Nannan Wu	A Methyltransferase Homolog in <i>Neurospora crassa</i> Mediates RIP Mutation and Heterochromatin Formation in Repeat Sequences
S3-P13	1169	Lin Bi	Populational Evolutionary Dynamics of Fusion Recovery in Prm1-Deficient <i>Schizosaccharomyces pombe</i>
S3-P14	1171	Gai Niu	Exploring Host Genome Responses to Newly Integrated Mobile Genetic Elements in <i>Neurospora crassa</i>
S3-P15	1182	Jiarui Weng	Research on the Evolutionary Dynamics of HLA in TCR-T Cell Therapy
S3-P16	1321	Ke Li	High-Throughput Experimental Evolution Uncovers Universal Mechanisms of Enzyme Temperature Adaptation

### Symposium 8: Novel insights on genome architecture evolution

Poster No.	Abstract ID	Presenter Name	Abstract Title
S8-P01	1455	Vladimir Jovanovic	Architecture and adaptiveness of B chromosomes in the yellow-necked mouse genome
S8-P03	378	Zeyuan Chen	Insights into Genome Reorganization in Phylum Mollusca
S8-P04	559	Dorothee Huchon	Intron-exon dynamics and splicing mechanisms in Myxozoa: insights from long-read sequencing
S8-P05	178	Qiyi Yang	Chromosomal Synteny Provides Robust Evidence for the Phylogenetics of Fabales
S8-P06	529	Zhen Li	Recombinative DNA Deletion Dominates Gene Loss After Polyploidization in Angiosperms
S8-P07	632	Xiao Zhang	Temporal genomics in Hawaiian crickets reveals compensatory intragenomic coadaptation during adaptive evolution
S8-P08	835	Maria Vasilarou	Independent hybridization events, followed by genomic rearrangements, shape genome evolution of polyploid <i>A. kamchatica</i>
S8-P09	271	Jialin Wei	Comparative genomics show convergent evolution in the conquest of land by animals

S8-P10	824	Santiago Montero-Mendieta	Subgenome Asymmetry and Diversification in an Allotetraploid Cavefish: Structural Variation as a Catalyst for Extreme-Environment Adaptation
S8-P11	79	Michael Olufemi	Unraveling the DNA Methylation Landscape of New Gene Duplications
S8-P12	263	Shangzhe Zhang	Polymorphic genomic inversions illuminate rapid adaptation in silent cricket populations
S8-P13	460	Sean Chun-Chang Chen	Comparative Genomics of Arthropods: Insights into Genome Evolution across Diverse Lineages
S8-P14	495	Yu-Long Li	Asian noodlefishes vs. Antarctic icefishes: alternative evolutionary trajectories to deterioration of the oxygen-transport system
S8-P15	780	Le Qin Choo	Inversion Nation: How Chromosomal Rearrangements Shape Local Adaptation in the Flat Periwinkle
S8-P16	797	Mohammed Errbii	Evolutionary genome dynamics in asexually reproducing mite species
S8-P17	998	Wen-Sui Lo	Whole-genome duplication and its role in anhydrobiosis in fungal-feeding nematode <i>Aphelenchus avenae</i>
S8-P18	1240	Hao Yang	Parallel sympatric divergence driven by disruptive selection acting on the magic reproductive timing trait in a wild fish
S8-P19	1276	Nikita Tikhomirov	Recurrent allopolyploidy outruns rediploidization in <i>Potamogeton</i> aquatic plants
S8-P20	1324	Maddie James	Chromosomal inversions and the genetic architecture of parallel adaptation
S8-P21	26	Fan Li	Evolutionary innovations for marine life: Genomic insights from intertidal spiders
S8-P22	702	Hanchen Wang	Unequally Abundant Chromosomes and Unusual Collections of Transferred Sequences Characterize Mitochondrial Genomes of <i>Gastrodia</i> (Orchidaceae), One of the Largest Mycoheterotrophic Plant Genera
S8-P23	801	Genevieve Law	Mutation rate and selection in the unusual duplicated mitogenomes of Australasian stingless bees (Apidae: Meliponini)
S8-P24	857	Paris Veltsos	The effect of chromosomal inversions on gene expression in <i>Mimulus guttatus</i>
S8-P25	889	Santiago Montero-Mendieta	Chromosomal Inversions Drive Genome Evolution and Population Diversification in Common Quails
S8-P26	930	Maximilian Fitz-James	Genome architecture and organisation as a source of heritable epigenetic variation
S8-P27	1026	Pia Merete Eriksen	Evaluating the Viability of Macrosynteny as a Phylogenetic Trait Using Lophotrochozoa
S8-P28	715	Jorge Gonzalez Garcia	Novel Retrovirus Integrations in Bats - The enERVate Pipeline
S8-P29	823	Heiman Ho	Study of Evolutionary Genomics of Swifts and Swiftlets (Apodiformes: Apodidae): A Comparative Genomic approach
S8-P30	913	Guanjing Hu	A telomere-to-telomere genome assembly of cotton provides insights into centromere evolution and short-season adaptation
S8-P31	1261	Raúl Wijfjes	Detecting evolutionary constraint in <i>Arabidopsis thaliana</i> genes using a panel of diverse Brassicaceae genomes
S8-P32	1398	Juan Li	Genetic variation in a polygenic trait under stabilizing selection and population structure
S8-P33	1088	Yi Qiu	The Red Queen's hypothesis of transcriptional start sites: hyper-mutational bias leads to transcription start site hopping in human protein coding genes
S8-P34	847	Carol Eunmi Lee	Impacts of Genome Architecture (Chromosomal Fusions) on Selection Response during Laboratory Experimental Evolution

