
Wednesday 17 October 2018

15:30 - 17:00	Arrival and Registration ATC Registration Desk	
17:00 - 17:15	Welcome & Opening Remarks ATC Auditorium	
17:15 - 19:25	Session 1 - Systems and Synthetic Biology Chair: Peter Philippsen ATC Auditorium	
17:15 - 17:45	Writing genomes Jef Boeke <i>New York University, United States of America</i>	1
17:45 - 18:15	WHO's yo' Momma, HO? Kenneth Wolfe <i>University College Dublin, Ireland</i>	2
18:15 - 18:45	Epigenetic feedbacks linking DNA-dependent processes: how cells maintain expression homeostasis during DNA replication Naama Barkai <i>Weizmann Institute of Science, Israel</i>	3
18:45 - 19:05	Molecular drivers of complex heritability revealed by a natural genotype-to-phenotype map Christopher M Jakobson <i>Stanford University School of Medicine, United States of America</i>	4
19:05 - 19:25	Chemical genomics in genetically diverse strains of <i>Saccharomyces cerevisiae</i> Bede Busby <i>EMBL Heidelberg, Germany</i>	5
19:25 - 23:00	Dinner & Get Together EMBL Canteen	

Thursday 18 October 2018

09:00 - 12:30	Session 2 - Evolutionary Systems Biology I Chair: Anja Forche ATC Auditorium	
09:00 - 09:30	Can microbes help explain the evolution of host cooperation? Lilach Hadany <i>Tel Aviv University, Israel</i>	6
09:30 - 10:00	Yeast as a model to understand how new genes are born Anne-Ruxandra Carvunis <i>University of Pittsburgh, United States of America</i>	7
10:00 - 10:20	Mapping genetic variation in gene expression by simultaneous quantification of mRNA and protein levels in single cells Christian Brion <i>University of Minnesota, United States of America</i>	8
10:20 - 10:50	Coffee Break ATC Auditorium Foyer	
10:50 - 11:20	Paralogous interference in cellular networks Christian Landry <i>Université Laval, Canada</i>	9
11:20 - 11:50	To be presented onsite Daniela Delneri <i>University of Manchester, United Kingdom</i>	10
11:50 - 12:10	Recombining your way out of trouble: Adaptation to stressful environments through hybridization Rike Stelkens <i>Stockholm University, Sweden</i>	11

12:10 - 12:30	Dramatic variations in extrachromosomal DNA circle complement are caused by environmentally responsive gene expression	12
	Jonathan Houseley <i>Babraham Institute, United Kingdom</i>	
12:30 - 13:30	Lunch ATC Auditorium Foyer	
13:30 - 14:10	Poster Introduction (odd numbers) ATC Auditorium	
14:10 - 16:00	Poster Session I (odd numbers) ATC Helix A	
16:00 - 19:10	Session 3 - Experimental Evolution Chair: Jolanda van Leeuwen ATC Auditorium	
16:00 - 16:30	Gain of function mutations in yeast evolved in and out of the lab	13
	Maitreya Dunham <i>University of Washington, United States of America</i>	
16:30 - 17:00	To be presented onsite	14
	Gavin Sherlock <i>Stanford University, United States of America</i>	
17:00 - 17:20	Re-coding the <i>Saccharomyces cerevisiae</i> genome through evolution	15
	Ana Rita Guimarães <i>University of Aveiro, Portugal</i>	
17:20 - 17:50	Coffee Break ATC Auditorium Foyer	
17:50 - 18:20	To be presented onsite	16
	Michael Desai <i>Harvard University, United States of America</i>	

EMBO Workshop: Experimental Approaches to Evolution and Ecology Using Yeast

- 18:20 - 18:50 **Systems biology of yeast metabolism** 17
Jens Nielsen
Chalmers University of Technology, Sweden
- 18:50 - 19:10 **Repurposing the function of a kleisin protein in budding yeast** 18
Yu-Ying Phoebe Hsieh
Harvard University, United States of America
- 19:10 - 21:30 **Dinner**
EMBL Canteen
- 21:30 - 23:00 **After Dinner Drinks**
ATC Rooftop Lounge

Friday 19 October 2018

09:00 - 12:30	Session 4 - Metabolic and Inter-species Networks I Chair: Frank Albert ATC Auditorium	
09:00 - 09:30	Nematode pheromone-mediated prey sensing is highly polymorphic among the wild isolates of nematode-trapping fungi Yen-Ping Hsueh <i>Academia Sinica, Taiwan</i>	19
09:30 - 10:00	Rapid adaptation to the host environment by <i>Cryptococcus neoformans</i> involves genomic changes Kirsten Nielsen <i>University of Minnesota, United States of America</i>	20
10:00 - 10:20	Comparative pangenome analysis across yeast species reveals a variability shaped by introgression events Anne Friedrich <i>University of Strasbourg / CNRS, France</i>	21
10:20 - 10:50	Coffee Break ATC Auditorium Foyer	
10:50 - 11:20	To be presented onsite Markus Ralser <i>University of Cambridge, United Kingdom</i>	22
11:20 - 11:50	Unravelling inter-species metabolite exchange by combining modeling, genetic and metabolomic approaches Kiran Patil <i>EMBL Heidelberg, Germany</i>	23
11:50 - 12:10	Induction of aneuploidy enables yeast to grow without the major membrane lipid phosphatidylcholine Xue Bao <i>Utrecht University, The Netherlands</i>	24

