

**NICD (National Institute for Communicable Diseases) 3-week onsite course by Centre
2nd October - 20th October 2023**

Division of Public Health Surveillance and Response (DPHSR) 1 Full day: Facilitator Tiisetso Lebaka		
Monday 2nd October 2023	Topic	Presenter
08:45- 09:00	Welcome & DPHSR Overview	Lehlohonolo Chandu
09:00-10:00	Outbreak Response	Moipone Shonhiwa
10:00-10:45	NMC	Brian Brummer
10:45-11:00	Break	
11:00-11:30	Provincial Epidemiology Team	Lehlohonolo Chandu
11:30-12:00	GERMS-SA Overview	Tiisetso Lebaka
12:00-12:30	Overview on IDSR	Genevie Ntshoe
12:30-13:15	Event-Based Surveillance (EBS)	Zandile Nukeri
13:15-14:00	Break	
14:00-15:00	Emergency Operations Centre	Genevie Ntshoe
15:00-16:15	General Discussion	Lucille Blumberg

Centre for Respiratory and Meningitis (CRDM) 1 Full day : Facilitator Prof Cheryl Cohen		
Tuesday 3rd October 2023	Topic	Presenter
08:30-10:30	CRDM overview, surveillance and special studies (including Covid-19)	Cheryl Cohen
10:30-10:45	Break	
10:45-12:00	Syndromic surveillance for respiratory illness	Sibongile Walaza
12:00-13:00	Lunch	
13:00-14:15	Laboratory discussion (Q&A)	Anne von Gottberg
14:15-14:30	Break	
14:30-16:00	Case studies	Linda de Gouveia/Nicole Wolter/ Mignon du Plessis

CRDM half-day : Facilitator Prof Cheryl Cohen		
Wednesday 4th October 2023	Topic	Presenter
08:30-12:00	National Influenza Centre/Virus isolation and serology/sequencing	Amelia Buys/Nicole Wolter
12:00-13:00	Lunch	

Division of Biosafety and Biosecurity: Facilitator Zibusiso Masuku		
Wednesday 4 th October 2023	Topic	Presenter
13:00-14:00	Biosecurity and Bio-risk	Anastasia Trataris-Rebisz
14:00-16:00	Biosafety in a BSL 3 laboratory/Tour of the TB laboratory	Zibusiso Masuku

Centre for Vaccines and Immunology (CVI) 1 full day: Facilitator Wayne Howard Victor Mabasa		
Thursday 5 th October 2023	Topic	Presenter
09:00-10:15	Measles	Sheilagh Smit
10:15-10:45	Break	
10:45-11:45	Rubella and CRS	Susan Malfeld
11:45-12:15	Cell culture	Heleen Du Plessis/Shelina Moonsamy
12:15-13:00	Polio isolation / serology	Rosinah Sibiya /Shelina Moonsamy
13:00-14:00	Lunch	
14:00-14:30	Polio Video	https://www.nicd.ac.za/media/videos/polio-documentary/
14:30-15:30	Polio molecular surveillance, epidemiology	Shelina Moonsamy/Lerato Seakamela

CVI 1 full day: Facilitator Wayne Howard Victor Mabasa		
Friday 6 th October 2023	Topic	Presenter
09:00-10:00	SARS-CoV-2 surveillance from environmental samples	Victor Mabasa
10:00-11:00	Disease eradication/elimination with focus on polio/measles, and the impact of COVID on surveillance programmes	Kerrigan McCarthy
11:00-11:30	Break	
11:30-12:30	History of vaccines	Clement Adu-gyamfi
12:30-13:30	Lunch	
13:30-14:30	Immunology followed a quiz/How do we measure if a vaccine is working	Clement Adu-gyamfi
14:30-15:30	Hepatitis	Nishi Prabdhial-Sing

**Centre for Healthcare Associated Infections, Antimicrobial Resistance and Mycoses (CHARM) 1 Full day: (AMR)
Facilitator Prof Olga Perovic**

Monday 9th October 2023	Topic	Presenter
08:30-09:30	Overview and Antimicrobial resistance (AMR) strategy, One Health approach: understanding the concepts and roles at national and global level	Olga Perovic
09:30-10:00	WHO GLASS surveillance	Olga Perovic
10:00-10:30	Break	
10:30-11:30	Case study 1: Hospital Associated Pneumonia (HAP) case with MDRO	Olga Perovic/Liliwe Shuping
11:30-12:30	Case study 2: Outbreak of investigation with clinical, epidemiological, laboratory and public health aspects	Caroline Maluleka
12:30-13:00	Using Whole Genome Sequencing for prediction of AMR	Sabelle Jallow
13:00-14:00	Lunch	
14:00-15:00	Phenotypic AMR laboratory and matrix-assisted laser desorption/ionization time of flight mass spectrometry (MALDI-TOF); AST, Culture Collection and PTS	Marshagne Smith
15:00-16:00	Online practical- molecular approach	Ruth Mogokotleng
16:00-16:30	Self-assessment	Caroline Maluleka/Sabelle Jallow/Ruth Mogokotleng

