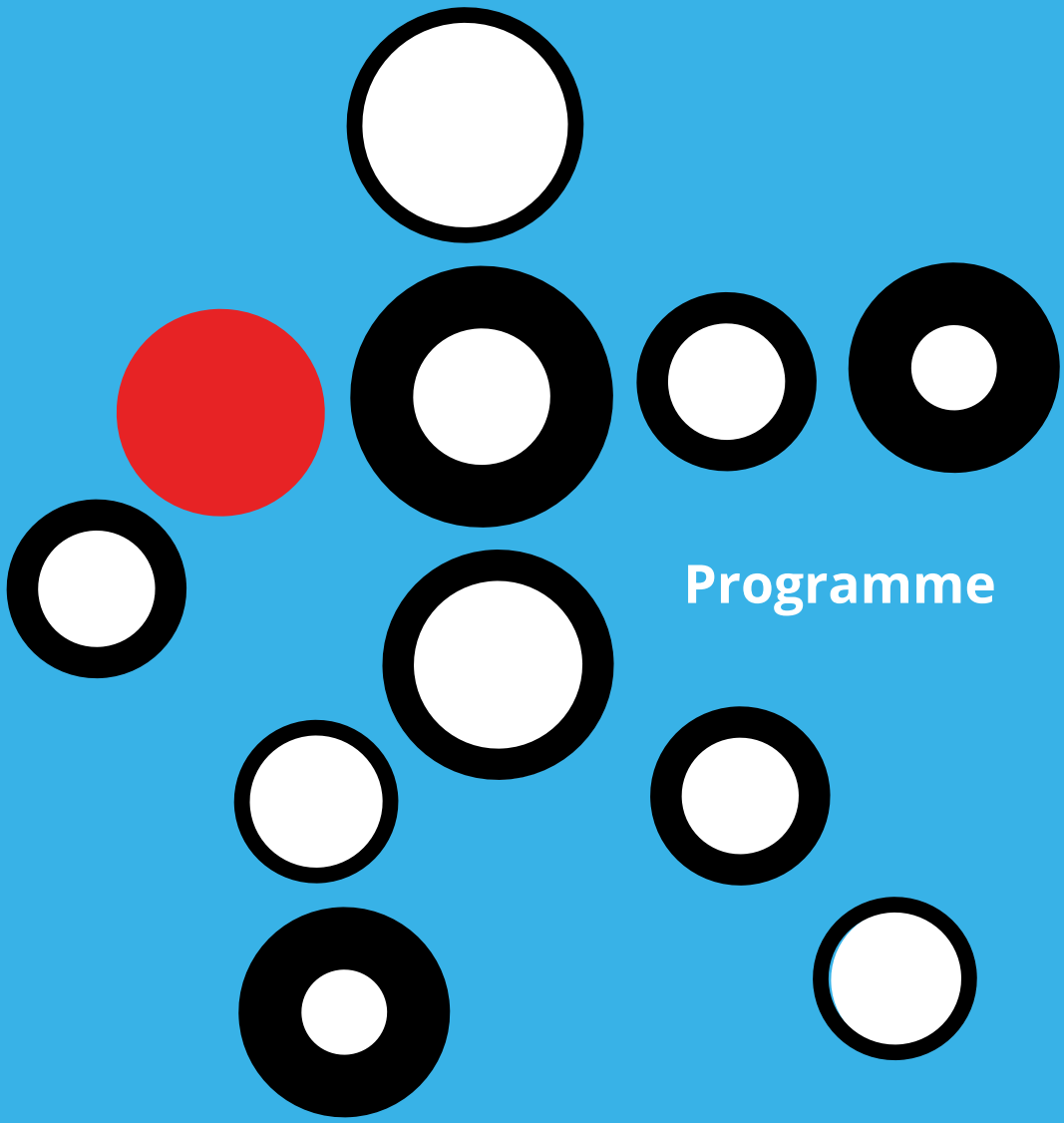

Programme

LifeTime Opening Conference
May 6-7, 2019

Monday, May 6, 2019

7:30-8:30	Registration and Breakfast
8:30 - 8:45	Welcoming Address **Martin Lohse** (Scientific Director, MDC) **Axel Pries** (Dean, Charité – Universitätsmedizin Berlin; – CEO (interim), Berlin Institute of Health BIH) **André Le Bivic** (Director of the Institute of Biological Sciences, CNRS) **Otmar Wiestler** (President, Helmholtz Association)
8:45 - 9:15	Introduction by **Nikolaus Rajewsky** and **Geneviève Almouzni** (LifeTime coordinators)
9:15 - 11:40	**SESSION 1: SINGLE CELL MULTI-OMICS** **Hosted by WP3 (leads: Giacomo Cavalli and Amos Tanay)**
9:15 - 9:35	**Amos Tanay**, The Weizmann Institute for Sciences, Rehovot, Israel Introduction to WP3: Single cell multi-omics
9:35 - 9:55	**Prisca Liberali**, FMI – Friedrich-Miescher-Institute for Biomedical Research, Basel, Switzerland Single cells in space and time during development
9:55 - 10:15	**Marcelo Nollmann**, CNRS – Centre National de la Recherche Scientifique, Montpellier, France Seeing is believing: new breakthroughs in imaging technologies
10:15 - 10:40	Coffee time
10:40 - 11:00	**Alexander Van Oudenaarden**, Hubrecht Institute, Utrecht, The Netherlands Lineage reconstruction by single-cell sequencing
11:00 - 11:20	**Robert Balderas**, BD Biosciences, USA Co-creation of innovative tools for Single Cell Multi-omics
11:20 - 11:30	**Mats Nilsson**, SciLifeLab, Solna, Sweden Spatial cell-maps of molecularly defined cell types using targeted in situ sequencing
11:30 - 11:40	**Marlies Vanden Bempt**, VIB, Belgium Single cell profiling of different cancer types before and during immune checkpoint therapy
11:40 - 12:10	**CROSS TOPICS: INNOVATION, TRAINING** **Hosted by WP7 and WP10 (leads: Jan Ellenberg, Susan Gasser, Joachim Schultze, Marek Figlerowicz and Dimitris Thanos)**

LifeTime

12:10 - 13:30	Lunch time/poster session in parallel
