



Bio26

SOUTH AFRICA CONGRESS

Synergies, Symbioses, Sustainability

26–29 January 2026
1820 Settlers Monument, Makhanda
bio26.scifest.org.za

SCIENTIFIC PROGRAMME

26 Jan 2025, Monday			
08:00 - 17:00	<p>REGISTRATION Venue: The Box Office</p>		
17:00 - 17:45	<p>OPENING CEREMONY Venue: Guy Butler Theatre Chair: Prof Rosemary Dorrington (RU)</p> <p>Agenda SASM Welcome - Prof Rosemary Dorrington (RU) Housekeeping - Prof Rosemary Dorrington (RU) Welcome Address - Dr Kwezi Mzilikazi (RU)</p>		
17:45 - 18:45	<p>Plenary 1 Venue: Guy Butler Theatre</p>	<p>Chair: Prof Rosemary Dorrington (RU)</p>	<p>[26262] Dr Rachel Sipler (Bigelow, USA) From Single Species to Symbiotic Systems: Harnessing Microbial Communities for a Sustainable Future</p>
19:00 - 20:30	<p>COCKTAIL EVENING Venue: Fountain Foyer Entertainment: AMP (Jazz)</p>		

27 Jan 2026, Tuesday					
07:30 - 08:00	REGISTRATION				
08:15 - 09:15	Plenary 2 Venue: Guy Butler Theatre	Chair: Dr Gwynneth Matcher (SAIAB)	[26267] Prof Russell Hill (University of Maryland, USA) Symbiotic Marine Bacteria Are Key In Nutrient Cycling, Natural Products And Carbon Sequestration		
THEME 1 Venue: Guy Butler Theatre			THEME 2 Venue: Olive Schreiner Hall		
Drug Discovery I			Lab to Life		
Chair: Prof Xavier Siwe Noundou (SMU)			Chair: Prof Marelize LeRose-Hill (CPUT)		
09:30 - 10:00	Keynote 1	[26285] Prof Rosemary Dorrington (RU) The Search For New Antibiotics: Leveraging the Chemical Diversity of Marine Natural Products as Chemical Leads for Antimicrobial Development	09:30 - 10:00	Keynote 2	[26058] Dr Lucia Steenkamp (CSIR) From Laboratory to Commercial Scale Using Biocatalysis for Sustainable Product Development
10:00 - 10:15	Lecture 1.1	[26219] Dr Idris Njanje (RU) Stromatolite-derived Actinobacteria Exhibit Potential For The Discovery Of Novel Antimicrobial Natural Products	10:00 - 10:15	Lecture 2.1	[26081] Dr Francois Kruger (UWC) Adaptive Laboratory Evolution And Rational Engineering Enabled Efficient Xylose Consumption And Xylan Conversion In Natural Isolates Of <i>Saccharomyces cerevisiae</i>
10:15 - 10:30	Lecture 1.2	[26020] Dr Mashilo Matotoka (U. Limpopo) Biological Activities Of <i>Leonotis ocyimifolia</i> (Burm.f.) And Its Antibacterial Activities Against ESKAPE Pathogens	10:15 - 10:30	Lecture 2.2	[26168] Dr Odwa Biko (SU) High-yield Production Of Recombinant Bioplastic Hydrolases In Yeast
10:30 - 10:45	Lecture 1.3	[26043] Dr Khumiso Dthebe (U. Limpopo) Fermentation Matters: Impact Of Growth Media On The Antimicrobial Activity Of Yeast Endophytes Previously Isolated From <i>Monsonia angustifolia</i>	10:30 - 10:45	Lecture 2.3	[26236] Dr Neerja Kumar Singh (DUT) Statistical Optimisation and Metagenomic Analysis for Improved Biohydrogen Production Using Pretreated Sugarcane Bagasse in Sulfate-reducing Bacteria-based Anaerobic Bioreactor
10:45 - 11:00	Lecture 1.4	[26143] Prof Adrienne Edkins (RU) Targeting Proteostasis In Infectious Diseases	10:45 - 11:00	Lecture 2.4	[26099] Mrs Taskeen Simons (UWC) Biogenic RW-AgNPs As An Antimicrobial In Non-sterile Industrial Fermentation
11:00 - 11:30	Coffee/Posters				
THEME 1 cont. Venue: Guy Butler Theatre			THEME 3 Venue: Olive Schreiner Hall		
Drug Discovery II			One Health		
Chair: Prof Adrienne Edkins (RU)			Chair: Dr Ellen Ledwaba (RU)		
11:30 - 12:00	Keynote 3	[26244] Prof Carminita Frost (NMU) Bringing Medicinal Plants to the Biopharmaceutical Market: Unveiling the Potential of <i>Cannabis sativa</i>	11:30 - 12:00	Keynote 4	[26260] Prof Anthony Okoh (UFH) Genomics Approaches For Monitoring Water Quality