#### Symposium 11: Phylogenomics in the presence of gene flow: opportunities and challenges

Poster No.	Abstract ID	Presenter Name	Abstract Title
S11-P01	390	Yang Yang	Integrating Bayesian and Heuristic Tests of Introgression to Infer Phylogenetic Networks
S11-P02	355	Nico Bremer	Surprising effects of differential loss in genome evolution

S11-P03	458	Antoine Corne	The Last Universal Common Ancestor was not a hyperthermophile
S11-P04	539	Jun Huang	Inference of Gene Flow between Species under Misspecified Models
S11-P05	616	Ka Yan Ma	Untangling the phylogenetic discordance in Pancrustacea
S11-P06	697	Peter Arndt	Modeling the mosaic structure of bacterial genomes to infer their evolutionary history
S11-P07	1200	Yu Endo	Hybridization pattern between the brown bear and the polar bear reveals multi-layered genetic structure of the brown bear.
S11-P08	1265	Paulomi Dam Kanunjna	A ‘Spectacular’ Saga: Reconstructing the Evolutionary History of the Indian Spectacled Cobra ( <i>Naja naja</i> )
S11-P09	1572	Hao Shen	Fine-Resolution Asymmetric Migration Estimation

### Symposium 13: Synthetic approaches to evolutionary theory: A dialog between the past and the future

Poster No.	Abstract ID	Presenter Name	Abstract Title
S13-P01	1539	Zeyu Chen	In situ directed evolution on native mammalian genome
S13-P02	80	Xunuo Zhu	Identification of Cancer Mini-Drivers by Deciphering Selective Landscape in the Cancer Genome
S13-P03	87	Benjamin Epley	A comprehensive double-mutant scan of a steroid receptor DNA-binding domain
S13-P04	270	Zhiqing Guo	Exploration of the dynamic evolutionary rates of early animals
S13-P05	949	Bingke Jiao	Engineering a Toxin-Antidote Dominant Sperm Gene Drive for Population Control in Flies

### Symposium 14: The roles of hybridization and introgression in evolution

Poster No.	Abstract ID	Presenter Name	Abstract Title
S14-P01	43	Junhao Chen	Haplotype-level assembly for a hybrid species <i>Saccharomyces bayanus</i> reveal substantial introgression from multiple species
S14-P02	45	Jialin Geng	Patterns of interspecific introgression in ornamental and feralized <i>Xiphophorus</i> strains from southern China
S14-P03	242	Jun Wen	Hybridization and incomplete lineage sorting in the evolution of <i>Apiales</i>
S14-P04	332	Ningbo Chen	Multiple bovine species introgression contributes to the complex history and adaptation of East Asian cattle
S14-P05	439	Qinglong Li	Negative selection in females against heterozygosity on X chromosome drives the evolution of reproductive barrier during incipient speciation
S14-P06	598	Kornsorn Srikulnath	Unlocking Asexual Survival in Hybrid Clariid Catfish (Bighead catfish ( <i>Clarias macrocephalus</i> ) and North African catfish ( <i>Clarias gariepinus</i> )) through Understanding Meiotic Deviations and Endoreplication
S14-P07	661	Yujie Huang	Widespread remote introgression events in grass genomes
S14-P08	710	Rigoberto Padilla-Bustos	An autosomal genome informs about the evolutionary history of the Columbian mammoths in Mexico
S14-P09	745	Lounes Chikhi	Ignoring population structure in evolutionary models can lead to the inference of spurious admixture events
S14-P10	818	Clarisse Palma da Silva	DNA Methylation and transcriptomic patterns in hybridizing Neotropical Bromeliads
S14-P11	899	Genavieve Gray-Sandoval	Extreme Levels of Genetic Variant Sharing in Southwestern United States <i>Myotis</i> Bats: Implications for Hybridization and Viral Adaptation
S14-P12	904	Tianpeng Wang	Contribution of homoeologous exchange to domestication of polyploid Brassica
S14-P13	908	Yulin Sun	A comparative assessment of methods to estimate gene flow and adaptive introgression using individual-based simulations
S14-P14	951	Xian Shi	Selection increases mitonuclear DNA discordance but reconciles incompatibility in African cattle
S14-P15	995	Jianyu Zhang	Correlation between Hybrid Ancestry and Ecological Niches in Invasive Tilapias from the Dongjiang River Basin in South China

