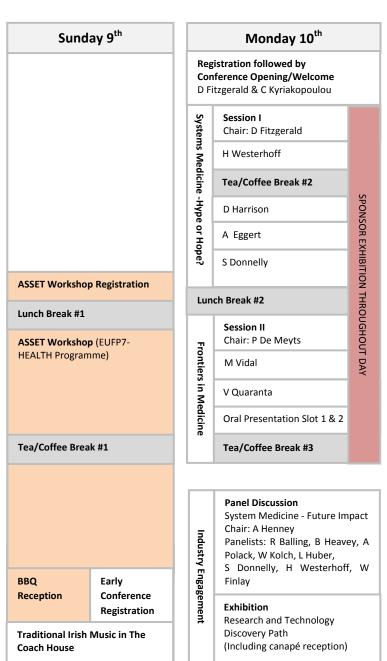
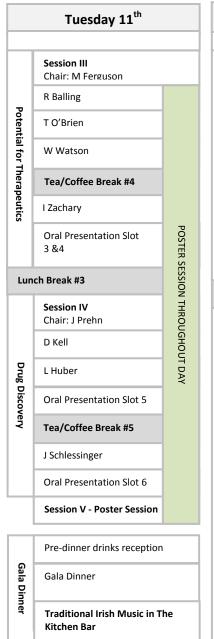
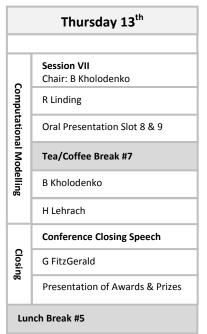
International Conference in Systems Medicine Programme











International Conference in Systems Medicine Programme

Speakers, Session Chairs & Panelists

Footnote:

- Desmond Fitzgerald, VP for Research, University College Dublin, Ireland (C)
- Christina Kyriakopoulou, Health Directorate, DG Research & Innovation, European Commission, Belgium (C)
- Hans Westerhoff, AstraZeneca Professor of Systems Biology and Director of Manchester Centre for Integrative Systems Biology (MCISB), University of Manchester, UK and Chair for Microbial Physiology, VU University Amsterdam, Netherlands and Steering Committee, IT Future of Medicine (S, P)
- David Harrison, Professor of Pathology, University of Edinburgh, UK (S)
- Angelika Eggert, Director, Department of Pediatric Hematology/Oncology, Pulmonology and Cardiology, University Hospital of Essen, Germany (S)
- Pierre De Meyts, Director, De Meyts R&D Consulting SPRLU, Belgium (C)
- Seamas Donnelly, Consultant and Principal Investigator, Education and Research Centre, St. Vincent's Hospital, and School of Medicine, University College Dublin, Ireland (S, P)
- Marc Vidal, Professor, Centre for Cancer Systems Biology, Dana-Farber Cancer Institute/Harvard Medical School, Boston, USA (S)
- Vito Quaranta, Professor of Cancer Biology and Director of Integrative Cancer Biology Center, Vanderbilt University Medical School, Nashville, USA (S)
- Adriano Henney, Director of Obsidian Biomedical Consulting Ltd and Director of the German Virtual Liver Network, University of Heidelberg, Germany (C)
- Barry Heavey, Science and Technology Advisor, Life Sciences, IDA Ireland (P)
- Axel Polack, General Partner, TVM Capital Life Science (P)
- William Finlay, Director, Protein Discovery and Optimisation Group, Global Biologic Therapeutics, Pfizer (P)
- Mark Ferguson, Director General, Science Foundation Ireland (C)
- Rudi Balling, Luxembourg Centre for Systems Biomedicine (LCSB), University of Luxembourg (S, P)
- Tim O'Brien, Director of the Regenerative Medicine Institute, National University of Ireland Galway, Ireland (S)
- William Watson, Associate Professor of Cancer Biology, School of Medicine and Medical Science, University College Dublin, Ireland (S)
- Ian Zachary, Director of the UCL Centre for Cardiovascular Biology and Medicine, Consultant to Ark Therapeutics Ltd (S)
- Douglas Kell, Chief Executive, Biotechnology and Biological Sciences Research Council, UK (S)
- Lukas Huber, Director of the Cell Biology Division, University of Innsbruck and Chief Scientific Officer, Oncotyrol, Austria (S, P)
- Joseph Schlessinger, Professor and Chair of Pharmacology, Yale School of Medicine, Connecticut, USA (S)
- Walter Kolch, Director, SBI and Conway Institute, University College Dublin, Ireland (S, P, C)
- Jochen Prehn, Professor and Chair of Department of Physiology and Medical Physics and Head of the Centre for Systems Medicine, Royal College of Surgeons in Ireland (S, C)
- James Schwaber, Research Associate Professor, Department of Pathology, Anatomy & Cell Biology, Thomas Jefferson University, USA (S-ST)
- Olaf Wolkenhauer, Chair in Systems Biology and Bioinformatics, University of Rostock, Germany (S)
- Yansheng Liu, Institute of Molecular Systems Biology, ETH Zürich, Switzerland (S)
- Rune Linding, Research Group Leader, Department of Systems Biology, Technical University of Denmark (S)
- Boris Kholodenko, Deputy Director, Systems Biology Ireland, University College Dublin, Ireland (S, C)

