



# Immunoprofiling of Single Cells

EMBL COURSE



**We have moved our website to [embl.org/events](https://embl.org/events). The content below is no longer being updated.**

## **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

Got something to say? Tweet it with [#EMBLimmune](#)

Please note the below programme still subject to changes

[HIDE ALL](#)

Day 1 - Monday 4 March 2019

Time

Speaker

Location

Time	Speaker	Location
	<b>Arrival &amp; Welcome</b>	
09:00 - 10:00	Elisabeth Zielonka - EMBL Heidelberg, Germany Yvonne Yeboah - EMBL Heidelberg, Germany	Flex Lab A & B
	<b>An Introduction to 10x Genomics Technology (including Single Cell Feature Barcoding and VDJ enrichment)</b>	
10:00 - 11:00	Nicola Cahill - 10x Genomics, UK Katharina Danielski - 10x Genomics, Germany	Flex Lab A & B
11:00 - 11:30	<b>Coffee break</b>	Flex Lab A & B
	<b>Practical: Loading the Training Chip</b>	
11:30 - 12:30	Bianka Baying - EMBL Heidelberg, Germany Nicola Cahill - 10x Genomics, UK Katharina Danielski - 10x Genomics, Germany Dinko Pavlinic - EMBL Heidelberg, Germany	Training Lab B
12:30 - 13:30	<b>Lunch break</b>	EMBL Canteen
	<b>Practical: Cell Prep &amp; Antibody Staining</b>	
13:30 - 15:30	Bianka Baying - EMBL Heidelberg, Germany Nicola Cahill - 10x Genomics, UK Katharina Danielski - 10x Genomics, Germany Dinko Pavlinic - EMBL Heidelberg, Germany	Training Lab B
	<b>Practical: Practical: GEM generation &amp; RT</b>	
15:30 - 18:00	Bianka Baying - EMBL Heidelberg, Germany Nicola Cahill - 10x Genomics, UK Katharina Danielski - 10x Genomics, Germany Dinko Pavlinic - EMBL Heidelberg, Germany	Training Lab B
18:00 - 18:15	<b>Shuttle back to ISG Hotel</b>	
18:15	<b>Dinner</b>	ISG Hotel

## Day 2 - Tuesday 5 March 2019

Time	Speaker	Location
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Time	Speaker	Location
	<b>Practical: cDNA synthesis (for Feature Barcoding)</b>	
09:00 - 10:15	Bianka Baying - EMBL Heidelberg, Germany Nicola Cahill - 10x Genomics, UK Katharina Danielski - 10x Genomics, Germany Dinko Pavlinic - EMBL Heidelberg, Germany	Training Lab B
	<b>Practical: PCR amplification of VDJ region</b>	
10:15 - 13:00	Bianka Baying - EMBL Heidelberg, Germany Nicola Cahill - 10x Genomics, UK Katharina Danielski - 10x Genomics, Germany Dinko Pavlinic - EMBL Heidelberg, Germany	Training Lab B
13:00 - 14:00	<b>Lunch break</b>	EMBL Canteen
	<b>Lecture: TotalSeq<sup>TM</sup> - proteomics in the era of high-throughput single-cell sequencing</b>	
14:00 - 15:00	Carsten Wiethe - Biolegend, Germany	Flex Lab A & B
15:00 - 15:30	<b>Coffee break</b>	Flex Lab A & B
	<b>Lecture: Applying the newest single-cell technology to the oldest immune cell known to man</b>	
15:30 - 16:30	Martin Guilliams - Ghent University, Belgium	Flex Lab A & B
16:30 - 17:30	<b>Tour Gene Core Facility</b>	Flex Lab A & B
17:30 - 18:00	<b>Q&amp;A session</b>	Flex Lab A & B
18:00 - 19:00	<b>Dinner</b>	EMBL Canteen
19:00	<b>Shuttle back to ISG Hotel</b>	

## Day 3 - Wednesday 6 March 2019

Time	Speaker	Location
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Time	Speaker	Location
	<b>Practical: Illumina Sequencing Library Preparation (for both VDJ and Feature Barcoding)</b>	
09:00 - 13:00	Bianka Baying - EMBL Heidelberg, Germany Nicola Cahill - 10x Genomics, UK Katharina Danielski - 10x Genomics, Germany Dinko Pavlinic - EMBL Heidelberg, Germany Laurie Scott - 10x Genomics, UK	Flex Lab A & B
13:00 - 14:00	<b>Lunch break</b>	EMBL Canteen
14:00 - 15:00	<b>Lecture: Antigen receptor repertoires and specificities at single cell resolution</b> Michael Stubbington - 10x Genomics, UK	Flex Lab A & B
15:00 - 15:30	<b>Coffee break</b>	Flex Lab A & B
15:30 - 16:30	<b>Lecture: "Gone Fishing: Single cell sequencing for deep sea trawling of T cell clones"</b> Michelle Teng - Immunocore Ltd, UK	Flex Lab A & B
16:30	<b>Free Evening</b>	

## Day 4 - Thursday 7 March 2019

Time	Speaker	Location
	<b>Practical: Illumina Sequencing Run</b>	
09:00 - 12:30	Bianka Baying - EMBL Heidelberg, Germany Nicola Cahill - 10x Genomics, UK Katharina Danielski - 10x Genomics, Germany Dinko Pavlinic - EMBL Heidelberg, Germany	Flex Lab A & B
12:30 - 13:30	<b>Lunch break</b>	EMBL Canteen
13:30 - 15:30	<b>Lecture: An Introduction to Cell Ranger and Single Cell Data Analysis</b> Katharina Danielski - 10x Genomics, Germany	Flex Lab A & B
15:30 - 16:00	<b>Coffee break</b>	Flex Lab A & B
16:00 - 17:30	<b>Lecture: A Live Demo of the Loupe Cell Browser</b> Katharina Danielski - 10x Genomics, Germany Nicola Cahill - 10x Genomics, UK	Computer Training Lab

Time	Speaker	Location
17:30	<b>Shuttle to ISG Hotel and downtown</b>	
19:00	<b>Dinner downtown</b>	Restaurant

## Day 5 - Friday 8 March

Time	Speaker	Location
09:00 - 10:00	<b>Lecture: Additional Feature Barcoding Applications - High-throughput CRISPR Screening for Functional Genomics Analysis</b> Hannes Arnold - 10x Genomics, Germany	Computer Training Lab
10:00 - 11:00	<b>Lecture: Preparing a High Quality Single Cell Suspension</b> Diana Ordonez - EMBL Heidelberg, Germany	Computer Training Lab
11:00 - 12:00	<b>Lecture: Single Cell &amp; Immunology Publication Review</b> Hannes Arnold - 10x Genomics, Germany	Computer Training Lab
12:00 - 13:00	<b>Lunch break</b>	EMBL Canteen
13:00	<b>Bus to Heidelberg Train Station and Crown Plaza Hotel</b>	