

## Bootcamp 2017 Timetable (for registered students leading to 4-MC)

### MB5104: An Integrative Approach to Understand Cell Function

4<sup>th</sup> August to 12<sup>th</sup> August 2017

#### Venue:

**G** - General lectures: CREATE Theatrette, Level 2, 1 CREATE Way, CREATE Tower, S138602

**P** - Perseverance Rooms 1 and 2, CREATE Enterprise Level 5, University Town

Directions to CREATE Tower and CREATE Enterprise can be found:

<http://www.create.edu.sg/contact-us>

#### DAY 1

Date	Time	Content	Lecturer	Venue
Friday 4 <sup>th</sup> Aug 2017	8.00-8.30a.m.	Registration		Outside G
	8.30-9.00a.m.	Introduction to the bootcamp	Assoc. Prof. He and Asst. Prof. Saunders	G
	9.00-10.00a.m.	The cell cytoskeleton	Prof. Yu	
	10.00-10.30a.m.	<i>Break (coffee and discussion)</i>		Outside G
	10.30-11.15a.m.	Cell compartments	Adj. Assoc. Prof. Jedd	G
	11.15-12.00p.m.	Cellular shape and polarization	Asst. Prof. Motegi	
	12.00-1.00p.m.	<i>Lunch</i>		
	1.00-4.30p.m.	Introduction to Matlab (I)	Prof. Koehl Asst. Prof. Saunders Dr. Ong	P
	4.30-5.00p.m.	<i>Break (coffee and discussion)</i>		Outside G
	5.00-5.30p.m.	How to write well	Asst. Prof. Toyama	G
	5.30-6.00p.m.	How to present well	Assoc. Prof. Monteiro	
	6.00-6.30p.m.	<i>Break</i>		
	6.30-8.30p.m.	The cell as a machine	Prof. Sheetz	G
	8.30p.m.	<i>Social activity: Informal discussion hosted by Asst. Prof. Saunders</i>		

## DAY 2

Date	Time	Content	Lecturer	Venue
Saturday 5 <sup>th</sup> Aug 2017	9.00-9.30a.m.	How fluorescence works	Prof. Wohland	G
	9.30-9.45a.m.	History of GFP	Asst. Prof. Saunders	
	9.45-10.30a.m.	Introduction to microscopy	Prof. So	
	10.30-11.00a.m.	<i>Break (coffee and discussion)</i>		Outside G
	11.00-12.30p.m.	Optics tutorial	Prof. Wohland Asst. Prof. Saunders Asst. Prof. Loh	G
	12.30-1.30p.m.	<i>Lunch</i>		
	1.30-6.00p.m.	Introduction to Matlab (II)	Prof. Koehl Asst. Prof. Saunders Dr. Ong	P
	6.00p.m.	<i>Social activity: Dinner at Lau Pa Sat and Gardens By The Bay (Transport provided)</i>		

## DAY 3

Date	Time	Content	Lecturer	Venue
Sunday 6 <sup>th</sup> Aug 2017		<i>No lesson</i>		

## DAY 4

Date	Time	Content	Lecturer	Venue
Monday 7 <sup>th</sup> Aug 2017	8.30-9.05a.m.	Introduction to bacteria	Dr. Foo Dr. Desai	G
	9.05-9.40a.m.	Introduction to yeast	Assoc. Prof. Yeong	
	9.40-10.15a.m.	Introduction to <i>Drosophila</i>	Assoc. Prof. Wang	
	10.15-10.45a.m.	Break (coffee and discussion)		Outside G
	10.45-11.20a.m.	Introduction to fish	Dr. Tao	G
	11.20-12.00p.m.	Introduction to plants	Asst. Prof. Lau	
	12.00-1.00p.m.	Lunch		
	1.00-6.00p.m.	Sample preparation and wetlab (LS Lab 1, Level 3, Blk S1A, 14 Science Drive 4)		DBS laborat ories