S: Speaker C: Chair P: Panelist S-ST: Speaker-short talk

- Hans Lehrach, Director, Max Planck Institute for Molecular Genetics, Berlin, Germany (S)
- Garret FitzGerald, Professor of Medicine & Pharmacology at the University of Pennsylvania and Director of the Institute for Translational Medicine & Therapeutics, Philadelphia, USA (S)





Sunday 9th September Pre-conference Workshop - EUFP7 ASSET** Programme Carton Suite III, Conference Centre

11:30 - 13:15 12:30 - 13:15	Registration (including light lunch) Lunch in "The Linden Tree Restaurant"
13:15 - 13:30	Workshop Opening and Welcome Walter Kolch, Systems Biology Ireland and Conway Institute, University College Dublin, Ireland
13.30 - 15.30	Title: Cell Cycle Perturbations in Embryonal Tumours (Part I)
13:30 - 14:00	Neuroblastoma and Cell Cycle Overview (TBC) Frank Westermann, Department of Tumor Genetics, Cancer Research Center- DKFZ, Heidelberg, Germany
14:00 - 14:15	N-myc Dependent Tumour Models
	Johannes H. Schulte, Pediatric Oncology Research Lab, University Hospital of Essen, Germany
14:15 - 14:45	Copy number alterations in neuroblastoma preferentially target MYCN down-stream genes: implications for modeling and study of MYCN regulated signaling pathways Frank Speleman, Center Medical Genetics, Ghent University, Belgium
14:45 - 15:00	Application of Omics Technologies to Elucidate the MYCN Transcriptional Network in
	Neuroblastoma
15:00 - 15:30	David Duffy, Systems Biology Ireland, University College Dublin, Ireland Medulloblastoma Overview
13.00 - 13.30	Alexandre Arcaro, Paediatric Oncology, Department of Clinical Research, University of Bern, Germany
15:30 - 16:00	Coffee break
16.00 - 18.00	Title: Cell Cycle Perturbations in Embryonal Tumours (Part II)
16:00 - 16:30	Ewing Sarcoma Overview
16:30 - 16:45	Heinrich Kovar, Children's Cancer Research Institute, Vienna, Austria Gene Networks in EWS
	Loredana Martignetti, Institut Curie, Paris, France
16:45 - 17:00	Data Integration
17:00 - 17:15	Ramneek Gupta, University of Copenhagen, Denmark Modelling approaches
	Florian Lamprecht, Cancer Research Center - DKFZ, Heidelberg, Germany
17:15 - 18:00	Annual Report Preparatory Meeting (ASSET Partners only)
19.00	BBQ reception in the Coach House
21.00	Traditional Irish Music in the Coach House

^{**} Asset: Analysing and Striking the Sensitivities of Embryonal Tumours (http://www.ucd.ie/sbi/asset)



Monday 10th September SYSMED 2012 Conference (inclusive of Sponsor Exhibition in Carton Suite I) Carton Suite, Conference Centre

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8.30 - 9.30	Registration
9.30 - 10.00	Conference Opening and Welcome Desmond Fitzgerald, University College Dublin, Ireland Christina Kyriakopoulou, Health Directorate, DG Research & Innovation, European Commission, Belgium
10.00 - 13.10 10.00 - 10.40	Session I: Systems Medicine - Hype or Hope? Chair: Desmond Fitzgerald, University College Dublin Systems Medicine: How to Capitalise on Molecular Medicine Hans Westerhoff, Manchester Centre for Integrative Systems Biology (MCISB), University of Manchester, UK/VU University Amsterdam, Netherlands/IT Future of Medicine
10.40 - 11.10	Coffee break
11.10 - 11.50	Systems Pathology: How much more can tissue tell us?
11.50 - 12.30	David Harrison, St Andrew's University, UK The way to Systems Medicine Approaches in neuroblastoma Angelika Eggert, Department of Pediatric Hematology/Oncology, Pulmonology a Cardiology, University Hospital of Essen, Germany
12.30 - 13.10	Systems Biology and Translational Medicine- Maximising the Synergy Seamas Donnelly, Education and Research Centre, St. Vincent's University Hospital and School of Medicine, University College Dublin, Ireland
13:10 - 14:00	Lunch in The Linden Tree Restaurant
14.00 - 16.00	Session II: Frontiers in Medicine Chair: Pierre De Meyts, De Meyts R&D Consulting SPRLU, Belgium
14:00 - 14:40	Interactome Networks and Human Disease Marc Vidal, Centre for Cancer Systems Biology, Department of Genetics, Dana-Farber Cancer Institute/Harvard Medical School, Boston, USA
14.40 - 15.20	Cancer Response to Targeted Agents: Dynamics and Variability from Single Cell Data Vito Quaranta, Integrative Cancer Biology Center, Vanderbilt University Medical School, Nashville, USA
15.20 - 15.40	A Brief View of Systems Medicine and Genetics Jie (Bangzhe) Zeng, Institute of Systems Biological Engineering, China
15.40 - 16.00	Pathway-GPS and SIGORA: Identifying relevant pathways based on the over-representation of their gene-pair signatures David Lynn, Teagasc, Ireland
16.00 - 16.30	Coffee break
16.30 - 20.00 16:30 - 16:50	Panel Discussion, Exhibition and Networking Session Introduction to panel discussion Adriano Henney, German Virtual Liver Network, University of Heidelberg, Germany (Chair)



