Monday, April 14		
Start Time	**End Time**	**Atlantic 1**
8:00 AM	19:30 PM	**Registration - Located in the Atlantic Foyer**
8:00 AM	8:30 AM	Session C Posters set up
8:30 AM	9:00 AM	**Opening Networking**
9:00 AM	9:15 AM	Opening Ceremony
9:15 AM	10:00 AM	Opening Keynote Talk: Aligning bioinformatics to inform public health decision making: Alan Christoffels
10:00 AM	10:15 AM	**Tea Break**
10:15 AM	11:00 AM	SCS Talks
11:00 AM	11:15 AM	**Tea Break**
11:15 AM	12:00 PM	SCS Talks
12:00 PM	13:00 PM	Lunch
13:00 PM	14:00 PM	Panel Disussion: Building a Sustainable Bioinformatics Community in Africa
14:00 PM	14:45 PM	SCS Talks
14:45 PM	15:00 PM	**Tea Break**
15:00 PM	15:45 PM	Closing Keynote Talk: Alia Benkahla
15:45 PM	16:00 PM	Closing Ceremony
16:00 PM	16:30 PM	Session C Posters dismantle
16:30 PM	17:15 PM	**Break**
17:15 PM	17:30 PM	Scientific Programme: Welcome and Opening Remarks
17:30 PM	18:30 PM	Translating computational biology to the clinic: Alan Christoffels
18:30 PM	20:00 PM	Welcome Reception

Tuesday, April 15			
Start Time	**End Time**	**Atlantic 1**	**Posters - Atlantic 2**
8:00 AM	18:30 PM	Registration - Located in the Atlantic Foyer	
8:00 AM	9:00 AM		Session A Posters set up
9:00 AM	10:00 AM	Keynote: The South African experience of sequencing respiratory and meningitis pathogens: from vaccine-preventable pathogens to antimicrobial resistance to outbreaks - Anne von Gottburg	
10:00 AM	10:30 AM	Break	
10:30 AM	10:45 AM	Early Biomarkers of Long Covid (PASC) - Malika Aid Boudries	
10:45 AM	11:00 AM	Augmented kurtosis-based projection pursuit: a novel, advanced machine learning approach for multi-omics data analysis and integration - Tobias Karakach	
11:00 AM	11:15 AM	Using explainable machine learning to enhance breast cancer biomarker discovery in precision medicine - Ouso Daniel	
11:15 AM	11:30 AM	GEMINI: A Breakthrough System for Robust Gene Regulatory Network Discovery, Enabling the Application of GRNs to Industrial Level Genetic Engineering - Ridhi Gutta	
11:30 AM	11:45 AM	Machine Learning for Hypertension Genetics in African Populations - Peace Bassey Osim	
11:45 AM	12:00 PM	Integrating multi-omics datasets with machine learning algorithms in developing clinical decision support systems for cancer management - Itunuoluwa Isewon	
12:00 PM	12:15 PM	AI in Regulatory Genomics: The Role of Silencer Variants in Human Diseases - Di Huang : Ivan Ovcharenko	
12:15 PM	12:30 PM	Leveraging Artificial Intelligence for Predicting Human-Viral Protein-Protein Interactions: A Benchmarking Study to Address Key Challenges - Chaima Hkimi	
12:30 PM	12:45 PM	Identifying genetic biomarkers of dilated cardiomyopathy using whole exome sequencing data from Southern African patients	
12:45 PM	13:00 PM	African Bioinformatics Institute Engagement Session	
12:45 PM	13:30 PM	Networking Lunch	