S14-P16	1008	Martin Kuhlwilm	A refined landscape of introgression in great apes
S14-P17	1021	Jorge García Calleja	The case of SLC30A9: ABC-based testing of a widespread Denisovan adaptive introgressed variant
S14-P18	1044	Manuel Ferrando-Bernal	Evidence for reinforcement between humans and Neanderthals
S14-P19	1108	Valeria Añorve-Garibay	The genomic landscape of archaic introgression: insights from the largest nationwide genomic cohort of admixed individuals from Mexico
S14-P20	1249	Tingshen Han	Hybrid zone mediating clinal adaptation of yellowcress herbs to high-altitudes
S14-P21	1404	Xiaotong Niu	Hybridization and Introgression Patterns in Two Closely Related Wader Species
S14-P22	1414	Shen-Ao Liang	A Refined Analysis of Neanderthal-Introgressed Sequences in Modern Humans with a Complete Reference Genome
S14-P23	1421	Feng Cheng	Electric organ discharge ontogeny and evolution in an African weakly electric fish: an insight from artificial hybridization
S14-P24	1423	Shen-Ao Liang	The Landscape of Adaptive Introgression Networks in High-Altitude Adaptation from 1,039 Tibetan Genomes
S14-P25	1447	Yao Li	Influence of Pliocene and Pleistocene climates on hybridization patterns between two closely related oak species in China
S14-P26	1449	Qiong Zhu	Neanderthal and Denisovan nuclear-embedded mitochondrial DNA sequences introgressed into modern human genomes

#### Symposium 15: Transposable elements in genome evolution and biotechnology development

Poster No.	Abstract ID	Presenter Name	Abstract Title
S15-P01	229	Wenlei Guo	Enhanced DNA methylation associated with amplification of transposable elements during foxtail millet domestication
S15-P02	122	Congying Chen	Termini-seq: a generalized telomere-targeted sequencing method for high-resolution characterization of telomere diversity and dynamics
S15-P03	128	Shuyu Liu	A Comprehensive Study of Dynamics and Impacts of Structural Variations and Transposon Insertions in Populus Species
S15-P04	138	Kun Li	Widespread of horizontal gene transfer in eukaryotes
S15-P05	214	Cong Liu	The diversity and evolution of transposons in termite genomes
S15-P06	465	Xiaochi Zhou	Comparative analysis of the evolution of transposons in two medaka species
S15-P07	874	Xuanzeng Liu	The evolution and mechanisms of genome gigantism in Caelifera insects
S15-P08	974	Esther van den Bos	Caste-dependent genomic stability and protection against transposable elements in the superorganism
S15-P09	1062	Hwan Su Yoon	From Red to Green: The Evolutionary History of Porphyridium's Phycobilisomes
S15-P10	1160	Vladimir Kapitonov	Unprecedented independent domestications of horizontally transferred DNA transposons in mammals
S15-P11	1178	Pavel Merkulov	Extrachromosomal circular DNA long-read sequencing and genome assembly of a <i>S. lycopersicum</i> breeding line revealed active LTR retrotransposons derived from <i>S. peruvianum</i> L. introgressions.
S15-P12	1179	Alexander Polkhovskiy	NICOTIANA BENTHAMIANA “VIRUS FACTORY” OBTAINMENT VIA TSWV-BASED VIGE
S15-P13	1210	Anna Haider	Factors driving differences in the distribution of transposable elements in natural populations of diverse species
S15-P14	1315	Roudin Sarama	Transposable Elements (TEs) Control Genes as Targets of Positive Selection During Recent Evolution of Diverse Human Populations
S15-P15	1188	Ravinder Kanda	Novel Endogenous Betaretrovirus and how it aids species identification in Slow Lorises ( <i>Nycticebus</i> )