Centre for Tuberculosis (CTB) 1 Full day: Facilitator Dr Farzana Ismail

Tuesday 10th October 2023	Topic	Presenter
09:00-09:15	Welcome and overview	Farzana Ismail/Shahed Vally Omar
09:15-10:30	Diagnostic tools for <i>Mycobacterium tuberculosis</i> : A closer look at the algorithm	Farzana Ismail
10:30-11:00	Break	
11:00-11:30	MTB Typing methods and application	Halima Said
11:35-12:30	TB in time and Space	Harry Moultrie
12:35-13:05	Phenotypic DST (TB eXiST and Carrier method)	Santhuri Rambaran
13:05-14:00	Lunch	
14:00-15:00	Next generation sequencing for MTB	Shahed Vally Omar
15:00-16:00	New drugs, New regimens: Update on drug Resistant TB treatment	Farzana Ismail

CTB half day: Facilitator Dr Farzana Ismail		
Wednesday 11 th October 2023	Topic	Presenter
09:00-10:30	Case Studies and Q & A session	Farzana Ismail/Yasmin Gardee
10:30-10:45	Break	
10:45-11:45	Contemporary concepts in antimicrobial therapy	Warren Lowman
11:45-12:45	Antimicrobial surveillance in SA - current status	Warren Lowman
12:45-13:30	Lunch	

Centre for Enteric Diseases (CED) half day: Facilitator Prof Anthony Smith		
Wednesday 11 th October 2023	Topic	Presenter
13:30-15:00	An overview of CED activities and introduction to enteric bacteria	Linda Erasmus
15:00-15:15	PCR assays used for diagnosis and characterisation of bacterial enteric pathogens	Nomsa Tau
15:15-16:15	Whole genome sequencing for bacterial enteric disease surveillance an outbreak investigation	Anthony Smith

CED 1 Full day: Facilitator Prof Anthony Smith		
Thursday 12 th October 2023	Topic	Presenter
08:30-10:30	Case studies 1-3 (including laboratory work)	CED bacteriology team
10:30-10:50	Break	
10:50-13:00	Case studies 4-6 (including lab work)	CED bacteriology team
13:00-13:45	Lunch	
13:45-14:30	Introduction to diarrhoeal disease burden and enteric viruses associated with diarrhoea	CED virology team
14:30-15:15	Enteric viruses associated with diarrhoea (case studies) Laboratory detection and interpretation	CED virology team
15:15-15:45	Practical demonstration: virology laboratory	CED virology team
15:45-16:15	Poop Quiz	Linda Erasmus

Centre for Healthcare Associated Infections, Antimicrobial Resistance and Mycoses (CHARM) 1 Full day: (Mycology) Facilitator Prof Nelesh Govender		
Friday 13 th October 2023	Topic	Presenter
09:00-09:30	Introduction	Nelesh Govender
09:30-10:30	Clinical cases 1 and 2	Nelesh Govender
10:30-11:00	Break	
11:00-11:30	Mycology reference laboratory (MRL) (case 2)	Ruth Mpembe
11:30-12:00	Molecular laboratory (case 3)	Tsidiso Maphanga
12:00-12:30	Molecular laboratory (case 4)	Serisha Naicker
12:30-13:00	Break	
13:00-13:30	Fungal outbreak exercise part 1: Verifying an outbreak of <i>Candida auris</i> in neonatal ward	Liliwe Shuping
13:30-14:00	Fungal outbreak exercise part 2: Verifying an outbreak of <i>Candida auris</i> in a neonatal ward	Husna Ismail
14:00-15:00	Group exercise to design a laboratory-based surveillance system for fungal infections in a resource-limited setting	Rudzani Mashau/Sabelle Jallow
15:00-16:30	Lab demonstration: antigen assays, yeast ID, antifungal susceptibility testing, Mould ID (mucoraceous, dematiaceous, <i>Aspergillus</i> , dermatophytes)	Ruth Mpembe/MRL team
16:30-16:45	Wrap-up session	Nelesh Govender

