

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 - PROMOCCELL
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

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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