## DAY 5

Date	Time	Content	Lecturer	Venue
Tuesday 8 <sup>th</sup> Aug 2017	9.00-9.45a.m.	Perturbing the cell	Asst. Prof. Toyama	G
	9.45-10.30a.m.	Super-resolution microscopy	Asst. Prof. Kanchanawong	
	10.30-11.00a.m.	<i>Break (coffee and discussion)</i>		Outside G
	11.00-11.45a.m.	Electron microscopy	Dr. Kostyuchenko	G
	11.45-12.30p.m.	Single molecule manipulation	Prof. Yan	
	12.30-1.30p.m.	<i>Lunch</i>		
	1.30-5.30p.m.	Advanced Matlab (I)	Prof. Koehl Asst. Prof. Saunders Dr. Ong	P
	5.30-6.00p.m.	<i>Break</i>		
	6.00-8.00p.m.	Using quantitative tools in biology	Prof. Matsudaira	G
	8.00pm	<i>Social activity: Informal discussion hosted by Asst. Prof. Saunders</i>		

## DAY 6

Date	Time	Content	Lecturer	Venue
Wednesday 9 <sup>th</sup> Aug 2017		<i>No lesson</i>		

## DAY 7

Date	Time	Content	Lecturer	Venue
Thursday 10 <sup>th</sup> Aug 2017	9.00-10.00a.m.	Gene editing	Dr. Lieu	G
	10.00-10.30a.m.	Genomes	Prof. Tucker-Kellogg	
	10.30-11.00a.m.	<i>Break (coffee and discussion)</i>		Outside G
	11.00-11.30a.m.	Genomes	Prof. Tucker-Kellogg	G
	11.30-12.30p.m.	Genomics worksheet	Prof. Tucker-Kellogg Assoc. Prof. He Dr. Lieu	
	12.30-1.30p.m.	<i>Lunch</i>		
	1.30-5.30p.m.	Microscopy	Assoc. Prof. He Asst. Prof. Saunders Dr. Ong	MBI CBIS SMART
	5.30-6.00p.m.	<i>Break</i>		
	6.00-8.00p.m.	Evolution of complex traits	Assoc. Prof Monteiro	G
	8.00p.m.	<i>Social activity: Informal discussion hosted by Asst. Prof. Saunders</i>		

## DAY 8

Date	Time	Content	Lecturer	Venue
Friday 11 <sup>th</sup> Aug 2017	9.00-9.45a.m.	Statistical methods for biology	Prof. Koehl	G
	9.45-10.15a.m.	Perils of the p-value	Asst. Prof. Saunders	
	10.15-10.45a.m.	Theoretical modeling in biology	Asst. Prof. Carrasco	
	10.45-11.15a.m.	Break (coffee and discussion)		Outside G
	11.15-12.30p.m.	Statistics and modeling problem solving	Prof. Koehl Asst. Prof. Saunders Asst. Prof. Carrasco	G
	12.30-1.30p.m.	Lunch		
	1.30-5.00p.m.	Advanced Matlab (II)	Prof. Koehl Asst. Prof. Saunders Dr. Ong	P
	5.00p.m.	Move to MBI		
	5.10-5.30p.m.	Informal discussion with Prof. Michael Sheetz and Prof. Yu Hao		MBI Level 10, lobby
	5.30-8.00p.m.	TGIF		

## DAY 9

Date	Time	Content	Lecturer	Venue
Saturday 12 <sup>th</sup> Aug 2017	9.00-10.30a.m.	Group presentations (by student registrants)	Assoc. Prof He Asst. Prof. Saunders Dr. Ong	G
	10.30-11.00a.m.	<i>Break (coffee and discussion)</i>		Outside G
	11.00-12.30p.m.	Group presentations (by student registrants)	Assoc. Prof He Asst. Prof. Saunders Dr. Ong	G
	12.30-1.30p.m.	<i>Lunch</i>		
	1.30-6.00p.m.	Writing workshop	Assoc. Prof. He Asst. Prof. Saunders	P

## DAY 10

Date	Time	Content	Lecturer	Venue
Sunday 13 <sup>th</sup> Aug 2017	6.00p.m.	Deadline for submission of report  Email report to: Assoc. Prof. He @ <a href="mailto:dbshyc@nus.edu.sg">dbshyc@nus.edu.sg</a> and Asst. Prof. Saunders @ <a href="mailto:dbsste@nus.edu.sg">dbsste@nus.edu.sg</a>		