Liquid Biopsies - Virtual

EMBL COURSE

EMBL Courses and Conferences during the Coronavirus pandemic

With the onsite programme paused, many of our events are now being offered in virtual formats.

Registration is open as usual for many events, with back-up plans in place to move further courses and conferences online as necessary. Registration fees for any events affected by the COVID-19 disruption are fully refundable.

More information for participants of events at EMBL Heidelberg can be found here.

Programme

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- The course will start on **Friday 11 September**, and after a break over the weekend, will continue on **Monday 14 September** with the regular programme.
- The virtual course includes live-streamed lectures by invited speakers with Q&A sessions after each talk as well as interactive discussion sessions, online practicals and live poster sessions.
- Information on the live stream and access to the discussion platform and digital posters will be provided shortly before the start of the event.
- Access to the recorded talks will be available for 1 week after the start of the event. *Please note: there will be an essential software test session for participants on Thursday 10 September 2020, prior to the course.*

The following times are used in the programme below:

- Central European Summer Time (CEST): eg. Berlin, Amsterdam, Paris
- Central Standard Time (CST): eg. San José

To find out the equivalent time zone in your location, enter Berlin, the CEST programme time and your city into the Time Zone Converter.

Day 1 - Friday 11 September 2020

Time	Speaker
	Topic: Preanalytical Day
09:00 - 09:30 (CEST) 01:00 - 01:30 (CST)	Welcome and Introduction Elisabeth Zielonka, Lisa Trinh and Irena Provaznikova - EMBL Heidelberg, Germany
09:30 - 10:15 (CEST) 01:30 - 02:15 (CST)	Live Lecture: Background and Course Overview Anders Ståhlberg - Sahlgrenska Academy at University of Gothenburg, Sweden
10:15 - 10:25 (CEST) 02:15 - 02:25 (CST)	Break
10:25 - 11:00 (CEST) 02:25 - 03:00 (CST)	Interactive: Flash Talks
11:00 - 12:00 (CEST) 03:00 - 04:00 (CST)	Interactive: Icebreaker
12:00 - 12:45 (CEST) 04:00 - 04:45 (CST)	Lunch Break
12:45 - 13:30 (CEST) 04:45 - 05:30 (CST)	Live Lecture with Q&A: Role of biobanks in securing process quality in sample retrieval and storage Romy Kirsten - National Center for Tumor Diseases (NCT) Heidelberg, Germany
13:30 - 13:35 (CEST) 05:30 - 05:35 (CST)	Break
13:35 - 14:30 (CEST) 05:35 - 06:30 (CST)	Live Lecture and Interactive: Preanalytical experience and group discussion questions with Q&A Anders Ståhlberg and Stefan Filges - Sahlgrenska Academy at University of Gothenburg, Sweden
14:30 - 14:40 (CEST) 06:30 - 06:40 (CST)	Break

Time	Speaker
14:40 - 15:00 (CEST) 06:40 - 07:00 (CST)	Interactive: Technology Session: Sample collection, stabilization and handling as key factor for your liquid biopsy based research and diagnostics Thorsten Voss - QIAGEN, Germany
15:00 - 15:30 (CEST) 07:00 - 07:30 (CST)	Break
15:30 - 17:15 (CEST) 07:30 - 09:15 (CST)	Interactive: Poster Session 1 with odd numbers
17:15 (CEST) 09:15 (CST)	End of day 1 - Continued access to digital posters, networking and discussion platforms, recorded talks

Day 2 - Monday 14 September 2020

Time	Speaker
	Topic: Single Cell Day
09:00 - 09:40 (CEST) 01:00 - 01:40 (CST)	Interactive: Group discussion from Preanalytical Day
09:40 - 09:45 (CEST) 01:40 - 01:45 (CST)	Break
09:45 - 10:30 (CEST) 01:45 - 02:30 (CST)	Live Lecture with Q&A: Single Cell Analysis Anders Ståhlberg - Sahlgrenska Academy at University of Gothenburg, Sweden
10:30 - 10:40 (CEST) 02:30 - 02:40 (CST)	Break
10:40 - 11:25 (CEST) 02:40 - 03:25 (CST)	Live Lecture with Q&A: Flow Cytometry Beata Ramasz - EMBL Heidelberg, Germany
11:25 - 11:35 (CEST) 03:25 - 03:35 (CST)	Break
11:35 - 12:05 (CEST) 03:35 - 04:05 (CST)	Practical: Flow Cytometry Beata Ramasz - EMBL Heidelberg, Germany