12:00 - 12:10	Lecture 1.5	[26079] Ms Gugu Ngobese (UP) Experimental And Computational Screening Of Propolis Compounds Against Multidrug Resistant Efflux Pumps And Membrane Integrity In <i>Campylobacter jejuni</i>	12:00 - 12:15	Lecture 2.5	[26280] Dr Nolonwabo Nontongana (UFH) Towards a One Health Approach for the Surveillance of Zoonotic Infectious Diseases in Agro-ecosystems: Emerging Questions & Collaborations
12:10 - 12:20	Lecture 1.6	[26014] Mr Lemohang Gumenku (UKZN) Fermentation Dynamics Of White Corn Steep Liquor And Potential Postbiotic Applications In Metabolic Diseases: A Metabolomics Insight	12:15 - 12:25	Lecture 2.6	[26197] Dr Samuel Leareng (SU) Mobile Genetic Elements Influence Temporal Patterns Of Antimicrobial Resistance Genes In Wastewater Treatment Plants And Receiving Waters
12:20 - 12:30	Lecture 1.7	[26207] Mr Mohamed Deen Hendricks (UWC) Investigating The Anti-microbial Of Sulfadiazine-based Schiff Bases: Synthesis, Antibacterial Activity And Cytotoxicity	12:25 - 12:35	Lecture 2.7	[26146] Dr Luyanda Msolo (UFH) Co-prevalence Of SARS-CoV-2 And Respiratory Panel 1 Viruses In Wastewater Influent Recovered From Wastewater Treatment Plants In The Eastern Cape Region, South Africa
12:30 - 12:40	Lecture 1.8	[26059] Ms Amahle Bokveld (UFH) In vitro Evaluation Of The Safety And Anti-inflammatory Potential Of <i>Helichrysum pedunculatum</i> Plant Extracts	12:35 - 12:45	Lecture 2.8	[26192] Dr John Paul Makumbi (SU) Environmental Compartmentalisation And Physicochemical Gradients Shape AMR Persistence And Mobility Across WWTP-River Networks
12:40 - 12:50	Lecture 1.9	[26273] Mr Bienvenu Tsakem (SMU) Bioactive Chemical Constituents Of <i>Erythrina caffra</i> Leaves And Stem Bark	12:45 - 12:55	Lecture 2.9	[26202] Miss Kavani Sanasi (UJ) Water, Sanitation And Hygiene And The Distribution Of <i>Escherichia coli</i> Pathotypes In Households: Implications For Public Health And Sustainable Development In Gauteng, South Africa
13:00 - 14:00	Lunch & Poster Session Tech Hub (13:30 - 14:00, Venue: Olive Schreiner)				
14:00 - 15:00	Plenary 3 Venue: Guy Butler Theatre	Chair: Prof Rosemary Dorrington (RU)	[26257] Prof Salim Abdool Karim (CAPRISA) A Research Response to a Pandemic		

THEME 1 cont. Venue: Guy Butler Theatre			THEME 4 Venue: Olive Schreiner Hall		
Drug Discovery III			Environmental Biotechnology I		
Chair: Prof Adrienne Edkins (RU)			Chair: Prof Riaan den Haan (SU)		
15:20 - 15:30	Lecture 1.10	[26284] Dr Dele Abdissa Keneni Anticancer and Antibacterial Activities Bifunctional Sphingolipids from the Marine Sponge Oceanapia ramsayi	15:10 - 15:20	Lecture 2.10	[26052] Miss Tetelo Tolo (ARC) Nano-Biopriming Improves Solanum lycopersicum Seed Germination Under Cold Stress
15:30 - 15:40	Lecture 1.11	[26106] Mr Dylan Moodley (WITS) Insights Into The Structure And Function Of A Recombinant Cannabidiolic Acid Synthase Enzyme From The Swazi Gold Cannabis sativa Landrace	15:20 - 15:30	Lecture 2.11	[26031] Dr Livhuwani Makulana (U. Limpopo) Thatch Grass Utilization For Enzyme Induction And Biomass Saccharification: Toward Cost-Effective And Sustainable Biofuel Production
15:40 - 15:50	Lecture 1.12	[26060] Dr Alyson Bennett (RU) Stability Of Cannabidiol (CBD) In Topical Formulations	15:30 - 15:40	Lecture 2.12	[26201] Dr Nonsikelelo Precious Hlongwa (SU) Health Risks Of Potentially Toxic Metals And Microbes In Dust Around An Industrial Hub In Coastal South Africa