16.50 - 18.00 Panel Discussion - "Systems Biology and the Future of Medicine?"

William Finlay, Global Biologic Therapeutics, Pfizer

Rudi Balling, Luxembourg Centre for Systems Biomedicine, University of Luxembourg Barry Heavey, Life Sciences, IDA Ireland

Axel Polack, TVM Capital Life Science

Walter Kolch, Director, Systems Biology Ireland and Conway Institute, University College Dublin, Ireland

Lukas Huber, Cell Biology Division, University of Innsbruck and Oncotyrol, Austria Seamas Donnelly, Education and Research Centre, St. Vincent's University Hospital and School of Medicine, University College Dublin, Ireland

Hans Westerhoff, Manchester Centre for Integrative Systems Biology (MCISB), University of Manchester, UK/VU University Amsterdam, Netherlands/IT Future of Medicine

18.00 - 20.00 Research and Technology Discovery Path in The Morrison Room - Exhibition and Networking event including wine and canapé reception

Exhibitors: Systems Biology Ireland (UCD & NUIG), Centre for Systems Medicine (RCSI), REMEDI (stem cell research, NUIG), Digital Enterprise Research Institute (NUIG), Complex and Adaptive Systems Laboratory (UCD), Conway Institute (UCD), Marine Biodiscovery Research Programme (NUIG), Shannon Applied Biotechnology Centre (LIT and ITT) and Alimentary Glycoscience Research Cluster (NUIG)

Tuesday 11th September SYSMED 2012 Conference (inclusive of Poster Session in Carton Suite I) Carton Suite, Conference Centre

9.00 - 12.50 **Session III: Potential for Therapeutics** Chair: Mark Ferguson, Science Foundation Ireland 9.00 - 9.40 Systems Approaches to Parkinson's Disease Rudi Balling, Luxembourg Centre for Systems Biomedicine (LCSB), University of Luxembourg 9.40 - 10.20 Systems Medicine Approaches to improve the Therapeutic Potential of Mesenchymal Stromal Cells in Critical Limb Ischemia Timothy O'Brien, Regenerative Medicine Institute, National University of Ireland Galway, Ireland 10.20 - 11.00 Biomarker Discovery and Validation for Prostate Cancer patient stratification into Appropriate treatment options: Addressing the Clinical Dilemma William Watson, School of Medicine and Medical Science, University College Dublin, Ireland 11.00 - 11.30 Coffee break Neuropilin as a therapeutic target in Cancer 11.30 - 12.10 Ian Zachary, UCL Centre for Cardiovascular Biology and Medicine and Consultant to Ark Therapeutics Ltd, UK 12.10 - 12.30 Unravelling the path to Mesenchymal Stem Cell migration: A co-ordinated effort of beta gamma subunit, PI3K, Rac and Rho signalling Caroline Ryan, Regenerative Medicine Institute, National University of Ireland Galway,

