



SUSAN2021 Virtual Scientific Conference Program **5TH – 9 TH September 2021** **[All times Kenyan (EAT)]**

Date	Time	Room1	Room 2	Room3	Room4
Pre-conference courses					
Sunday 5th September 2021	10:00-12:30	PCC1:GEMVI TEAM		PCC3:Z.Shkedy	
	12h30-13h30	Lunch break			
	13:35-15:30	PCC1:GEMVI TEAM	PCC2:R.Hubbard	PCC3:Z.Shkedy	PCC4:G.Agogo
	15h30-15h45	Health break			
	15h45-17h45	PCC1:GEMVI TEAM	PCC2:R.Hubbard		PCC4:G.Agogo

Day 1 conference

Monday 6th September 2021	10:00-10:40	Opening ceremony			
	10:40-10:50	Health break			
	10:50-11:35	Opening KEYNOTE Address(KL01) (Louise Ryan)			
	11:35- 12:20	Plenary Session(KL02) (Ratemo Michieka)			
	12h30-13h30	Lunch break			
		Statistical Modelling			
	13:30-14:00	IS04: G. Molenberghs	IS08: J.Mung'atu		
	14:00-14:15	CT13:L. Muchene	CT34:M.Magesa		
	14:15-14:30	CT30: W.Yodah	CT45:A.Kasyoki		
	14:30-14:45	CT23:E.Mwebesa	CT72:Hendricks		
	14:45-15:00	CT39:S.Wephukhulu	CT35:P.Kimani		
	15:00-15:15	CT17:V.Orango	CT21:S.Ogutu		
	15:15-15:30				
	15h30-15h45	Health break			
		Mhealth/Global Health/Health Economics			
	15:45-16:15	IS42: A.Kiragga	IS11:R. Hubbard		
	16:15-16:30	CT14:A.Okutse	CT12:W.Chacha		
	16:30-16:45	CT11:Y.Balakrishna	CT26:Materu		
	16:45-17:00		CT48:G.Banturaki		
	17:00-17:15				
	17:15-17:30				

Day 2 conference

Tuesday 7th September 2021	10:00-10:40	KEYNOTE Address(KL03) (Peter Diggle)			
	10:40-10:50	Health break			
		Spatial Analysis			
	10:50-11:20	IS05:S.Manda	IS03: V. Mose		
	11:20- 11:50	IS02: T.Achia	IS06: L.Waller		
	11:50-12:05	CT20:M.Ouma	CT73:K.Muchie		
	12:05-12:20	CT29:C.Ogira	CT37:P.Kimani		
	12:20-12:35		CT46:A.Lagat		
	12h35-13h30	Lunch break			
		Covid-19 session			
	13:30-14:00	T.Reddy	IS13:T.Awoke		
	14:00-14:15	CTH1:T.Reddy	IS12:S. Mwalili		
	14:15-14:30	CTH2:B.Yimer			
	14:30-14:45	CTH3:E. Olajumoke	IS14:T.Mapako		
	14:45-15:00	CTH4:R.Sengupta			
	15:00:15:15		CT49:L.Najjemba		
	15:15-15:30				
	15h30-15h45	Health break			
		Poster session			
	15:45-16:15				
	16:15-16:20	CP4:O.Kaluse			
	16:20-16:25	CP18:T.Asena			
	16:25-16:30	CP44:M.Kuyo			
	16:30-16:35	CP40:A.Kimaina			
	16:35-16:40				
	16:40-16:45				

Day 3 conference

Wednesday 8th September 2021	10:00-10:40	IT33:H.Mwambi			
	10:40-10:50	Health break			
	10:50-11:30	Plenary session (KL06)(Andreas Ziegler)			
		Machine Learning	Precision Medicine		
	11:30- 12:00	IS07:J.Todd	IS10: P. Kimani		
	12:00-12:15	CT27:S.Sawe	CT10:L.Ouma		
	12:15-12:30	CT08:P.Mwaniki	CT38:C.Rensburg		
	12:30-12:45	CT06:G.Assegie	CT76:G.Agogo		
	12h45-13h30	Lunch break			
	13:30-14:10	Plenary session(KL04)(Joseph Hogan)			
		Survival Analysis	Infectious Disease Modeling		
	14:15-14:45	IS09:P.Janssen	IS15:K. Zuma		
	14:45-15:00	CT15:W.Safari	CT19:Oyamakin		
	15:00:15:15	CT41:R.Kiplimo	CT22:C.Okoyo		
	15:15-15:30	CT36:N. Nchunu			
	15h30-15h45	Health break			
	15:45-17:30	SUSAN2021 AGM			

