



SOCIETY FOR ADVANCED CELL CULTURE MODELLING FOR AFRICA CONFERENCE 2022

9 - 12 October 2022 | North-West University | Potchefstroom | South Africa

| Program |

Sunday 9 October 2022

SACCMA Conference | Day ONE

11:30 – 13:00	Delegate registration and coffee/tea and refreshments
13:00 – 13:20	Official opening and Welcome: Prof Chrisna Gouws , SACCMA Organising Committee chair
13:20 – 14:05	Keynote speaker: Prof Stefan Przyborski , Durham University, UK Innovative advanced cell technologies to bioengineer Human tissues <i>in vitro</i> for use in R&D and modelling Human disease
14:05 – 14:25	Dr Alex Laux - Development of a three-dimensional melanoma spheroid model for anticancer screening of selected aloe materials
14:25 – 15:00	Poster presentation flash talks – 3 min each <ul style="list-style-type: none">• Cara de Moura - Cytotoxicity of EGTA, verapamil, CHC and doxorubicin in BT-20 triple-negative breast carcinoma spheroids• Maryke de Villiers - Flow cytometry as an analytical method of drug-induced apoptosis in 3D bioprinted melanoma cells• Connor Esterhuizen & Adele Nel - Comparative study of growth characteristics of A549 alveolar carcinoma spheroids grown in different culture conditions• Jean-Pierre Laux - Development and evaluation of a three-dimensional spheroid-based nasal epithelial cancer model
15:00 – 15:20	Tea/coffee
15:20 – 15:40	Dr Paul Bartels – Wildlife cell propagation – an alternative meat source
15:40 – 16:00	Poster presentation flash talks – 3 min each <ul style="list-style-type: none">• Prof Vidushi Neergheen - Cytotoxic effects of the indigenous crop, <i>Moringa oleifera</i>, on 2D and 3D oesophageal cancer models• Leslie Pedzisayi - Cell-to-cell communication between cancer cells can modify recipient behaviour• Dr Wihan Pheiffer - Optimization of spheroid implantation for xenograft model improvement• Dr Mduduzi Sithole - A 3D printed biomaterial scaffold reinforced with inorganic fillers for bone tissue engineering: <i>in vitro</i> assessment studies
16:00 – 16:15	Closing for the day
17:30 – 20:30	Cocktail function and society launch – Lekwena Wildlife Estate



Monday 10 October 2022

SACCMA Conference | Day TWO

08:30 – 09:00	Tea/coffee
09:00 – 09:45	Keynote speaker: Prof Bojana Žegura , Head of Department of Genetic Toxicology and Cancer Biology, National Institute of Biology, Slovenia Spheroids: a 3D cell-based system for assessing the genotoxic activity of chemicals
09:45 – 10:05	Dr Helle Frandsen - Human based 3-dimensional non-alcoholic fatty liver model
10:05 – 10:25	Dr Yonela Ntamo - An <i>in vitro</i> comparison of C3A liver models for toxicity screening
10:25 – 11:00	Tea/coffee AND Poster Session 1 (even numbers)
11:00 – 11:30	Plenary speaker: Prof Sias Hamman , North-West University, South Africa RPM1 2650 nasal epithelial cell model: effect of growth techniques on cell properties
11:30 – 11:50	Prof Lissinda du Plessis - Print parameter optimisation for three-dimensional bioprinting of hydrogel scaffolds
11:50 – 12:10	Bongiwe Sibiyi - Analysis of the role of Hop/STIP1 in anchorage-independent growth of cancer cells
12:10 – 12:25	Industry presentations Separations
12:25 – 13:30	Lunch
13:30 – 14:00	Plenary speaker: Prof Krzysztof Wrzesinski , Celvivo ApS, Denmark ClinoStar, a purpose-built system for culturing cells as <i>in vivo</i> mimetic 3D structures
14:00 – 14:20	Tanya Smit - Anticancer efficacy of selected South African phytomedicines in a three-dimensional colorectal cancer model
14:20 – 14:40	Dr Iman van den Bout - Using breast cancer organoids to inform treatment options
14:40 – 15:00	Dr Tracey Hurrell - Establishing advanced hepatic models for precision medicine in Africa
15:00 – 15:20	Tea/coffee
15:20 – 15:50	Plenary speaker: Prof Thashree Marimuthu , Advanced Drug Delivery Platform Research Unit, University of the Witwatersrand, South Africa Properties and performance of 3D printed drug delivery systems and nanomedicine
15:50 – 16:00	Closing for the day
16:00 – 17:30	Inaugural Annual General Meeting of SACCMA
18:00 – 20:00	Informal dinner – The Roots