13:30 PM	14:30 PM		Session A: Poster Presentation
14:30 PM	14:45 PM	Genomics Landscape of Quinolone Resistant and ESBL-producing Klebsiella pneumoniae in Tanzanian Referral Hospitals - Boaz Wadugu et al.	
14:45 PM	15:00 PM	Emergence of novel mosaic G9P[6] rotaviruses through multiple intragenogroup reassortment events post vaccine introduction in Blantyre Malawi - Chimwemwe Mhango	
15:00 PM	15:15 PM	Comparative pangenomics of Streptococcus pneumoniae from Malawi: uncovering genetic variability and pathogenicity - Arash Iranzadeh et al.	
15:15 PM	15:30 PM	Comprehensive Phylogenomic Analysis of Mycobacterium tuberculosis in Ethiopia - Betselot Ayano et al.	
15:30 PM	15:45 PM	Genetic Diversity and Spatiotemporal Distribution of SARS-CoV-2 Variants in Guinea: A Meta-Analysis of Sequence Data (2020–2023)	
15:45 PM	16:00 PM	Biphasic Middle East respiratory syndrome coronavirus incidence in dromedary camels in Northern Kenya, 2022 - 2023 - Brian Ogoti et al.	
16:00 PM	16:15 PM	CAMRAH: A Cloud-enabled workflow for analysis and harmonization of antibiotic resistance gene predictions - Daniella Matute et al.	
16:15 PM	16:30 PM	Simulate Codon Sequences with Darwinian Selection Incorporated as an Ornstein-Uhlenbeck Process - Hassan Sadiq & Darren Martin	
16:30 PM	17:00 PM	**Break**	
17:00 PM	17:15 PM	Integrating Multiple Learning Strategies into the PHA4GE Wastewater Surveillance Bioinformatics Course - Keaghan Brown et al.	
17:15 PM	17:30 PM	Surveillance Capacity Building through Pathogen Genomics and Bioinformatics Training Across Africa - Siddiqah George et al.	
17:30 PM	17:45 PM	Ethics and governance of AI-powered genomics - Tendayi Mutangadura et al.	
17:45 PM	18:00 PM	Developing an information system for integrating clinical and genomic infectious disease data in Tanzania - Melkiory Beti et al.	
18:00 PM	18:30 PM	**Break**	
18:30 PM	19:00 PM		Session A Posters dismantle

Wednesday, April 16			
Start Time	**End Time**	**Atlantic 1**	**Posters - Atlantic 2**
8:00 AM	18:00 PM	Registration - Located in the Atlantic Foyer	
8:00 AM	8:30 AM		Session B Posters set up
8:30 AM	9:00 AM	ASBCB Town Hall	
9:00 AM	9:15 AM	textToKnowledgeGraph: Generation of Molecular Interaction Knowledge Graphs Using Large Language Models for Exploration in Cytoscape - Favour James et al.	
9:15 AM	9:30 AM	Prelude - Building Research Data Platforms Incrementally: A Guide for Teams of All Sizes - Mitchell Shiell et al.	
9:30 AM	9:45 AM	The African Population Ontology (AfPO): Building a Framework for representing African Populations - Melek Chaouch et al.	
9:45 AM	10:00 AM	Prostruc: An Open-source Tool for 3D Structure Prediction using Homology Modeling - Olaitan Awe et al.	
10:00 AM	10:30 AM	**Break**	
10:30 AM	10:45 AM	Integrative Epigenomic and Transcriptomic Analysis Reveals Molecular Signatures in Multiple Sclerosis Patients	
10:45 AM	11:00 PM	Reference Genome and Pangenome Construction of Wild Spotted Hyenas (Crocuta crocuta) from the Kruger National Park - Ansia van Coller et al.	An assessment of the genomic structural variation landscape in Sub-Saharan African populations - Scott Hazelhurst et al.
11:00 PM	11:15 PM	SeqWord Motif Mapper: Unlocking Bacterial Epigenetic Insights - Oleg Reva et al.	
11:15 PM	11:30 PM	Making models work: Matching Human in vitro models to deliver precision medicine - Winston Hide et al.	
11:30 PM	11:45 PM	Afrigen-D Imputation Service: A Comprehensive Platform for African-Specific Genotype Imputation and Polygenic Risk Score Calculation - Mamana Mbiyavanga et al.	
11:45 PM	12:00 PM	Shared Genetic Architecture between Suicidality and Subcortical Brain Volume: A Genome-Wide Association Study - Joel Defo & Raj Ramesar	
12:00 PM	12:15 PM	First Continental African Genome-Wide Association Study Identifies Novel Genetic Loci Associated with Blood Urea Nitrogen and Kidney Function - Gloria Kirabo et al.	
12:15 PM	12:30 PM	Menopause-related changes in the gut microbiome and their association with cardiometabolic diseases in women from four sub-Saharan African countries - Phehello Chauke et al.	
12:30 PM	12:45 PM	The African Pangenome Reference Graph Project	
12:45 PM	13:00 PM	African Bioinformatics Institute Engagement Session	
12:45 PM	13:30 PM	**Networking Lunch**	