12:05 - 12:25 (CEST) 04:05 - 04:25 (CST)	Interactive: **Technology Session: ctDNA testing along the patient journey: Clinical research examples** Leonie de Visser - Roche Diagnostics International, Switzerland
12:25 - 13:25 (CEST) 04:25 - 05:25 (CST)	**Lunch Break**
13:25 - 14:10 (CEST) 05:25 - 06:10 (CST)	Practical: **Single-cell workflow part including protocol discussion and group work questions** Anders Ståhlberg and Stefan Filges - Sahlgrenska Academy at University of Gothenburg, Sweden
14:10 - 14:20 (CEST) 06:10 - 06:20 (CST)	**Break**
14:20 - 15:05 (CEST) 06:20 - 07:05 (CST)	Live Lecture with Q&A: **Basic Statistics** Mikael Kubista - Institute of Biotechnology and TATAA Biocenter, Czech Republic
15:05 - 15:15 (CEST) 07:05 - 07:15 (CST)	**Break**
15:15 - 16:00 (CEST) 07:15 - 08:00 (CST)	Interactive: **Single Cell Data Analysis** Mikael Kubista - Institute of Biotechnology and TATAA Biocenter, Czech Republic Amin Forootan - MultiD Analyses AB, Sweden
16:00 - 16:30 (CEST) 08:00 - 08:30 (CST)	**Opportunity for further discussion and questions on single cell data analysis**
16:30 (CEST) 08:30 (CST)	**End of day 2 - Continued access to digital posters, networking and discussion platforms, recorded talks**

Day 3 - Tuesday 15 September 2020

Time	Speaker
	Topic: **Digital PCR / miRNA Day**
09:00 - 09:40 (CEST) 01:00 - 01:40 (CST)	Interactive: **Group discussion from Single Cell Day**
09:40 - 09:45 (CEST) 01:40 - 01:45 (CST)	**Break**

09:45 - 10:45 (CEST) 01:45 - 02:45 (CST)	Live Lecture with Q&A: **Digital PCR** Jörg Bantin - BioRad, Germany
10:45 - 11:00 (CEST) 02:45 - 03:00 (CST)	**Break**
11:00 - 12:00 (CEST) 03:00 - 04:00 (CST)	Practical: **Data Analysis Demo** Jörg Bantin - BioRad, Germany
12:00 - 13:00 (CEST) 04:00 - 05:00 (CST)	**Lunch Break**
13:00 - 13:45 (CEST) 05:00 - 05:45 (CST)	Live Lecture with Q&A: **miRNA** Mikael Kubista - Institute of Biotechnology and TATAA Biocenter, Czech Republic
13:45 - 13:55 (CEST) 05:45 - 05:55 (CST)	**Break**
13:55 - 14:40 (CEST) 05:55 - 06:40 (CST)	Practical: **miRNA** Anders Ståhlberg and Manuel Marceliano Luna Santa-María - Sahlgrenska Academy at University of Gothenburg, Sweden
14:40 - 14:50 (CEST) 06:40 - 06:50 (CST)	**Break**
14:50 - 15:35 (CEST) 06:50 - 07:35 (CST)	Practical: **Data Analysis** Mikael Kubista - Institute of Biotechnology and TATAA Biocenter, Czech Republic Amin Forootan - MultiD Analyses AB, Sweden Robert Sjöback - TATAA Biocenter, Sweden
15:35 - 15:45 (CEST) 07:35 - 07:45 (CST)	**Break**
15:45 - 17:00 (CEST) 07:45 - 09:00 (CST)	Virtual Social Programme: **Pub Quiz**
17:00 (CEST) 09:00 (CST)	**End of day 3 - Continued access to digital posters, networking and discussion platforms, recorded talks**

Day 4 - Wednesday 16 September 2020

Time	Speaker

Topic:
Sequencing Day

09:00 - 09:40 (CEST) 01:00 - 01:40 (CST)	Interactive: **Group discussion from Digital PCR / miRNA Day**
09:40 - 09:45 (CEST) 01:40 - 01:45 (CST)	**Break**
09:45 - 10:30 (CEST) 01:45 - 02:30 (CST)	Live Lecture with Q&A: **Effect of pre-analytical factors on the measurement of Evs in liquid biopsies** An Hendrix - Ghent University, Belgium
10:30 - 10:40 (CEST) 02:30 - 02:40 (CST)	**Break**
10:40 - 11:25 (CEST) 02:40 - 03:25 (CST)	Live Lecture with Q&A: **Exosomal biomarkers in liquid biopsies: How to identify valid and better 'biomarker signatures' from micro-vesicular small-RNA sequencing** Michael Pfaffl - Technical University of Munich, Germany
11:25 - 11:35 (CEST) 03:25 - 03:35 (CST)	**Break**
11:35 - 12:10 (CEST) 03:35 - 04:10 (CST)	Live Lecture and Interactive: **SiMSen-seq Workflow** Anders Ståhlberg and Stefan Filges - Sahlgrenska Academy at University of Gothenburg, Sweden
12:10 - 13:15 (CEST) 04:10 - 05:15 (CST)	**Lunch Break**
13:15 - 14:00 (CEST) 05:15 - 06:00 (CST)	Practical: **SiMSenSeq with videos, short presentations and Q&A** Anders Ståhlberg and Stefan Filges - Sahlgrenska Academy at University of Gothenburg, Sweden
14:00 - 14:15 (CEST) 06:00 - 06:15 (CST)	**Break**
14:15 - 15:00 (CEST) 06:15 - 07:00 (CST)	Practical: **SiMSenSeq with videos, short presentations and Q&A** Anders Ståhlberg and Stefan Filges - Sahlgrenska Academy at University of Gothenburg, Sweden
15:00 - 15:15 (CEST) 07:00 - 07:15 (CST)	**Break**