Ireland



12.30 - 12.50 differentiation	Differential localization of A-Raf kinase regulates MST2-mediated apoptosis and
	Jens Rauch, Systems Biology Ireland, University College Dublin, Ireland
12.50 - 13.50	Lunch in The Linden Tree Restaurant
13:50 - 17.00	Session IV: Drug Discovery Chair: Jochen Prehn, Department of Physiology and Medical Physics and Centre for Systems Medicine, Royal College of Surgeons in Ireland
13.50 - 14.30	The Cellular uptake of Pharmaceutical Drugs: A problem not of Biophysics but of Systems Biology Douglas Kell, Biotechnology and Biological Sciences Research Council, UK and School of Chemistry and the Manchester Institute of Biotechnology, The University of Manchester, UK
14.30 - 15.10	New Drug Screening Strategies for Multiple Myeloma Treatment Lukas Huber, Cell Biology Division, University of Innsbruck and Oncotyrol, Austria
15.10 - 15.30	Uncoupling oncogenic receptor kinases from their intracellular nanocomputers Stephan Feller, University of Oxford, UK
15.30 - 16.00	Coffee break
16.00 - 16.40	Cell Signaling by receptor tyrosine kinases; From basic principles to cancer therapy Joseph Schlessinger, Yale School of Medicine, Connecticut, USA
16.40 - 17.00	Discovering new lead compound candidates and combination therapy model using traditional Oriental Medicine Jongwook Jeon, Korea Advanced Institute of Science & Technology
17.00 - 18.00	Session V: Poster session in Carton Suite I
19.30 - 20.00 20.00 21.30 22.30	Pre-Conference Dinner Drinks Reception in Carton House Lobby and The Kitchen Bar Conference Dinner in Carton Suite Traditional Irish Dancing Showcase in Carton Suite Traditional Irish Music in The Kitchen Bar

Wednesday 12th September SYSMED 2012 Conference (inclusive of Social Outing) Carton Suite, Conference Centre

9.00 - 12.50	Session VI: Omics to Systems Medicine Chair: Walter Kolch, Systems Biology Ireland and Conway Institute, University College Dublin, Ireland
9.00 - 9.40	From proteomics and mathematical models to new therapies for colorectal cancer Walter Kolch, Systems Biology Ireland and Conway Institute, University College Dublin, Ireland
9.40 - 10.20	Apoptosis modelling predicts therapy responses in Cancer patients: Towards Personalised Oncology Approaches Jochen Prehn, Department of Physiology and Medical Physics and Centre for Systems Medicine, Royal College of Surgeons in Ireland



10.20 - 10.40	Systems Medicine of Neurogenic Hypertension James Schwaber, Department of Pathology, Anatomy & Cell Biology, Thomas Jefferson University, USA
10.40 - 11.10	Coffee break
11.10 - 11.50	Multi-Levelness as the Final Frontier of Systems Medicine Olaf Wolkenhauer, Systems Biology and Bioinformatics, University of Rostock, Germany
11.50 - 12.30	SWATH-MS provides a deep, reproducible and permanent quantitative proteomic reference for biomarker studies
12.30 - 12.50	Yansheng Liu, Institute of Molecular Systems Biology, ETH Zürich, Switzerland Identification of molecular mechanisms underlying MCF-7 cell differentiation using proteomics and systems biology approaches Natalia Volinsky, Systems Biology Ireland, University College Dublin, Ireland
12.50 - 13.50	Lunch in The Linden Tree Restaurant
15:00 - 21.00	Social Outing: Dublin City Walking Tour and Visit to Guinness Storehouse
15.00	Buses depart for Dublin City Centre
16.00	Dublin City Walking Tour (to include Trinity College Dublin, Book of Kells, Dublin Castle, Christchurch)
18.30	Bus transport to Guinness Storehouse
19.00	Guinness Storehouse Tour and Buffet Reception
20.30	Buses depart for Carton House

Thursday 13th September SYSMED 2012 Conference (inclusive of Closing Keynote) Carton Suite, Conference Centre

9.00 - 12.00	Session VII: Computational Modelling Chair: Boris Kholodenko, Systems Biology Ireland, University College Dublin, Ireland
9.00 - 9.40	Modelling of Cancer Kinome Networks
9.40 - 10.00	Rune Linding, Department of Systems Biology, Technical University of Denmark Agent-based modelling approach of immune defense against opportunistic human pathogenic fungi
10.00 - 10.20	Christian Tokarski, Friedrich Schiller University Jena, Germany Gene regulatory network controllability to identify cellular reprogramming driver genes Antonio del sol, Luxembourg Centre for Systems Biomedicine, University of Luxembourg
10.20 - 10.40	Coffee break
10.40 - 11.20	Signalling Ballet in Four Dimensions Boris Kholodenko, Systems Biology Ireland, University College Dublin, Ireland
11.20 - 12.00	The future of Medicine (And Health) Hans Lehrach, Max Planck Institute for Molecular Genetics, Berlin, Germany
12.00 - 13.00	Closing Keynote Systems Pharmacology and Systems Medicine



Garret FitzGerald, University of Pennsylvania and Institute for Translational Medicine & Therapeutics, Philadelphia, USA

13.00 - 13.15 Presentation of Prizes and Awards

Walter Kolch, Systems Biology Ireland and Conway Institute, University College Dublin, Ireland

13.15 - 14.00 Lunch in The Linden Tree Restaurant