Day 4 conference

Thursday September 2021	10:00-10:40	Opening KEYNOTE Address (Kandala Bakwin)			
	10:40-10:50	Health break			
	10:50-11:40	Early Career Biometrician: A.Kiragga /R.Tarylee	Panel Discussion : Data science		
	11:40- 12:20	ECB1-ECB4			
	12h30-13h30	Lunch break			
	13:30-14:10	Keynote Address: IBS president(Geert Verbeke)			
	14:15-14:45	ER-BIOSTAT(IS01) Z.Shkedy	Data Science		
	14:45-15:30				
	15h30-15h45	Health break			
	15:45-17:30	Closing Ceremony			

List of Presenters

KEY	PRESENTER	TITLE
PCC1:	University of Warwick GeMVI Modelling Team	Techniques of Modelling Infectious Diseases
PCC2:	Prof. Rebecca Hubbard	Analysis of Big Healthcare Databases
PCC3: :	Prof. Ziv Shkedy & Dr. R. Sengupta	Infectious Disease Modelling using R - Specific focus on COVID-19
PCC4:	Dr. George Agogo	Correcting for covariate measurement error in the context of dietary assesment
KL01	Prof. Louise Ryan	Protecting our precious water resources
KL02	Prof. Ratemo Michieka	Scaling up Big Data in Agrcultural and Environmental Sector
KL03	Prof. Peter Diggle	Design and Analysis of Prevalence Surveys in Low-Resource Settings
KL04	Prof. Joseph Hogan	Data Science and HIV in sub-Saharan Africa
KL05	Prof. Ngianga-Bakwin Kandala	Bayesian Geospatial methods to generate Sub-National estimates of global health issues
KL06	Prof. Andreas Ziegler	A comprehensive comparison of approaches for the calibration of probability machines
KL07	Prof. Geert Verbeke	
IS1	Prof. Ziv Shkedy	Development of a robust E-learning system in Biostatistics using the >eR-BioStat platform: Implementation in Gondar University, Ethiopia
IS2	Prof. Thomas Achia	
IS3	Dr. Victor Mose	Long-term social network analysis of large herbivore species in an African savanna landscape
IS4	Prof. Geert Molenberghs	Handling Negative Correlation and/or Over/Underdispersion in Gaussian and Non-Gaussian Hierarchical Data
IS5	Prof. Samuel Manda	Bayesian methods for small area estimation and application in health
IS6	Prof. Lance Waller	Zoonotic Surveillance of Plague via Point Processes in Geographic and Principal Components Space
IS7	Prof. Jim Todd	The INSPIRE network: Building a data science platform for multi-modal data harmonization and analysis in East Africa

IS8	Dr. Joseph Mung'atu	The realm of Extreme Value Theory and its role in the prediction of health and food security pointers
IS9	Prof. Paul Janssen	Nonparametric estimation of univariate and bivariate survival functions in the presence of right censoring: a review
IS10	Dr. Peter Kimani	Bias adjusted estimators for log hazard ratio following phase II/III clinical trials
IS11	Prof. Rebecca Hubbard	An Introduction to Extraction and Analysis of EHR-derived Phenotypes
IS12	Prof. Samuel Mwalili	Modelling effects of COVID-19 misinformation and corrective information in Kenya
IS13	Dr. Tadesse Awoke	Missed appointments and quality of life in patients with chronic medical illness during Covid-19 pandemic in Ethiopia
IS14	Tonderai Mapako	Impact of Prevention Strategies for COVID-19 in Zimbabwe: Modelling study
IS15	Prof.Kangelani Zuma	
CP4	Ombeni Kaluse	The global food security challenges: Reviewing possible factors leading to increasing food insecurity

CT6	Getnet M. Assegie	Nonparametric Method for Multivariate Tests with Big Data
CT8	Paul Mwaniki	Self-Supervised Feature Learning for Pulse Oximeter Signal Classification
CT9	Elias Mwakilama	Study of a contaminant in plant as an epidemiological SIR model
CT10	Luke Ouma	Treatment allocation strategies for umbrella trials in the presence of multiple biomarkers: A comparison of methods
CT11	Yusentha Balakrishna	Nutrient patterns in South African foods: an analysis of the South African food composition database
CT12	Winnie Chacha	Value for Money Analysis of Funds Spent on Disease Intervention
CT13	Leacky Muchene	Two-stage topic modelling of scientific publications: A case study of University of Nairobi, Kenya
CT14	Amos Okutse	Trends of Socioeconomic Disparities in the Kenyan Child Malnutrition Statistics: Analysis of the Demographic and Health Survey
CT15	Wende Clarence Safari	Nonparametric estimation in mixture cure model when the event indicator is available for some censored observations
CT16	Nicholas Siame Adam	A Simulation Study for Evaluating the Performance of Clustering Measures for Multilevel Logistic Regression
CT17	Vitalis Orango	Anthropometric measurements as predictors of hypertension in Busia, Vihiga, Trans-
CP18	Tilahun Asena	Semi-Markov Modelling of HIV/AIDS Disease Progression
CT20	Moses Ouma	Joint mapping of HIV, Physical and Sexual Violence Against Reproductive-Aged Women in the Kenya Counties
CT21	Sarah Ogutu	Confidence interval for comparing two independent folded normal with an application.
CT22	Collins Okoyo	Sensitivity analysis of the soil-transmitted helminth infections transmission interruption model
CT23	Edson Mwebesa	Determinants of Facility-Based Delivery among Women of Reproductive Age in Uganda Using 2016 DHS Data: A Hierarchical Regression Approach
CT24	Jim Todd	The INSPIRE network: Building a data science platform for multi-modal data
CT26	Jacqueline Materu	Estimating patterns and indicators of an adolescent's sexual behavior in North West Tanzania