Infectious Diseases Society of South Africa (IDSSA) Half day: Facilitator Jeremy Nel - Virtual		
Saturday 14 th October 2023	Topic	Presenter
08:30-09:00	Adult unknown case 1	Jeremy Nel
09:00-09:30	Adult unknown case 2	Ribka Berhanu
09:30-10:00	Paeds unknown case 1	Fikile Mabena
10:00-10:15	Break	
10:15-10:45	Adult unknown case 3	Kim Pieton
10:45-11:15	Paeds unknown case 2	Gill Sorour
11:15-11:45	Adult unknown case 4	Michelle Venter
11:45-12:00	Additional questions/discussion	

Centre for HIV and STI (CHIVSTI) 1 Full day (HIV) : Facilitator Prof Adrian Puren		
Monday 16 th October 2023	Topic	Presenter
08:30-10:00	The great debate: HIV cure strategies: On the horizon or Hen's teeth?	Adrian Puren
10:00-10:15	Break	
10:30-11:00	A view from the sanctuary sites: current research on HIV cure	Caroline Tiemessen
11:15-11:30	Break	
11:30-13:00	Everything but the kitchen sink. Preventions strategies the elimination of HIV/other viruses.	Penny Moore
13:00-14:00	Break	
14:00-16:00	Diagnostics, Strategies and difficult cases	Adrian Puren

Centre for HIV and STI (CHIVSTI) 1 Full day (STI): Facilitator Venessa Maseko		
Tuesday 17 th October 2023	Topic	Presenter
08:30-10:00	The role of surveillance in STI syndromic management	Frans Radebe
10:00-10:20	Break	
10:20-11:20	STI POCT and Congenital Syphilis	Tendesayi Kufa-Chakezha
11:20-11:30	Break	
11:30-12:20	STI molecular diagnostics for surveillance and specialised reference testing	Etienne Muller
12:20-12:30	Break	
12:30-13:15	STI case studies - discussion	Bianca Da Costa Dias Naicker
13:15-14:00	Lunch	
14:00-16:00	Laboratory practical session: STI phenotypic diagnostics-microscopy, culture identification and antimicrobial susceptibility testing; serology.	Venessa Maseko and Team

Centre for Emerging Zoonotic and Parasitic Disease (CEZPD) 1 Full day (Parasitology): Facilitator Dr Charlotte Sriruttan		
Wednesday 18 th October 2023	Topic	Presenter
08:30-09:00	Introduction to parasitology reference lab and ARMMOR	Charlotte Sriruttan
09:00-09:30	Epidemiology of malaria in Southern Africa	Charlotte Sriruttan
09:30-09:45	Break	
09:45-11:00	Parasite methodology (blood films, rapid antigen test) and identification (malaria, microfilaria, trypanosoma and borrelia)	Bhavani Moodley/Lisa Ming Sun
11:00-12:00	Vector control laboratory overview	Basil Brooke/Sune Oliver
12:00-12:30	Lunch	
12:30-13:45	Parasite methodology (Formalin-ethyl acetate concentration, Ziehl Neelsen) and identification (stool & urine parasites)	Bhavani Moodley/Lisa Ming Sun
13:45-14:00	Break	
14:00-15:30	Parasitic case studies	John Frean/Charlotte Sriruttan

Centre for Emerging Zoonotic and Parasitic Disease (CEZPD) 1 Full day (Special Viro Pathogens): Facilitator Dr Jacqueline Weyer		
Thursday 19 th October 2023	Topic	Presenter
08:30-09:45	Overview of viral haemorrhagic fevers	Jacqueline Weyer
09:45-10:00	Break	
10:00-10:45	VHF case studies	Jacqueline Weyer/Lucille Blumberg
10:45-11:45	Overview of rabies	Naazneen Moolla
11:45-12:30	Rabies case studies (clinical and PEP)	Jacqueline Weyer/Naazneen Moolla
12:30-13:15	Lunch	
13:15-14:15	Overview of arboviral disease	Jessica Coertse
14:15-15:15	The role of transmission electron microscopy in infectious disease diagnostics	Monica Birkhead

Centre for Emerging Zoonotic and Parasitic Disease (CEZPD) Half day (Special Bacterial Pathogens): Facilitator Dr Jenny Rossouw		
Friday 20 th October 2023	Topic	Presenter
8:30-9:30	Overview of bacterial zoonoses (Plague/Brucellosis)	Jenny Rossouw
9:30-9:45	Break	
9:45-10:45	Overview of bacterial zoonoses (Leptospirosis/Anthrax)	Kovashnee Naidoo/Jenny Rossouw
10:45-11:00	Break	
11:00-12:00	Case studies	John Frean/Charlotte Sriruttan
ONLY UP TO 12H00		