13:30 - 15:30	**SESSION 2: DATA SCIENCE, AI & MACHINE LEARNING** **Hosted by WP4 (leads: John Marioni, Marc Marti-Renom and Helen Parkinson)**
13:30 - 13:50	**John Marioni**, EMBL-EBI, Wellcome Genome Campus, Hinxton Introduction to WP4: Data science, AI & machine learning
13:50 - 14:10	**Fabian Theis**, Institute of Computational Biology, Helmholtz Center Munich, Germany Large-scale lineage and latent-space learning in single-cell genomics
14:10 - 14:30	**Jean-Philippe Vert**, Google, France Learning representations of single cell data
14:30 - 14:50	**Nir Friedman,** HUJI – The Hebrew University of Jerusalem, Rehovot, Israel From factoids to knowledge - how do we connect the dots?
14:50 - 15:10	**Anna Kreshuk**, EMBL – The European Molecular Biology Laboratory, Heidelberg, Germany Image analysis with machine learning
15:10 - 15:20	**Matthias Becker**, DZNE – German Center for Neurodegenerative Diseases, Bonn, Germany Memory-Driven Computing: A novel architecture for growing single-cell data sets
15:20 - 15:30	**Mario Nicodemi**, University of Naples, Italy Machine learning chromatin architecture in single cells by polymer physics
15:30 – 16:00	Coffee time
16:00 - 18:00	**SESSION 3: EXPERIMENTAL DISEASE MODELS** **Hosted by WP5 (leads: Jürgen Knoblich, Jean-Christophe Marine and Giuseppe Testa)**
16:00 - 16:20	**Giuseppe Testa**, IEO – European Institute of Oncology, Milano, Italy De humani corporis fabrica: the new landscape of experimental models for charting disease dynamics at single cell resolution
16:20 - 16:40	**Jürgen Knoblich**, IMBA – Institute of Molecular Biotechnology, Vienna, Austria Modeling human development and disease in Cerebral organoids
16:40 - 17:00	**Cédric Blanpain**, ULB – Université Libre de Bruxelles, Brussels, Belgium Deciphering cellular heterogeneity and lineage segregation during embryonic development, tissue homeostasis and tumorigenesis using single cell RNA sequencing