			15:40 - 15:50	Lecture 2.13	[26095] Mr Tshepiso Mononyane (ARC) Impact Of Diverse Wheat Genotypes On The Control Of Microbial Nitrogen Cycling And Plant Uptake
15:50 - 16:10	Coffee/Posters				
Lightning Talks Stream 1 Venue: Guy Butler Theatre			Lightning Talks Stream 2 Venue: Olive Schreiner Hall		
Chair: Prof Olihle Sebolai (UFS)			Chair: Dr Ronen Fogel (RU)		
16:10 - 16:15	Flash 1.1	[26101] Miss Bridget Nkosi (RU) Selective Allosteric Inhibition Of Plasmodial Isoleucyl-tRNA Synthetase: Mechanism- Driven In Silico Insights Into Antimalarial Development	16:10 - 16:15	Flash 2.1	[26186] Miss Letitia Minnaar (UWC) Enhancing Cellulolytic Activity In Natural Isolates Of Saccharomyces cerevisiae For Improved Cellulosic Ethanol Production
16:15 - 16:20	Flash 1.2	[26038] Mr Mfundo Magagula (U. Limpopo) Extracellular Vesicles From Endophytic Fungi Neofusicoccum parvum KaS-3 And Pseudofusicoccum olivaceum KaS-5 As Alternative Sources Of Bioactive Metabolites And Industrial Enzymes	16:15 - 16:20	Flash 2.2	[26128] Ms Caitlin Hoffman (SU) Construction Of A Marker-less Saccharomyces cerevisiae Strain For Bioplastic Degradation
16:20 - 16:25	Flash 1.3	[26131] Mr Bongile Mpetsheni (NMU) The Investigation Of The Antithrombotic Potential Of Cannabis sativa In Diabetes Mellitus	16:20 - 16:25	Flash 2.3	[26233] Miss Jwalane Sephiri (UCT) Selective Enrichment Of Clostridioides difficile From Complex Environments: A Tool For Wastewater Surveillance
16:25 - 16:30	Flash 1.4	[26132] Miss Anita Ndabeni (RU) Investigating The Role Of Hop Co- chaperone In v-Cyclin-CDK6-NPM Complex In KSHV-infected Primary Effusion Lymphoma Cells	16:25 - 16:30	Flash 2.4	[26086] Miss Silindile Madiya (RU) Occurrence Of Extended-Spectrum β - Lactamase Escherichia coli in Human Wastewater In Makana Municipality, Eastern Cape Province
16:30 - 16:35	Flash 1.5	[26199] Mr Babushi Madaba (U. Limpopo) Green Synthesis Of Metal Oxide Nanoparticles Using Endophytes Isolated From Kirkia acuminata For Anticancer And Antimicrobial Applications	16:30 - 16:35	Flash 2.5	[26061] Dr Charles Monyama (UNISA) Silent Hitchhikers: ESKAPE Bacteria Harboured By Musca domestica Collected From A Hospice And A Nearby Dumping Site In Krugersdorp, South Africa
16:35 - 16:40	Flash 1.6	[26240] Ms Gabrielle van den Heever (UFS) Heterologous Expression Of Epidermin-like Lantibiotics In Lactococcus lactis	16:35 - 16:40	Flash 2.6	[26071] Mr Louis Burger (SU) Long COVID Contributes To Gut Microbiota Alterations In A South African Cohort
16:40 - 16:45	Flash 1.7	[26116] Miss Tsepiso Rakoesha (RU) Establishment Of An In Vitro Enzyme Assays Platform and Screening Of An Natural Product Library For Discovery Of Novel Antimicrobial Compounds	16:40 - 16:45	Flash 2.7	[26178] Mr Justin Safari (RU) Production Of Xylooligosaccharides (XOS) With Antioxidant And Prebiotic Properties By The Bioconversion Of Sawdust From Poplar, Pine, And Acacia Trees
16:45 - 16:50	Flash 1.8	[26037] Mr Maruping Frost (U. Limpopo) Investigation Of Xylitol Production Potential, Antibacterial And Antioxidant Activities Of Fungal Endophytes From Monsonia angustifolia	16:45 - 16:50	Flash 2.8	[26138] Ms Gugulethu Buthelezi (DUT) Construction Of An Optogenetically Programmed Cell Autolysis For Facile Recovery Of Intracellular Proteins