- 12:10 - 12:30 **The landscape of *S. paradoxus* introgression in *S. cerevisiae* strains from diverse environments** 25
Anne Clark
University of Washington, United States of America
- 12:30 - 13:30 **Lunch**
ATC Auditorium Foyer
- 13:30 - 14:10 **Poster Introduction (even numbers)**
ATC Auditorium
- 14:10 - 16:00 **Poster Session II (even numbers)**
ATC Helix A
- Free Afternoon & Evening**
- 17:00 - 18:30 **Optional: Brewery Tour**
Brauerei zum Klosterhof

Saturday 20 October 2018

09:00 - 12:30	Session 5 - Evolutionary Systems Biology II Chair: Shay Ben-Aroya ATC Auditorium	
09:00 - 09:30	Proteotoxic stress due to loss of interaction partners induces reproductive isolation in yeast hybrids Jun-Yi Leu <i>Academia Sinica, Taiwan</i>	26
09:30 - 10:00	Feedbacks on cyclin-dependent kinase activity: evolution of safety nets for cell cycle control Damien Coudreuse <i>Institute of Genetics and Development of Rennes, France</i>	27
10:00 - 10:20	Compensated deleterious mutations as drivers of morphological evolution Balazs Papp <i>Biological Research Centre of the Hungarian Academy of Sciences, Hungary</i>	28
10:20 - 10:50	Coffee Break ATC Auditorium Foyer	
10:50 - 11:20	Mechanisms controlling variation in yeast growth Mark Siegal <i>New York University, United States of America</i>	29
11:20 - 11:50	Genetic assimilation of epigenetic adaptation in experimental yeast populations Jonas Warringer <i>University of Gothenburg, Sweden</i>	30
11:50 - 12:10	Interactions between two transcription factors modulate positive feedback in a eukaryotic bistable system Naomi Ziv <i>University of California, San Francisco, United States of America</i>	31

EMBO Workshop: Experimental Approaches to Evolution and Ecology Using Yeast

12:10 - 12:30	Host-virus coevolution in laboratory populations of yeast	32
	Sean Buskirk <i>Lehigh University, United States of America</i>	
12:30 - 14:00	Lunch EMBL Canteen	
14:00 - 15:20	Session 6 - Evolution of Complex Traits I Chair: Giulia Rancati ATC Auditorium	
14:00 - 14:30	Evolving cross-resistance via aneuploidy in <i>Candida albicans</i>	33
	Judith Berman <i>Tel Aviv University, Israel</i>	
14:30 - 15:00	Natural variation in the response to gene over-expression in wild <i>Saccharomyces cerevisiae</i> strains	34
	Audrey Gasch <i>University of Wisconsin-Madison, United States of America</i>	
15:00 - 15:20	Single-cell copy number variant detection reveals the dynamics and diversity of adaptation	35
	David Gresham <i>New York University, United States of America</i>	
15:20 - 15:50	Coffee Break ATC Auditorium Foyer	
15:50 - 17:10	Session 7 - Metabolic and Inter-species Networks II Chair: Hsin-Hung Chou ATC Auditorium	
15:50 - 16:20	Genetic conflicts and developmental constraints shape centromeric histone function	36
	Harmit Malik <i>Fred Hutchinson Cancer Research Center, United States of America</i>	

Programme

16:20 - 16:50	Evolution of functional promoters from random sequences	37
	Jeff Gore <i>Massachusetts Institute of Technology, United States of America</i>	
16:50 - 17:10	Genetic dissection of an ancient divergence in yeast thermotolerance	38
	Rachel Brem <i>University of California, Berkeley, United States of America</i>	
17:10 - 17:40	Coffee Break	
	ATC Auditorium Foyer	
17:40 - 19:00	Session 8 - Evolution of Complex Traits II Chair: Gianni Liti	
	ATC Auditorium	
17:40 - 18:10	Surrogate Genetics: Science at the interface of precision medicine and synthetic biology	39
	Aimée Dudley <i>Pacific Northwest Research Institute, United States of America</i>	
18:10 - 18:40	The complex underpinnings of genetic background effects	40
	Ian Ehrenreich <i>University of Southern California, United States of America</i>	
18:40 - 19:00	High-resolution yeast meiotic recombination landscape and its genomic modulators	41
	Jia-Xing Yue <i>Université Côte d'Azur, CNRS, Inserm, IRCAN, France</i>	
19:00 - 20:30	Dinner	
	EMBL Canteen	
20:30 - 00:00	Party	
	ATC Rooftop Lounge	