15:15 - 16:00 (CEST) 07:15 - 08:00 (CST)	Live Lecture with Q&A: **ctDNA applications using ultrasensitive sequencing** Tony E. Godfrey - Boston University School of Medicine, USA
16:00 (CEST) 08:00 (CST)	**End of day 4 - Continued access to digital posters, networking and discussion platforms, recorded talks**

Day 5 - Thursday 17 September 2020

Time	Speaker
	Topic: **Protein Day**
09:00 - 09:40 (CEST) 01:00 - 01:40 (CST)	Interactive: **Group discussion from Sequencing Day**
09:40 - 09:45 (CEST) 01:40 - 01:45 (CST)	**Break**
09:45 - 10:30 (CEST) 01:45 - 02:30 (CST)	Live Lecture with Q&A: **Protein detection in liquid biopsies** Ulf Landegren - Uppsala University, Sweden
10:30 - 10:40 (CEST) 02:30 - 02:40 (CST)	**Break**
10:40 - 11:25 (CEST) 02:40 - 03:25 (CST)	Practical: **Plasma Protein Detection (PEA) Assay Demo** Lei Chen - Uppsala University, Sweden
11:25 - 11:35 (CEST) 03:25 - 03:35 (CST)	**Break**
11:35 - 12:20 (CEST) 03:35 - 04:20 (CST)	Practical: **Plasma Protein detection (PEA) Data Analysis Demo** Lei Chen - Uppsala University, Sweden
12:20 - 13:15 (CEST) 04:20 - 05:15 (CST)	**Lunch Break**
13:15 - 14:00 (CEST) 05:15 - 06:00 (CST)	Live Lecture with Q&A: **Liquid biopsies in the clinical context high-fidelity sequencing** Tony E. Godfrey - Boston University School of Medicine, USA
14:00 - 14:15 (CEST) 06:00 - 06:15 (CST)	**Break**
14:15 - 16:00 (CEST) 06:15 - 08:00 (CST)	Interactive: **Poster Session 2 with even numbers**

16:00 (CEST) 08:00 (CST)	End of day 5 - Continued access to digital posters, networking and discussion platforms, recorded talks

Day 6 - Friday 18 September 2020

Time	Speaker
	Topic: Bioinformatics Day
09:00 - 09:40 (CEST) 01:00 - 01:40 (CST)	Interactive: Group discussion from Protein Day
09:40 - 09:45 (CEST) 01:40 - 01:45 (CST)	Break
09:45 - 10:30 (CEST) 01:45 - 02:30 (CST)	Live Lecture with Q&A: Clinical validation of droplet-based procedures in the context of liquid biopsies Valérie Taly - Paris Descartes University, France
10:30 - 10:40 (CEST) 02:30 - 02:40 (CST)	Break
10:40 - 11:25 (CEST) 02:40 - 03:25 (CST)	Practical: Data Analysis Stefan Filges and Manuel Marceliano Luna Santa-María - Sahlgrenska Academy at University of Gothenburg, Sweden
11:25 - 11:35 (CEST) 03:25 - 03:35 (CST)	Break
11:35 - 12:20 (CEST) 03:35 - 04:20 (CST)	Practical: Data Analysis Stefan Filges and Manuel Marceliano Luna Santa-María - Sahlgrenska Academy at University of Gothenburg, Sweden
12:20 - 13:15 (CEST) 04:20 - 05:15 (CST)	Lunch Break
13:15 - 14:00 (CEST) 05:15 - 06:00 (CST)	Live Lecture with Q&A: Implementing liquid biopsies in routine clinic – The role in cancer diagnostics Anders Edsjö - Skåne University Hospital, Sweden
14:00 - 14:15 (CEST) 06:00 - 06:15 (CST)	Break
14:15 - 15:00 (CEST) 06:15 - 07:00 (CST)	Course Sum Up

15:00 - 15:15 (CEST) 07:00 - 07:15 (CST)	**Break**
15:15 - 16:30 (CEST) 07:15 - 08:30 (CST)	Virtual Social Programme: **Happy Hour Mixer**
16:30 (CEST) 08:30 (CST)	**End of course**