

In association with the 42nd Annual conference of the
Anatomical Society of Southern Africa (ASSA)

Cell & Developmental Biology Symposium

Sunday 13 April 2014, 8h30 – 16h40

Lecture Theatre 2002, Dept Physiological Sciences, Mike de Vries Building,
Merriman Avenue Stellenbosch

The symposium is

**open to ALL academics, researchers, postdocs and
students**

Talks given by leading researchers in Cell and Developmental Biology, and the symposium
offers a great opportunity to network with others from this research community.

Registration: FREE

(Lunch and teas will be provided at no cost)

Symposium Topics

**Cancer Biology, Development and Differentiation, Stem cells and
Regenerative Medicine, Cell mechanics and Mechanobiology, Cell Stress/ Cell
Death, Receptors / Drug Targeting, Tools for Modern day Cell Biology**

Keynote speakers:

*Assoc Prof Sharon Prince (Univ Cape Town), Dr Mandy Mason (UCT), Prof Kathy Myburgh (US), Dr Neil Davies (UCT), Dr
Ben Loos (US), Prof Jane Hapgood (UCT)*

Short talks: *Prof Anna-Mart Engelbrecht (US), Dr Sahar Abdul-Rasool (UWC) Dr Jade Peres (UCT), Assoc Prof Dirk Lang
(UCT), Dr Laura Dubuis (UCT), Dr Kyle Goetsch (UCT), Dr Robea Ballo (UCT), Ms Danielle Smith (UCT), Prof Maryna de Kock
(UWC), Prof Janine Marnewick (CPUT), Dr Christo Muller (MRC), Mr Edward Archer (US), Dr Peter Durcan (US), Mr Shaun
Garnett (UCT).*

RSVP before Monday 7th APRIL
for catering purposes.

Mail your name and contact details to

robea.ballo@uct.ac.za or elizabeth.vandermerwe@uct.ac.za

The Symposium is kindly sponsored by: **B&M Scientific; Inqaba Biotec;
Life Technologies; Separations; Sigma, Whitehead Scientific**

PROGRAM

CELL & DEVELOPMENTAL BIOLOGY SYMPOSIUM

Organizers: Drs Liz van der Merwe, Lester Davids, Robea Ballo and Prof Sue Kidson

08:30 – 09:00	REGISTRATION AND WELCOME
09:00 – 11:00	SESSION 1: Chair - Assoc Prof Sharon Prince
	CANCER BIOLOGY
9:00 - 9:25	Keynote: Assoc Prof Sharon Prince (Dept Human Biology, Faculty of Health Sciences, University of Cape Town) <i>“Upregulation of the developmentally important TBX3 by the AKT pathway is sufficient to drive melanomagenesis”</i>
9:25 - 9:40	Prof Anna-Mart Engelbrecht (Dept Physiological Sciences, University of Stellenbosch) <i>“The role of autophagy in energy metabolism in a breast cancer model”</i>
9:40 – 9:55	Dr Sahar Abdul-Rasool (Dept of Medical Biosciences, University of the Western Cape) <i>“Keeping abreast of Breast Cancer”</i>
9:55 – 10:10	Dr Jade Peres (Dept Human Biology, Faculty of Health Sciences, University of Cape Town) <i>“The T-box transcription factor, TBX3, promotes melanoma progression by activation of ID1”</i>
	DEVELOPMENT AND DIFFERENTIATION
10:10 – 10:35	Keynote: Dr Mandy Mason (Dept Molecular and Cellular Biology, University of Cape Town) <i>“Hox in the hand: a story of bat wing development”</i>
10:35 – 10:50	Mr Shaun Garnett (Dept Medical Biochemistry, Faculty of Health Sciences, University of Cape Town) <i>“Generating a Proteomic Profile of Neurogenesis, through quantitative analysis of human fetal neural stem cells”</i>
10:55– 11:10	TEA
11:10 – 13:00	SESSION 2: Chair - Drs Liz van der Merwe / Neil Davies
	CELL MECHANICS AND MECHANOBIOLOGY
11:10 – 11:35	Keynote: Dr Neil Davies (Cardiovascular Research Unit, University of Cape Town) <i>“Engineered Hydrogel based therapies for Myocardial Infarction”</i>
11:35 - 11:50	Dr Laura Dubuis (Cardiovascular Research Unit, University of Cape Town) <i>“Feasibility of a hybrid tensegrity-continuum modelling approach for single cell computational mechanics”</i>
	STEM CELLS / REGENERATIVE MEDICINE
11:50 – 11:15	Keynote: Prof Kathy Myburg (Dept Physiological Sciences, University of Stellenbosch) <i>“Adult progenitor cells: Does fusion competence imply fusion?”</i>
12:15 – 12:30	Dr Kyle Goetsch (Cardiovascular Research Unit, University of Cape Town) <i>“The effect of the extracellular matrix during wound repair”</i>
12:30 – 12:45	Dr Robea Ballo (Dept Human Biology, University of Cape Town) <i>“Derivation and Characterisation of induced Pluripotent Stem Cells”</i>

