



# Techniques for Mammary Gland Research

EMBO PRACTICAL 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 The content below is no longer being updated.**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

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### Day 1 - Sunday 4 March 2018

Time	Speaker	Location
15:40 - 16:00	<b>Arrival and Registration at ISG hotel</b>	ISG hotel

Time	Speaker	Location
	<b>Welcome and Introduction</b>	
16:00 - 17:00	Yvonne Yeboah - EMBL Heidelberg, Germany Martin Jechlinger - EMBL Heidelberg, Germany Maria dM Vivanco - CIC bioGUNE, Spain	ISG hotel
17:00 - 19:30	<b>Short talks by participants</b>	ISG hotel
from 19:30	<b>Dinner at ISG hotel</b>	ISG hotel

## Day 2 - Monday 5 March 2018

Time	Speaker	Location
09:00 - 09:10	<b>Introduction to rules and safety issues</b> Yvonne Yeboah - EMBL Heidelberg, Germany	Flex Labs A & B
09:10 - 09:50	<b>Introduction to mouse mammary gland techniques</b> Matthew Smalley - Cardiff University, United Kingdom	Flex Labs A & B
09:50 - 10:30	<b>Introduction to human mammary gland</b> Maria dM Vivanco - CIC bioGUNE, Spain	Flex Labs A & B
10:30 - 12:30	<b>Demo mammary fat pad clearing and practice by attendees</b>	Training Lab B
12:30 - 13:30	<b>Lunch break</b>	EMBL Canteen
13:30 - 14:15	<b>Introduction to FACS</b> Malte Paulsen - EMBL Heidelberg, Germany	Flex Labs A & B
14:15 - 17:30	Practical session: <b>MG harvest demonstration</b> Howard Kendrick - Cardiff University, United Kingdom Matthew Smalley - Cardiff University, United Kingdom	Training Lab B
17:30 - 18:00	<b>Discussion about today issues</b>	Flex Labs A & B

Time	Speaker	Location
	Keynote talk	
18:00 - 19:00	<b>Tumour-stroma interactions in breast cancer progression</b> Clare Isacke - The Institute of Cancer Research, United Kingdom	
19:00 - 20:00	<b>Dinner</b>	EMBL Canteen
20:00 - 22:00	<b>Poster Session I</b>	Top of helix A

## Day 3 - Tuesday 6 March 2018

Time	Speaker	Location
09:00 - 10:45	Practical session: <b>Digest organoids to single cells and seeding on 2D</b>	Training Lab B
10:45 - 11:30	<b>From FACS to lineage tracing</b> Matthew Smalley - Cardiff University, United Kingdom	Flex Labs A & B
11:30 - 12:15	<b>FACS analysis in human cells</b> Maria dM Vivanco - CIC bioGUNE, Spain	Flex Labs A & B
12:15 - 13:00	<b>Lunch break</b>	EMBL Canteen
13:00 - 18:30	Practical session in groups: <b>Cell count and stain incl.:</b>  <b>Mouse stain for FACS</b> Howard Kendrick - Cardiff University, United Kingdom Diana Ordonez - EMBL Heidelberg, Germany  <b>Human staining for ALDH and FACS</b> Maria dM Vivanco - CIC bioGUNE, Spain	Training Lab B
18:30 - 19:30	<b>Discussion about today issues, paper discussion and project handout</b>	Flex Labs A & B
19:30 - 20:30	<b>Dinner</b>	EMBL Canteen

## Day 4 - Wednesday 7 March 2018

<b>Time</b>	<b>Speaker</b>	<b>Location</b>
09:00 - 11:00	<p><b>Practical session in groups incl.:</b></p> <p><b>Group 1: Seeding 3D cultures</b> Ashna Alladin - EMBL Heidelberg, Germany Martin Jechlinger - EMBL Heidelberg, Germany</p> <p><b>Group 2: IHC start and whole MG processing incl. introduction in MG techniques lecture and whole MG explanation</b> Marta Garcia Montero - EMBL Heidelberg, Germany Howard Kendrick - Cardiff University, United Kingdom</p>	Training Lab B
11:00 - 13:00	<p><b>Practical session in groups incl.:</b></p> <p><b>Group 1: IHC start and whole MG processing incl. introduction in MG techniques lecture and whole MG explanation</b> Marta Garcia Montero - EMBL Heidelberg, Germany Howard Kendrick - Cardiff University, United Kingdom</p> <p><b>Group 2: Seeding 3D cultures</b> Ashna Alladin - EMBL Heidelberg, Germany Martin Jechlinger - EMBL Heidelberg, Germany</p>	Training Lab B
13:00 - 14:00	<b>Lunch break</b>	EMBL Canteen
14:00 - 14:30	<p><b>3D cultures</b> Martin Jechlinger - EMBL Heidelberg, Germany</p>	Flex Labs A & B
14:30 - 15:00	<p><b>Mammosphere cultures</b> Maria dM Vivanco - CIC bioGUNE, Spain</p>	Flex Labs A & B
15:00 - 16:30	<b>Wrap-up and discussion about today's issues</b>	Flex Labs A & B
16:30 - 19:00	<b>Poster session II and discussion about students' projects</b>	Top of helix A
19:00 - 20:00	<b>Dinner</b>	EMBL Canteen

Day 5 - Thursday 8 March 2018

<b>Time</b>	<b>Speaker</b>	<b>Location</b>
09:00 - 10:00	<p><b>Practical session in groups incl.:</b></p> <p><b>IHC finish part 1</b>  Marta Garcia Montero - EMBL Heidelberg, Germany  Howard Kendrick - Cardiff University, United Kingdom</p> <p><b>Possibility to see and discuss 3D cultures</b>  Ashna Alladin - EMBL Heidelberg, Germany  Martin Jechlinger - EMBL Heidelberg, Germany</p> <p><b>SPIM imaging</b></p>	Training Lab B
10:00 - 11:00	<p>Malte Wachsmuth - Luxendo Heidelberg, Germany</p> <p>Practical session:</p> <p><b>IHC finish part 2</b></p>	Flex Labs A & B
11:00 - 12:00	<p>Marta Garcia Montero - EMBL Heidelberg, Germany</p> <p>Howard Kendrick - Cardiff University, United Kingdom</p>	Training Lab B
12:00 - 13:00	<b>Lunch break</b>	EMBL Canteen
13:00 - 14:00	<p><b>Microscopy</b></p> <p>Stefan Terjung - EMBL Heidelberg, Germany</p>	Flex Labs A & B
14:00 - 17:30	<p><b>Practical session in groups incl.:</b></p> <p><b>Group 1: SPIM</b></p> <p><b>Group 2: ALMF tour</b></p> <p><b>Group 3: Mounting and photographing IHC /possibility to see and discuss sectioning techniques</b></p>	Training Lab B
17:30 - 19:00	<b>Presentation of the literature project</b>	Flex Labs A & B
19:00 - 19:30	<b>Bus to ISG hotel and to restaurant downtown</b>	EMBL bus stop / ISG hotel
from 19:30	<b>Dinner downtown</b>	Restaurant offsite

Day 6 - Friday 9 March 2018

<b>Time</b>	<b>Speaker</b>	<b>Location</b>
09:00 - 12:00	<b>Practical session in groups incl.:</b>  <b>Mount mammary gland finish</b>  <b>Repeat certain techniques, possibility to repeat mouse dissection training</b>  <b>Wrap up, analysis, troubleshooting for projects with trainers depending on interests of attendees, as discussed after the pitches from the morning of Day 2</b>	Training Lab B
12:00	<b>Packed lunch and departure</b>	Flex Labs A & B