16:50 - 16:55	Flash 1.9	[26062] Mr Harrison Banda (U. Zambia) Design, Synthesis, Antischistosomal And Physicochemical/ADMET Evaluation Of N- Pyridazin-3-ylbenzamides By In Silico And In Vitro Approaches	16:50 - 16:55	Flash 2.9	[26074] Miss Natalie Bezerra (SU) Investigating The Influence Of Physicochemical Factors On The Expression Of Antibiotic Resistance Genes Across Wastewater-Freshwater Networks In South Africa
16:55 - 17:00	Flash 1.10	[26027] Ms Loren Trerise (UWC) Mechanistic Insight Into The Antifungal Potential Of Gallic Acid Against Fusarium oxysporum	16:55 - 17:00	Flash 2.10	[26117] Miss Nokulunga Mnyayi (DUT) Cloning And Expression Of A Thermostable GDSL-motif Lipase From Bacillus velezensis Into Escherichia coli BL21 DE3

17:00 - 17:05	Flash 1.11	[26033] Miss Ramokone Florah Mothupi (U. Limpopo) Mycobacterial Methylerythritol Phosphate Pathway Inhibition By Medicinal Plant Extracts: A Novel Antitubercular Approach	17:00 - 17:05	Flash 2.11	[26164] Miss Jana Bisschoff (UFS) The Production Of Sapienic Acid By Recombinant Pphotosynthetic Enzymes
17:05 - 17:10	Flash 1.12	[26161] Ms Mulanga Luscious Mulaudzi (U. Limpopo) Evaluating The Antioxidant And Anti-inflammatory Properties Of Medicinal Plants In Dental Infections	17:05 - 17:10	Flash 2.12	[26200] Mr Emmanuel Sero (DUT) Neural Network Optimisation of Streptomyces-derived Enzymes for Biomass Saccharification
18:00 - 19:00	Sunset Lecture 1 Venue: Fountain Foyer	Chair: Prof Jo Dames (RU)	Prof Karin Jacobs (SU) & Dr Rachel Sipler (Bigelow Laboratory) How Healthy Is Your Environment [26234] Soil Health: The Small Things Matter [26282] Working Together for Healthy Water: Lessons from Community Partnerships		

28 Jan 2026, Wednesday						
08:15 - 09:15	Plenary 4 Venue: Guy Butler Theatre		Chair: Prof Joanna Dames (RU)		[26265] Dr Vasilis Kokkoris (Vrije Universiteit Amsterdam, The Netherlands) Cell and Network Dynamics in Arbuscular Mycorrhizal Fungi	
THEME 5 Venue: Guy Butler Theatre				THEME 6 Venue: Olive Schreiner Hall		
Symbioses I				New Technologies and the -Omics I		
Chair: Prof Bronwyn Kirby-McCullough (UWC)				Chair: Prof Janice Limson (RU)		
09:30 - 10:00	Keynote 5	[26263] Prof Thulani Makhalanyane (SU) tbc		09:30 - 10:15	Keynote 6	[26264] Prof Pedro Estrela (U. Bath, UK) Electrochemical Biosensors and Biodevices for Medical Diagnosis and Water Monitoring
10:00 - 10:15	Lecture 3.1	[26010] Dr Ebrahim Shokoohi (U. Limpopo) Medicinal Plant Microbiomes As Reservoirs of Novel Symbionts: Xiphinematobacter–Xiphinema Association In The Waterberry Rhizosphere				
10:15 - 10:30	Lecture 3.2	[26064] Prof Marshall Keyster (UWC) Pantoea In Agriculture: Balancing Promise And Pathogenicity		10:15 - 10:30	Lecture 4.2	[26182] Dr Karabelo Moloantsoa (UKZN) Application Of Environmental Microbiology, Metagenomics And Metabolomics As Tools Used To Predict Effectiveness Of A Bioremediation System
10:30 - 10:45	Lecture 3.3	[26078] Prof Joanna Dames (RU) Soil Properties And Not Crop Rotation With Non-mycorrhizal Canola Influence The Abundance And Species Richness Of Arbuscular Mycorrhizal Fungi In Wheat Soils		10:30 - 10:45	Lecture 4.3	[26012] Prof Sekelwa Cosa (UP) Antigonorrhoeal Lead Compounds' Identification Using A Metabolomics-guided Approach
10:45 - 11:00	Lecture 3.4	[26221] Ms Nompumelelo Mtsweni (ARC) Characterization Of Rhizosphere Bacteria From Fruit Tree Orchards For Beneficial Traits That Promote Plant growth		10:45 - 11:00	Lecture 4.4	[26179] Dr Jarmo-Charles Kalinski (RU) Sea Of Signals: Mass Spectrometry At The Frontier Of Marine Drug Discovery And Pollution Detection
11:00 - 11:30	Coffee/Posters					