12:45 – 13:00	Ms Danielle Smith (Division of Human Genetics, Institute for Infectious Disease & Molecular Medicine, Faculty of Health Sciences University of Cape Town) <i>“iPSCs as a tool for modelling retinal development and disease”</i>
13:00 – 13:45	LUNCH
13:45 – 15:30	SESSION 3: Chair - Dr Lester Davids
	CELLS IN STRESS / CELL DEATH
13:45 - 14:10	Keynote: Dr Ben Loos (Dept Physiological Sciences, University of Stellenbosch) <i>“The role of autophagy in the pathogenesis of Alzheimer’s disease”</i>
14:10 – 14:25	Prof Maryna de Kock (Dept of Medical Biosciences, University of the Western Cape) <i>“Cell Kinetic Parameters in Relation to Radiosensitivity”</i>
14:25 – 14:40	Prof Jeanine Marnewick (Oxidative Stress Research Centre, Dept of Biomedical Sciences, Faculty of Health and Wellness Sciences, Cape Peninsula University of Technology) <i>“Rooibos: protection against the African sun”</i>
	RECEPTORS / DRUG TARGETING
14:35 – 15:00	Keynote: Prof Janet Haggood (Dept Molecular and Cellular Biology, University of Cape Town) “ <i>Cross Talk: The glucocorticoid receptor, inflammation, contraceptives and disease”</i>
15:00 – 15:15	Dr Christo Muller (Diabetes Discovery Platform, Medical Research Council) <i>“Flavonoids as nutraceutical therapy in metabolic syndrome”</i>
15:15 – 15:30	Mr Edward Archer (Ecophysiology Laboratory, Dept Botany and Zoology, Faculty of Natural Sciences, Stellenbosch University) <i>“Using male-specific breeding glands in the African clawed frog (Xenopus laevis) as biomarkers of (anti)androgenic endocrine disruption studies”</i>
15:30 – 15:40	TEA
15:40 – 16:45	SESSION 4: Chair - Prof Sue Kidson / Assoc Prof Dirk Lang
	TOOLS FOR MODERN-DAY CELL BIOLOGY
15:40 – 15:55	Dr Peter Durcan (Dept Physiological Sciences, University of Stellenbosch), <i>“Expressed sequence tags – will they change your understanding of your favourite gene”</i>
15:55 – 16:05	Assoc Prof Dirk Lang (Dept Human Biology, Faculty of Health Sciences, University of Cape Town) <i>“ Modern day microscopy for modern day Cell Biologists”</i>
16:05 – 16:15	Dr Ben Loos (Dept Physiological Sciences, University of Stellenbosch) <i>“ Super-resolution confocal microscopy”</i>
16:15 – 16:25	Talks from our Sponsors.
16:25 – 16:40	Wrap-up: Prof Sue Kidson
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