CT27	Sharon Sawe	Machine Learning Prediction of Low Birth Weight in Kenya using Maternal Risk Factors
CPR28	Isiaka Oloyede	Big data: Technology and Innovation - Panacea to Health Care Palaver in Biometrics
CT29	Carol Ogira	Predicting Conflict Zones in Kenya using a Point Process Model
CT30	Walter Yodah	BAYESIAN STRUCTURAL EQUATION MODELLING FOR COUNT TIME SERIES COMBINED WITH UNOBSERVED VARIABLES (LATENT VARIABLES)
CT31	Henry Mwangi	The Impact of Free Maternity Services on Maternal and Perinatal Outcomes at Moi Teaching and Referral Hospital
IT33	Henry Mwambi	Estimating HIV Prevalence Using Population-Based Surveys in the Presence of Missing Data
CT34	Mtani Njegere Magesa	Factors contributing to Perinatal Mortality in Tanzania: Analysis of the Tanzania Demographic Health Survey
CT35	Peter Kimani	Trends of Armed Conflict in Kenya from 1997 to 2021: An Exploratory Data Analysis
CT36	Nobuhle Mchunu	Using joint models to study the association between CD4 count and the risk of death in TB/HIV data
CT37	Peter Kimani	Violence Against Civilians Relative Risk in Kenya in 2020: A Bayesian Approach

CT38	Charl Janse van Rensburg	Application of GUIDE and other algorithms to identify treatment effects in subgroups
CT39	Simon Wepukhulu	A logistic regression model for the innovations of high value horticultural crops production in Kenya
CP40	Allan Kimaina	Comparison of machine learning methods for predicting viral failure: a case study using electronic health record data
CT41	Richard Kiplimo	Longitudinal-Survival Models for Case-Based Tuberculosis Progression
IS42	Agnes Kiragga	Using a Digital Platform for Improving Knowledge, Attitudes and Uptake of Family planning Services among Men in Uganda
CT43	Mohanad Mohammed	Predictors of Colorectal Cancer Survival using Cox Regression and Random Survival Forests Models Based on Gene Expression Data
CP44	Moses Kuyo	MACHINE LEARNING APPROACHES FOR CLASSIFYING DISTRIBUTION OF COVID-19 SENTIMENTS
CT45	Alexander Kasyoki	Effects of Exposure Measurement Error on the Sensitivity, Specificity and AUC: A Simulation Study
CT46	Abraham Kipkosgei Lagat	Analysis of Land Cover Changes in Cherangani Hills Forest, Kenya
CT48	Grace Banturaki	Assessing awareness of Anti-Microbial Resistance (AMR) amongst clients exiting Private health facilities.
CT49	Letisha Najjemba	Geographical Distribution of the burden of COVID-19 pandemic in Uganda
CT50	Justine Nasejje	Use of a deep learning and random forest approach to track changes in the predictive nature of socioeconomic drivers of under-five mortality rates in sub-Saharan Africa
CT72	Hendricks H.J	Modification of the Ornstein Uhlenbeck process to incorporate the influence on volatility in financial market.
CT73	Kindie Fentahun Muchie	Hierarchical Bayesian Spatial Fusion Small Area Model for Binary Data Under Spatial Misalignment
CT74		
CT75		
CT76	George Agogo	Modeling of Correlated Cognitive Impairment and Functional Disability Outcomes with Bounded and Missing Data in a Longitudinal Aging Study

CT77	Benedict Orindi	A combined multilevel factor analysis and covariance regression model with mixed effects in the mean and variance structure	
CT78	Benedict Orindi	Invariance of the WHO Violence Against Women Instrument among Kenyan Adolescent Girls and Young Women: Bayesian Psychometric Modeling	
CTH01	Tarylee Reddy	Short-term real-time prediction of total number of reported COVID-19 cases and deaths in South Africa: a data driven approach	
CTH02	Belay Birlie Yimer	Short-term forecasting of total number of reported COVID-19 cases in South Africa - A Bayesian temporal modelling approach	
CTH03	Olajumoke Evangelina	Modelling the positive testing rate of COVID-19 in South Africa Using A Semi-Parametric Smoother for Binomial Data	
CTH04	Rudradev Sengupta	Development of a web-based platform for modelling COVID-19 in India	
ECB01	A.kiragga		
ECB02	R.Tarylee		
ECB03			
ECB04			