S15-P16	1187	Ravinder Kanda	Identification of Novel Transposable Elements in Anuran Genomes: Challenging a Mammal-Centric Perspective
S15-P17	1386	Hui Wen	Association Between Locus-Specific HERV Expression and Gene Dysregulation in Hepatocellular Carcinoma
<b>Symposium 16: Thematic symposium: evo-devo</b>			
Poster No.	Abstract ID	Presenter Name	Abstract Title
S16-P01	158	Xin Luo	The human-specific mutations of MCPH1 induce sensory-experience-dependent brain neoteny and extended lifespan in mouse
S16-P02	208	Bing Su	Single-cell multi-omics analyses of chondrocytes reveal evolutionary changes of lower limb development and their potential roles in human bipedalism
S16-P03	329	Yi Shao	Investigation on the Evolution and Function of the Barbel Traits in Some Goby Fishes
S16-P04	806	Jin Zhang	Identification and Analysis of Thyroid Hormone Synthesis-Related Factors and Their Signaling Pathways in Regulating Ascidian Metamorphosis
S16-P05	1086	Xiaodong Xu	Evolutionary and Developmental Basis of Ovipositor Specialization in <i>Drosophila suzukii</i>
S16-P06	1283	Sofia Sheikh	A shared supergene but distinct dynamics regulate mimicry polymorphisms in closely related <i>Papilio</i> species.
<b>Symposium 16: Thematic symposium: evo-devo</b>			
Poster No.	Abstract ID	Presenter Name	Abstract Title
S18-P01	120	Jiamiao Yuan	Single-nucleus multi-omics analyses reveal cellular and molecular innovations in the anterior cingulate cortex during primate evolution
S18-P02	183	kaimin chen	Comparative single-cell multiome identifies evolutionary changes in neural progenitor cells during primate brain development
S18-P03	437	Carolyn de Graaf	Evolution of haematopoiesis: regulation of gene expression in vertebrate blood cells
S18-P04	445	Qing Yang	Error-tolerant phylogenetic tree construction enables accurate lineage tracing with single-cell data
S18-P05	764	Julie Jung	Single-worm genomics: A chromosome-scale genome assembly for <i>Diplolaimelloides wo'ombe</i> from the Great Salt Lake, UT
S18-P06	1184	Zihan Liu	Postmortem Cellular Resilience: Transcriptomic and Epigenetic Insights into Somatic Cell Adaptation After Organismal Death
S18-P07	1234	Mengjun Wu	Characterization of molecular evolution of primate spermatogenesis is improved by an optimized single-nucleus RNA-seq protocol
<b>Symposium 20: Thematic symposium: evolution of immunity</b>			
Poster No.	Abstract ID	Presenter Name	Abstract Title
S20-P01	245	Xiang Liu	Deciphering the Evolution of Immune Cells at the Single-Cell Transcriptome Level
S20-P02	324	Cleopatra Petrohilos	When Cells Rebel: a comparative genomics investigation into marsupial cancer susceptibility
S20-P03	462	Jumaporn Sonongbua	The Diversity and Evolution of MHC Class I and II in Raptors: Insights from the Accipitridae Family
S20-P04	633	Rutvi Rajpara	The Underlying Evolutionary Dynamics of the Human Immune Response.
S20-P05	644	Katalin Voss	The evolutionary divergence of primate immunoglobulin genes
S20-P06	703	Xiaomeng Li	Evolution, Regulation, and Function of Type I Interferon Responses in Yinterochiroptera Bats
S20-P07	938	Tauras VILGALYS	Adaptive evolution and chromatin remodeling during primate immune evolution

S20-P08	1102	Tao Li	Adaptive evolution of inflammasome-related genes in amniotic vertebrates: Divergence and plesiomorphy explain the patterns of surface charge variation in mammalian NLRC3
S20-P09	1111	Rocco Notarnicola	Diversifying selection on Complement Factor H in a wild rodent
S20-P10	1435	Hugo Samano Sanchez	Elucidating PD-1 and SHP-2 Interactions: Structural, Evolutionary, and Computational Perspectives
S20-P11	1519	Mary Reed-Weston	Quantifying differential host adaptation during the viral life cycle
<b>Symposium 28: Human history and past social organisation in the light of palaeogenomes: new methods, new findings session B</b>			
<b>Poster No.</b>	<b>Abstract ID</b>	<b>Presenter Name</b>	<b>Abstract Title</b>
S28-P01	1238	Jonas Niemann	From fragments to foodways: Challenges in palaeodietary reconstruction using ancient metagenomics
S28-P02	1252	Viridiana Villa Islas	Extended enamel database for hominin palaeoproteomics allows for more accurate identification of hominin groups
S28-P03	1342	Ahmad Faiz Shazwan Bin Abdul Malik	Paleogenomics of Human Remains from Nenggiri Valley in Malaysia
S28-P04	1473	Xiaowen Jia	1000 years of solitude: Tracing local lineages and ancestry in a prominent Albanian BA-IA tumulus
S28-P05	1505	Hannah Moots	Moving Beyond Migration: Using Archaeogenetics to Study Diverse Modes of Mobility in the Ancient Mediterranean