Tuesday 11 October 2022

SACCMA Conference | Day THREE

08:30 – 09:00	Tea/coffee
09:00 – 09:45	Keynote speaker: Dr Magdalena Kasendra , Cincinnati Children's Hospital Medical Center, USA Engineering next generation organoids with automated workflows
09:45 – 10:05	Atoosa Amel - Building a stem cell-based <i>in vitro</i> model of early mammalian development
10:05 – 10:25	Rhys McColl - The modification of kirrel expression in C2C12 myoblasts and their effects on differentiation and fusion
10:25 – 11:00	Tea/coffee AND Poster Session 2 (uneven numbers)
11:00 – 11:30	Plenary speaker: Prof Carola Niesler , University of KwaZulu- Natal, South Africa <i>In vitro</i> models to understand cellular communication during regeneration and disease: simple or complex?
11:30 – 11:50	Dr Jerolen Naidoo - YAP chromatin occupancy & enhancer dynamics in human iPSCs inform cell fate transitions during hepatic lineage specification
11:50 – 12:10	Simoné Rossouw - <i>In vitro</i> modelling of embryonic development using advanced 3D stem cell culture
12:10 – 12:30	Andrea Ellero - Proteomic characterization of inducible proteins in three-dimensional cultures
12:30 – 13:30	Lunch
13:30 – 14:15	Keynote speaker: Prof Adelina Rogowska-Wrzesinska , Professor in Functional Proteomics, University of Southern Denmark, Denmark Why is 3D better? An omics analysis of mini liver spheroids
14:15 – 14:35	Keith Ncube - Characterization of BT-20 triple-negative breast cancer spheroids cultivated under dynamic and static conditions
14:35 – 14:55	Alandi van Niekerk - A novel NCI-H69AR drug resistant small cell lung cancer mini-tumour model for anti-cancer treatment screening
14:55 – 15:15	Tea/coffee
15:15 – 15:45	Plenary speaker: Dr Janine Scholefield , CSIR/University of Cape Town, South Africa What to do with an advanced cellular model for commercial purposes in Africa
15:45 – 16:05	Charity Mabela - Establishing an A549 mini tumour model intended for xenograft implantation
16:05 – 16:20	Industry presentations Inqaba Biotec
16:20 – 16:45	Official closing
18:00 – 20:00	Conference dinner - Dampad, NWU



Wednesday 12 October 2022

Conference workshop | Day ONE

08:30 – 09:00	Delegate registration and coffee / tea and refreshments
09:00 – 09:10	Welcome: Soné Hendriks , Head of Microscopy - South Africa, Carl Zeiss Pty Ltd
09:10 – 09:40	Plenary speaker: Prof Ben Loos , Stellenbosch University, South Africa Visualising cellular fate using correlative light and electron microscopy and sub-diffraction imaging
09:40 – 10:40	ZEISS 3D Imaging workshop: Dr Soren Prag , Carl Zeiss Microscopy GmbH ZEISS Celldiscoverer 7, the smart confocal microscope for automated workflows
10:40 – 11:00	Tea/coffee
11:00 – 12:30	ZEISS 3D Imaging workshop: continue
12:30 – 13:30	Lunch
13:30 – 15:00	ZEISS 3D Imaging workshop: Hands-on training
15:00	Tea/coffee and Departure