THEME 5 cont. Venue: Guy Butler Theatre				THEME 6 cont. Venue: Olive Schreiner Hall		
Symbioses II				New Technologies and the -Omics II		
Chair: Prof Thulani Makhalanyane (SU)				Chair: Prof Earl Prinsloo (RU)		
11:30 - 11:45	Lecture 3.5	[26205] Prof Rosemary Dorrington (RU) Genome-resolved Metagenomic Analysis Of Nascent Microbialites: Recruitment And Succession Of Keystone Bacterial Species		11:30 - 11:45	Lecture 4.5	[26225] Dr Sherif Adeyemi (U. Ilorion, Nigeria) Network Pharmacology-based Investigation Of The Pharmacological Mechanism Of Secondary Metabolites Of <i>Bacillus subtilis</i> , An Endophyte Of <i>Kigelia africana</i> , In Breast Cancer
11:45 - 12:00	Lecture 3.6	[26142] Miss Gabriella Solomons (RU) Elucidating The Nature Of Symbiosis In Marine Sponges Through Comparative And Functional Genomics		11:45 - 12:00	Lecture 4.6	[26163] Dr Wayne Veldman (RU) How Residue Substitutions Modulate Metabolism Speed In Human NAT2 Enzyme: Insights From Molecular Dynamics Simulations
12:00 - 12:15	Lecture 3.7	[26279] Karin Jacobs (SU) The Role Of Phytopathogens in the Mycobiome of Blueberry-foraging Western Cape Honeybees (<i>Apis mellifera capensis</i>)		12:00 - 12:10	Lecture 4.7	[26183] Ms Veronica Phetla (U. South Africa) Understanding The Distribution of Muscidae flies And Their Role As Vectors Of Bacterial Pathogens In South Africa: A Review Using A BOLD Approach
12:15 - 12:25	Lecture 3.8	[26083] Mr Edwin Wanjofu (UP) Genetic Variability Among <i>Bradyrhizobium diazoefficiens</i> And Inoculant Usage Effect		12:10 - 12:20	Lecture 4.8	[26115] Dr Chiratidzo Chamboko (RU) Uncovering Reduced Functionality In Novel Afrocentric/Sub-Saharan African CYP2D6 Alleles Using Prior Mechanistic Findings
12:25 - 12:35	Lecture 3.9	[26057] Miss Megan Starbuck (RU) Bio-vectoring By Honeybees And Symbiosis: A Combined Approach To Controlling <i>Botrytis</i> Mould On Strawberry		12:20 - 12:30	Lecture 4.9	[26174] Mr Eben Mundell (River Bioscience) High-Throughput qPCR Melt Curve Analysis For Monitoring <i>Baculovirus</i> Isolates In Codling Moth Biocontrol Programs
12:35 - 12:45	Lecture 3.10	[26255] Mr Keith Dube (SU) The Biogeography And Niche Spaces Of Plant-growth Promoting <i>Acidobacteriota</i>		12:30 - 12:40	Lecture 4.10	[26162] Dr Alaric Prins (CPU) Comparing Metabarcoding And Whole Metagenome Sequencing For Family Level Resolution Of <i>Actinomycetota</i> Associated With Two South African Soil Environments
12:45 - 12:55	Lecture 3.11	[26139] Miss Nombuso Sithole (SU) Elucidating The Relationship Between Gut And Cutaneous Microbiota In South African Individuals		12:40 - 12:50	Lecture 4.11	[26015] Mr Darin Holman (UWC) Elucidating Pathogenicity Mechanisms Of <i>Pantoea agglomerans</i> R6 With Ethyl Methanesulfonate-mutagenesis In <i>Brassica napus</i>

12:45 - 12:55	Lecture 3.12	[26283] Prof Rasheed A Adeleke (NWU) Nutritional Influence on the Intestinal Microbiome and Metabolic Potential of the African Savannah Honeybee (<i>Apis mellifera scutellata</i>)	12:50 - 13:00	Lecture 4.12	[26093] Ms Rehema Mukami Mwaniki (RU) Allostery In Divergent Dynamic Patterns Of A Single-nucleotide Polymorphism In CYP3A4
13:00 - 14:00	Lunch & Poster Session				
14:00 - 15:00	TECH HUB I Venue: Olive Shreiner Hall Slot 1: Separations (Raugme Buys) Slot 2: Diplomics (Shane Murray) Slot 3: Microsep (Dr Dylan Zeiss)				
THEME 7 Venue: Guy Butler Theatre			THEME 4 cont. Venue: Olive Schreiner Hall		
Microbial Genomics			Environmental Biotechnology II		