13:30 PM	**14:30 PM**		
14:30 PM	**14:45 PM**	Computational algorithms to identify mechanism-centric biomarkers of treatment response in cancer - Antonina Mitrofanova et al.	
14:45 PM	**15:00 PM**	Acquisition and persistence of Extended-spectrum beta-lactamase (ESBL) and Carbapenem resistant (CRE) Escherichia coli carriage in hospitalized Kenyan children - Caroline Tigoi et al.	
15:00 PM	**15:15 PM**	Leveraging Data Balancing and Chemical Encoding Strategies for Robust AI-Based Drug Discovery Pipeline - Ons Masmoudi et al.	
15:15 PM	**15:30 PM**	Autophosphorylation and Ca2+-binding alter the conformational landscape of Plasmodium falciparum Ca2+ dependent protein kinase 1, impacting stability and ligand binding: contextualising PTM using computational modelling - Charmaine Chido Matimba & Ikechukwu Achilonu	
15:30 PM	**15:45 PM**	Automated Molecular Docking (AMD) Platform for Ligand-Protein Interaction Studies (LPIS) in Cancers - Rihab Mahjoub et al.	
15:45 PM	**16:00 PM**	SAHMI and PRISM identify tumor microbiome and link it to cellular programs and immunity cancer - Subhajyoti De et al.	
16:00 PM	**16:15 PM**	The Gene catalogue and functional analysis of the gut microbiome of lions in Etosha National Park - Carl Belger et al.	
16:15 PM	**16:30 PM**	Metagenomic profiling of the gut microbiome in African populations: The AWI-Gen 2 Microbiome Study - Luicer Anne Ingasia Olubayo et al.	
16:30 PM	**16:45 PM**	**Break**	
16:45 PM	**17:45 PM**	Keynote: RNA structure prediction: existing approaches, strengths, limitations, and computational challenges - Aïda Ouangraoua	
18:30 PM		**Conference Dinner at GOLD Restaurant** *(ticket required)*	

Thursday, April 17						
Start Time	**End Time**	**Virtual**	**Atlantic 1**	**Pacific 1**	**Atlantic 2**	**Pacific 2**
8:00 AM	17:00 PM	Registration - Located in the Atlantic Foyer				
9:00 AM	9:10 AM	Overview of EMBL-EBI - Johanna McEntyre	Navigating Data Governance in the Health Data Ecosystem: An Interactive Multi-Stakeholder Perspective - Nicki Tiffin	Tutorial IP2: Simulation-Based Inference for Computational Biology: Integrating AI, Bayesian Modeling, and HPC	Tutorial IP5: Building agentic workflows for bioinformatics.	
9:10 AM	9:20 AM	Overview of EMBL-EBI Global Engagement programme - ThankGod Ebenezer				
9:20 AM	9:30 AM	Panel: Q/A and discussion session				
9:30 AM	9:45 AM	Phenotype data collection, harmonisation, management and standards in the DS-I Africa context - Katherine Johnston				
9:45 AM	10:00 AM	The European Nucelotide Archive: open digitial sequence information - Colman O'Cathail				
10:00 AM	10:15 AM					
10:15 AM	10:30 AM	Sequence data types and the role of MGnify on data management and FAIRification - Alexander Rogers				
10:30 AM	10:50 AM	Panel: All speakers				
10:50 AM	11:00 PM					
11:00 PM	11:05 PM	Break				
11:05 PM	11:20 PM	Comparative Genomics: Case studies in two groups of economically important marine finfish - Clint Rhode				
11:20 PM	11:35 PM	Overview of Ensembl data and training - Africa - Aleena Mushtaq				
11:35 PM	11:50 PM	Comparative genomics on public genomics data with Ensembl - Jitender Cheema				
11:50 PM	12:00 PM	**Break**				
12:00 PM	12:10 PM					
12:10 PM	12:25 PM	Panel: Presenting and showcasing examples/prototypes for low resource optimisation - UniProt - Vishal Joshi				
12:25 PM	12:30 PM	Presenting and showcasing examples/prototypes for low resource optimisation - UniProt - Daniel Rice				
12:30 PM	13:00 PM					
13:00 PM	14:00 PM			Tutorial IP1: Genotype Imputation and Data Analysis for African Populations: A Practical Tutorial Using AfriGen-D		Tutorial IP4: Introductions to constraint-based modeling using cobrapy
14:00 PM	15:00 PM					
15:00 PM	16:00 PM					
16:00 PM	17:00 PM					