Goodbye Flat Biology: ex vivo to in vivo models of cancer Programme

Essen, Germany

23 - 25 September 2025



Scientific Programme

Tuesday 23rd September 2025

Listed times are in Central European Summer Time (CEST)

11:30 REGISTRATION & WELCOME LUNCH (LUNCH FROM 12:00)

Light refreshments will be served.

13:00 CONFERENCE WELCOME

SESSION 1: CELL-BASED THERAPIES

Chair: Valerie Weaver

13:10 OPENING KEYNOTE LECTURE

Michael Milone

Perelman School of Medicine, University of Pennsylvania, Philadelphia, USA 'Navigating Beyond the Cancer Therapy Horizon with Engineered T cells'

Q&A 13:35 - 13:50

13:50 Emmanuel Donnadieu

Institut Cochin, Paris, France

'Predicting the Safety and Efficacy of Engineered T Cells Using an Ex Vivo Human Model'

Q&A 14:10 - 14:20

14:20 **Joash Joy**

Barts Cancer Institute, Queen Mary University of London, UK

Proffered Paper 1: 'Human 3D ovarian cancer models reveal malignant cell intrinsic and extrinsic factors that influence CAR T cell activity'

Q&A 14:30 - 14:35

14:35 EXHIBITOR INTRODUCTIONS

14:55 COFFEE BREAK, EXHIBITION & SOLO TRAVELLER MEET-UP

15:25 Peter Friedl

Radboud UMC, Nijmegen, Netherlands

'Life or death: monitoring the first days of metastatic organ colonization'

Q&A 15:45 - 15:55

15:55 Matt Paszek

Smith School of Chemical and Biomolecular Engineering, Cornell University, New York, USA

'The sweet forces in control of 3D cellular morphology and function'

Q&A 16:15 - 16:25

16:25 POSTER SPOTLIGHTS

16:35 INDUSTRY SYMPOSIUM - INVIVO BIOTECH SERVICES

Tim Welsink

InVivo BioTech Services

'Discover novel opportunities in antibody discovery, cell line development and functional single-cell analysis with Beacon® optofluidic technology'

Q&A: 16:55-17:05

17:05 NETWORKING QUIZ

17:35 WELCOME RECEPTION

18:25 POSTER DISCUSSION SESSION 1

Led by members of the Scientific Programme Committee

Wednesday 24th September 2025

Listed times are in Central European Summer Time (CEST)

08:15 EARLY POSTER VIEWING WITH COFFEE

08:45 INDUSTRY SPOTLIGHT - TECAN

Roman Petrovsky

Tecan

'Label-free spheroids and organoids analysis for assays development'

SESSION 2: MECHANOBIOLOGY

Chair: Emmanuel Donnadieu

09:00 THE EMBO KEYNOTE LECTURE

Johanna Ivaska

University of Turku, Turku, Finland

'3D matrix guided cues in cancer progression'

Q&A 09:20 - 09:30

09:30 Maria Benito Jardon

The Francis Crick Institute, UK

Proffered Paper 2: 'Melanoma cells orchestrate the composition of the tumour stroma via MRT-SRF signaling'

Q&A 09:40 - 09:45

09:45 Sara Wickstrom

Max Planck Institute for Molecular Biomedicine, Munster, Germany

'Phenotype and cell state dynamics in cancer'

Q&A 10:05 - 10:15

10:15 Thomas H. Barker

University of Virginia, Charlottesville, USA

'Mechanochemical dynamics of the provisional matrix critically instruct cell behaviors'

Q&A 10:35 - 10:45

10:45 COFFEE BREAK & EXHIBITION

11:15 Samantha Stehbens

Australian Institute for Bioengineering and Nanotechnology, University of Queensland, Brisbane, Australia

'The Mechanobiology of Melanoma: Understanding How Tumour Cells Survive Metastasis'

Q&A 11:35 - 11:45

11:45 Michelle Baird

National Institutes of Health - NHLBI, USA

Proffered Paper 3: 'Lamin B Receptor Upregulation in Melanoma Causes Cholesterol-Mediated Nuclear Envelope Fragility During Metastasis'

Q&A 11:55 - 12:00

12:00 POSTER SPOTLIGHTS

12:10 INDUSTRY SYMPOSIUM - PROMOCELL

Janina Moros

PromoCell

'Goodbye Clumps, Hello Tumorspheres!'