Chair: Prof Mahlolo Hope Serepa-Dlamini (UJ)			Chair: Prof Marshall Keyster (UWC)		
15:10 - 15:20	Lecture 3.13	[26193] Dr Janca Pieters (SU) Hidden Partners in Diversity: Acidobacteriota and Their Distribution in the Cape Floristic Region	15:10 - 15:20	Lecture 4.13	[26009] Dr Freedom Tshabuse (U. Zululand) pH-Dependent Green Synthesis Of Silver Nanoparticles By <i>Bacillus safensis</i> : Antibacterial Activity And Heavy Metal Removal In Water
15:20 - 15:30	Lecture 3.14	[26126] Mr Ongezile Nkalanke (UFH) Genetic Determinants Of Antibiotic Resistance In <i>Vibrio</i> spp. From Polyherbal Medicines: A Public Health Concern In Raymond Mhlaba Local Municipality	15:20 - 15:30	Lecture 4.14	[26241] Dr Maelys Puyo (SU) Uncovering The Diversity Of Pantothenic Acid Requirements In The Wine Yeast <i>Lachancea thermotolerans</i>
15:30 - 15:40	Lecture 3.15	[26087] Ms Sanelisiwe Dube (WITS) Genomic Insights Into Non-typhoidal <i>Salmonella</i> From An Urban River In Gauteng, South Africa	15:30 - 15:40	Lecture 4.15	[26147] Prof Benoit Divol (SU) Microbial Glycosidase Activity: A Sustainable Solution To Mitigate Smoke Taint In Wine?
15:40 - 15:50	Lecture 3.16	[26113] Dr Nompumelelo Ikegwuoha (UWC) A Genome-guided Approach Towards Characterization Of Lanthipeptides From A Marine Invertebrate Symbiont, Bacterial Isolate U16	15:40 - 15:50	Lecture 4.16	[26151] Mr Theo Jacobs (SU) Oxygen As The Missing Key: Optimising Bio-acidification By <i>Lachancea thermotolerans</i> In Climate-impacted Wines
15:50 - 16:10	Coffee/Posters				
Lightning Talks Stream 3 Venue: Guy Butler Theatre			Lightning Talks Stream 4 Venue: Olive Schreiner Hall		
Chair: Prof Aileen Boshoff (RU)			Chair: Dr Nolonwabo Nontongana (UFH)		
16:10 - 16:15	Flash 3.1	[26053] Ms Luyanda Zamokuhle Nkabinde (RU) Arbuscular Mycorrhizal Fungi In Heavy Metal Soils	16:10 - 16:15	Flash 4.1	[26180] Mr Kingstone Nihaka (DUT) Comparative Analysis Of Two Bacteriolytic Genes, SRRz And T4 Lysozyme-fused Cell-penetrating Peptide (2PaT4L), For Controlled Cell Autolysis And Intracellular Proteins Recovery
16:15 - 16:20	Flash 3.2	[26232] Miss Xena Goslett (UCT) From Pathogen To Postbiotic: Harnessing <i>Enterococcus</i> To Combat Diarrhoeal Pathogens	16:15 - 16:20	Flash 4.2	[26076] Ms Lexia Henning (WITS) Sequence To Survival: Novel Lanosterol 14 α -demethylase Variants And Antifungal Resistance In <i>Cryptococcus</i>
16:20 - 16:25	Flash 3.3	[26223] Miss Michaela Davies (RU) Comparison Of Fluorescent And Colorimetric Stains For Monitoring Key Parameters Of Biofilm Growth	16:20 - 16:25	Flash 4.3	[26073] Miss Emihle Benise (RU) Aptamer And Complementary DNA Binding In Prostate Specific Antigen Detection Using Cobalt Phthalocyanine Complexes And Graphene Molecules
16:25 - 16:30	Flash 3.4	[26034] Mr Axel Collins (UWC) The Biocontrol Of <i>Botrytis cinerea</i> Using Endophytic Yeasts And Bacteria	16:25 - 16:30	Flash 4.4	[26021] Mr Vince Mbanze (SMU) A Systems-level Chemoinformatic Analysis Of The Metabolic And Regulatory Signatures Of Colorectal Cancer
16:30 - 16:35	Flash 3.5	[26229] Miss Siviwe Tole (RU) The Isolation, Molecular Identification, And Characterisation Of Yeasts Associated With Fruit Fly Species For Potential Application In Bait Traps	16:30 - 16:35	Flash 4.5	[26238] Miss Kedibone Zama Bianca Nene (UCT) Genomic And Functional Characterization Of <i>Bifidobacterium pseudocatenulatum</i> Isolates From South African Donors Reveals Strain-level Diversity And Lanthipeptide Biosynthetic Potential