17:00 - 17:20	**Paul Vulto**, Mimetas, Netherlands Organ-on-a-Chip technology as a routine tool in drug discovery and development
17:20 - 17:40	**Barbara Treutlein**, ETH Zurich, Switzerland TBA
17:40 - 17:50	**Eleonora Leucci**, Trace PDX platform-LKI, Leuven, Belgium TRACE & the EurOPDX Research Infrastructure: providing cutting-edge translational cancer research, expertise, & services.
17:50 - 18:00	**Sven Nelander**, Uppsala University, Uppsala, Sweden Therapeutic targets from big data: integrative discovery of treatments for high-risk neuroblastoma
18:00 - 18:15	**Short break**
18:15 - 18:30	**Sabine Oertelt-Prigione**, Radboud University in Nijmegen, Netherlands The impact of sex differences on biomedical research
18:30 - 19:00	**Keynote: Angelika Eggert**, Charité, Berlin, Germany Creating the basis for tomorrow's cancer precision medicine
19:00 - 19:10	Welcoming Address **Steffen Krach**, Permanent Secretary for Higher Education and Research, Berlin, Germany
19:10	**Reception**

Tuesday, May 7, 2019

9:00 - 9:45	**Keynote: Alfonso Valencia**, BSC – Barcelona Supercomputing Center, Barcelona, Spain From data to models: infrastructures and resources for the challenges of the future medicine
9:45 - 10:15	**CROSS TOPICS: ELSI & COMMUNICATION** **Hosted by WP8 and WP9 (leads: Annelien Bredenoord, Maria Elena Torres-Padilla, Leïla Perié, Wolf Reik and Stephan Preibisch)**
10:15 - 10:45	**Coffee time**
10:45 - 12:45	**SESSION 4: LIFETIME LAUNCHPAD – DISEASE FOCUS** **Hosted by WP6 (leads: Peter Lichter and Mihai Netea)**
10:45 - 11:15	**Mihai Netea**, Radboud University Medical Center, Nijmegen, the Netherlands **Jan van Lunzen**, ViiV Healthcare, UK A functional genomics approach to characterize inflammation in disease: the case of HIV infection

11:15 - 11:35	**Bart De Strooper**, KU Leuven, VIB, and UK-Dementia research Institute Single-cell approaches and humanized Alzheimer Disease models: opportunities for real progress
11:35 - 11:55	**Georg Schett**, Friedrich-Alexander University Erlangen-Nürnberg, Erlangen, Germany Towards a molecular pathology of chronic inflammatory disease
11:55 - 12:15	**Wilko Weichert**, Institute of Pathology, Technical University Munich (TUM), Munich, Germany Cancer. On how to attack the emperor of all maladies.
12:15 - 12:25	**Céline Vallot**, Institut Curie, Paris, France Single-cell chromatin profiling reveals heterogeneity of chromatin landscapes in breast cancer
12:25 - 12:35	**Kathrin Kattler,** Saarland University, Saarbrücken, Germany Spatial transcriptomic and epigenomic maps of human liver: blueprints for projection of single cell data into hepatic pseudospace
12:35 - 12:45	**Claudia Ctortecka,** IMP – Research Institute of Molecular Pathology, Vienna, Austria In depth profiling of cardiac spheres to decipher cardiac progenitor functionality
12:45 - 14:15	**Lunch time/poster session in parallel**
14:15 - 16:15	**PARALLEL BREAKOUT SESSIONS (WP3, 4, 5 AND 6) FROM THE STATE OF THE ART TO LIFETIME OBJECTIVES**
16:15 - 17:15	**Wrap up and closing**

Conference Information

Date

May 6-7, 2019

Conference Venue

bcc, Alexanderstr. 11, 10178 Berlin

Organisation & Contact

Max-Delbrück-Center for Molecular Medicine in the Helmholtz Association
Robert-Rössle-Straße 10
13125 Berlin

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Electronic Programme and Abstract Booklet

Download: lifetime-fetflagship.eu/index.php/program

Poster Presentation Guidelines

Posters will be displayed during the meeting:

on May 6: 12:10-13:30
on May 7: 12:45-14:15

Authors are asked to be present at their poster during the poster sessions. You will find the number of your poster in the electronic programme and abstract book. Posters should be mounted on May 6, before lunch and removed on May 7 at 17:00 latest.

Internet:

Internet access via Wireless LAN is free of charge in the bcc. The login is "LifeTimeOpening", password: Launch2019.