Q&A: 12:30-12:40

12:40 LUNCH

Light refreshments will be served.

13:40 POSTER DISCUSSION SESSION 2

Led by members of the Scientific Programme Committee

SESSION 3: PLASTICITY

Chair: Henriette Lanz

15:10 G V Shivashankar

ETH Zurich, Zurich, Switzerland

'Mechano-genomics of tumor microenvironment and early diagnostics'

Q&A 15:30 - 15:40

15:40 Anna Mukha

Radboud University Medical Center, Netherlands

Proffered Paper 4: 'Mechanical challenges define the efficiency of the early organ colonization by tumor cells'

Q&A 15:50 - 15:55

15:55 Bethany Bareham

King's College London, UK

Proffered Paper 5: 'Extracellular biomechanics and Immune Modulation in Oral Squamous Cell Carcinoma Cells'

16:05 - 16:10

16:10 **Kevin Myant**

University of Edinburgh, Edinburgh, UK

'Loss of colonic lineage fidelity permits induction of squamous-like plasticity and metastasis in colorectal cancer'

Q&A 16:30 - 16:40

16:40 COFFEE BREAK & EXHIBITION

17:10 Viola Vogel

ETH Zurich, Zurich, Switzerland

'Mechanoregulation of the reciprocal ECM-cell crosstalk: does the tension of individual ECM fibers matter?'

Q&A 17:30 - 17:40

17:40 Chris Tape

UCL Cancer Institute, London, UK

'Single-cell Phenoscaping of Tumour Microenvironment Organoids'

Q&A 18:00 - 18:10

19:30 CONFERENCE DINNER (OPTIONAL TICKETED EVENT)

Thursday 25th September 2025

Listed times are in Central European Summer Time (CEST)

08:15 EARLY POSTER VIEWING WITH COFFEE

08:45 INDUSTRY SPOTLIGHT - GREINER BIO-ONE

Jennifer Bischoff

Greiner Bio-One

'Magnetic 3D Cell Culture - A innovative tool to simplify 3D Cell Culture'

SESSION 4: MODELLING THE TUMOUR MICROENVIRONMENT

Chair: Viola Vogel

09:00 Henriette Lanz

MIMETAS, Oegstgeest, Netherlands

'Influencing drug responses through in vitro tumour microenvironment characteristics: Development of organotypic patient-derived ovarian cancer models for therapy testing'

Q&A 09:20 - 09:30

09:30 Val Weaver

UCSF, San Francisco, USA

'Leveraging 3D spheroids to clarify links between ECM stiffness and inflammation-dependent DNA damage and protumor mutations'

Q&A 09:50 - 10:00

10:00 Oihane Mitxelena-Iribarren

Biogipuzkoa HRI, Spain

Proffered Paper 6: '3D bone organotypic models of dormant breast cancer metastasis to study cell-extracellular matrix interactions as a strategy for new therapies'

Q&A 10:10 - 10:15

10:15 COFFEE BREAK & EXHIBITION

10:45 **David Bryant**

CRUK Beatson Institute, Glasgow, UK

'Examining the contribution of PTEN to colorectal cancer using in vitro-to-in vivo transplantation and CRISPR-mediated knockout.'

Q&A 11:05 - 11:15

11:15 CLOSING KEYNOTE LECTURE

Frances Balkwill

CRUK, City of London Centre, UK

'3D multicellular models of ovarian cancer'

Q&A 11:40 - 11:55

11:55 SUMMARY & AWARDS