16:35 - 16:40	Flash 3.6	[26025] Mr Enriquay Smith (UWC) Exploring <i>Paenibacillus terra</i> B6a As A Sustainable Biocontrol Agent For <i>Fusarium proliferatum</i>	16:35 - 16:40	Flash 4.6	[26094] Miss Prasiddhi Prakash Parab (DUT) Unravelling Steroid Hormone Degradation In Municipal Wastewater Through Kinetics And Metagenomics
16:40 - 16:45	Flash 3.7	[26122] Mr Luphumlo Tunyiswa (RU) Screening For Selective Inhibitors Of <i>Mycobacterium tuberculosis</i> DnaK	16:40 - 16:45	Flash 4.7	[26214] Miss Ameerah Imaan Abrahams (UWC) Bioprospecting For Bacterial Based Cancer Therapies

16:45 - 16:50	Flash 3.8	[26110] Ms Unathi Ntshakaza (RU) Heavy Metal Soils: Microbial Diversity And Tolerance	16:45 - 16:50	Flash 4.8	[26111] Miss Asisipho Dloboyi (RU) Comparative Study On Twelve Supratidal Microbialites Across The Southeastern Coastline Of South Africa
16:50 - 16:55	Flash 3.9	[26080] Mr Keith Kambani (RU) Evaluation Of The Effects Of Cryptophlebia peltastica Nucleopolyhedrovirus And Cydia pomonella Granulovirus On Thaumetobia leucotreta	16:50 - 16:55	Flash 4.9	[26220] Mx Lindokuhle Biyela (UP) Comparative Analyses Of Extracellular Vesicles From Dickeya dadantii And Pectobacterium brasiliense
16:55 - 17:00	Flash 3.10	[26092] Miss Karabo Mabetoa (UP) Probiotic-derived Extracellular Vesicles (EVs): Characterization And Inhibitory Effects On Foodborne Pathogens	16:55 - 17:00	Flash 4.10	[26242] Ms Sihle Skosana (UFS) The Heterologous Expression Of Staphylococcal And Clostridial Lantibiotics In Escherichia coli
17:00 - 17:05	Flash 3.11	[26088] Ms Lebogang Moukangwe (UFS) Activation Of The SARS-CoV-2 Latent Spike Glycoprotein Protein By Candida albicans Proteases	17:00 - 17:05	Flash 4.11	[26152] Miss Kelebogile Letebele (UFS) Characterisation Of Candida albicans Biofilm Extracellular Vesicles To Inform Antifungal Strategies
17:05 - 17:10	Flash 3.12	[26189] Ms Wendy Nkomana (UWC) In Vitro Anticancer Effects Of Green Synthesized Vigna unguiculata Pods Silver Nanoparticles	17:05 - 17:10	Flash 4.12	[26075] Mr Gert Rutger van Lill (UWC) Mediating The Lifespan Of Saccharomyces cerevisiae As A Strategy For Increasing Heterologous Protein Production
18:00 - 19:00	Sunset Lecture 2 Venue: Fountain Foyer	Chair: Janice Limson (RU)	Mr Peter Nel (GESLabs) [26266] African Medicine Security Through Cannabinoids		

29 Jan 2026, Thursday					
08:15 - 09:15	Plenary 5 Venue: Guy Butler Theatre		Chair: tbc [26258] Prof Rachel Wynberg (UCT) tbc		
09:15 - 09:45	Keynote 7 Venue: Guy Butler Theatre		Chair: tbc [26268] Mr Ben Durham (DSTI) tbc		
THEME 8 Venue: Guy Butler Theatre			THEME 9 Venue: Olive Schreiner Hall		
Chair: Prof Lucy Moleleki (UP)			Chair: Prof Santhosh Pillai (DUT)		
Microbiology: The Next Frontier I			Sustainable Science and the Bioeconomy I		
10:00 - 10:15	Lecture 5.1	[26226] Dr Tsolanku Sidney Maliehe (UKZN) Bioprospecting Of Marine Actinomycetes For Antibacterial Agents: Antibacterial Mechanisms Of Action	10:00 - 10:15	Lecture 6.1	[26269] Mr Jan-Hendrick Duminy (GESLabs) The Never-Ending Experiment: Role Of R&D In Medicinal Cannabis
10:15 - 10:30	Lecture 5.2	[26177] Dr Jasmin Patel (Wits) Who Rules Where In The Microbial World: A Global Analysis Of Dominance And Prevalence	10:15 - 10:30	Lecture 6.2	[26121] Prof Marilize Le Roes-Hill (CPUT) Insights From The Microbiome Of The Brown Seaweed, Laminaria pallida: A Rich Source Of Carbohydrate-active And Plastic-degrading Enzymes
10:30 - 10:45	Lecture 5.3	[26196] Dr Benjamin Havinga (SU) South African Myxococcota: An Untapped Resource For Microbial Ecology And Biotechnology	10:30 - 10:45	Lecture 6.3	[26084] Prof Samuel Egieyeh (UWC) Talent Development For Vaccine And Biologics Manufacturing In Africa: A Step Towards Sustainable Bio-economy
10:45 - 11:00	Lecture 5.4	[26130] Dr Matteo Gregori (SU) Elucidating The Adaptations Of Coastal Microbiomes To Emerging Contaminants And The Potential Effect On Ecosystem Services	10:45 - 11:00	Lecture 6.4	[26170] Mr Aphiwe Mfuku (RU) Interrogating The Role Of Higher Education Institutions In The Eastern Cape In Biotechnology Enterprise Creation And Advancement
11:00 - 11:30	Coffee/Posters				
11:30 - 12:00	Keynote 8 Venue: Guy Butler Theatre		Chair: Prof Brett Pletschke (RU) [26270] Dr Jennifer Molwantwa (WRC) tbc		
THEME 8 cont. Venue: Guy Butler Theatre			THEME 9 cont. Venue: Oliver Schreiner Hall		
Microbiology: The Next Frontier II			Sustainable Science and the Bioeconomy II		
Chair: Prof Anthony Okoh (UFH)			Chair: Prof Renate Roux-Van Der Merwe (TUT)		
12:10 - 12:20	Lecture 5.5	[26252] Mr Abayomi Baruwa (DUT) Gene Cloning, Expression, And Biochemical Characterization Of Lipase From Serratia liquefaciens AB1 Isolated From Petroleum Oil-contaminated Soil	12:10 - 12:20	Lecture 6.5	[26069] Dr Wiya Leon Masudi (RU) Biofertilisation: An Agroecological Practice To Support Sustainable Agriculture And The Rehabilitation Of Degraded Lands
12:20 - 12:30	Lecture 5.6	[26275] Mr Lehlohonolo Qhanya (CUT) Enriching Indigenous Microbial Consortia As A Promising Strategy For The Removal Of Endocrine-disrupting Chemicals (EDCs)	12:20 - 12:30	Lecture 6.6	[26278] Dr Ashmika Singh (RU) Characterisation of the gut fungal communities of Anopheles arabiensis Patton (Diptera: Culicidae): Implications for microbial-based vector control
12:30 - 12:40	Lecture 5.7	[26133] Dr Peter Montso (SU) Investigating Viral Community Assembly And Host Interaction In Wastewater Treatment Plants And River Systems	12:30 - 12:40	Lecture 6.7	[26235] Dr Arina Hitzeroth (UWC) Microbial Drivers Of Spoilage In Vegetables And The Antimicrobial Potential Of Pelargonium sidoides Extracts And Chitosan
12:40 - 12:50	Lecture 5.8	[26077] Miss Nobuhle Kambunga (SU) Evidence Of Antimicrobial Resistance In The Gut Microbiota Of Children From Informal Settlements In South Africa	12:40 - 12:50	Lecture 6.8	[26172] Mr Siphumze Bani (RU) Quality Analysis Of Water From Local Sources And Sustainability Of Greywater
12:50 - 13:00	Lecture 5.9	[26173] Miss Tyla Baker (UFS) Pilot-scale Wastewater Surveillance For Pathogenic Yeasts In Mangaung, South Africa	12:50 - 13:00	Lecture 6.9	[26249] Mr Ntobeko Songcata (RU) Engaging The Mpondoland Cannabis Community: An In-Depth Study Of Challenges, Economic Dynamics, Practices, And Aspirations Through Participatory Action Research And Community Engagement
13:00 - 14:30	Lunch & Poster Session				
13:30 - 14:30	TECH HUB II Venue: Olive Shreiner Hall Slot 1: SA/UK ADD Hub (Dr Tarryn Swart) Slot 2: Inqaba (tbc)				
14:30 - 15:30	PANEL SESSION Venue: Guy Butler Theatre		THE FUTURE OF BIOSCIENCES Chairs: Prof Janice Limson (RU), Prof Stephanie Burton (UP)		

15:45 - 17:00	SASM AGM Venue: Guy Butler Theatre
18:00 - late	CLOSING CEREMONY & PRIZE-GIVING CONGRESS DINNER Venue: Fountain Foyer Chair: Prof Rosemary Dorrington (RU) Agenda Entertainment - AMP (Marimba) Closing Address - Dr Sizwe Mabizela (RU) Prize-giving Dinner DJ