

The Institute of Genetic and Biomedical Research of CNR in collaboration with the Technology Park of Sardinia, the European School of Genetic Medicine, the University Residential Centre of Bertinoro and the Center for Advanced Studies, Research and Development in Sardinia (CRS4) organize the



5th Sardinian International Summer School June 20-24, 2016

“From genome-wide association studies (GWAS) to function”

The Summer School is dedicated to cover state-of-the-art theory and practice of the approaches to the identification of the genetic bases of human diseases, in particular related to complex and monogenic traits.

Venue:

Polaris Techno Park
Building 2
Loc. Piscinamanna,
09010 Pula (CA), Italy

Registration Fee:

FREE OF CHARGE FOR
ALL ATTENDEES.

Selection based on CV
and motivation letter.

**Deadline for
application:**

June 10th 2016

For updates, program,
registration and info
please visit the web
site:

[www.irgb.cnr.it/
summerschool2016](http://www.irgb.cnr.it/summerschool2016)

mail info:

info_sc2016@irgb.cnr.it

School Directors:

Francesco Cucca (Italy), Marcella Devoto (Italy, USA); Giovanni Romeo (Italy)

Faculty:

G. Abecasis (USA), F. Cucca (Italy), T. Meitinger (Germany), S. Montgomery (USA), J. Novembre (USA), D. Nickerson (USA), O. Ohara (Japan), L. Pagani (UK), S. Sawcer (UK), D. Schlessinger (USA), C. Sidore (Italy), J. Todd (UK), E. Zeggini (UK)

Course Program

This course is designed to explore the current state of the molecular basis of complex genetic variation in humans and to use this information in different research areas applying new methodologies. The course program consists of lectures and practical sessions that are geared toward moving from GWAS data to functional studies. Data from genome-wide association studies will explore, starting from experimental design, through data analysis of genetic control of traits and their impact of functional information on variations.

The course will use a combination of lectures and demonstrations with a heavy emphasis on hands-on data analysis, which requires students' active participation. The focus will be on making maximum interaction with teachers and the creation of useful contacts with the other participants.

This summer school is intended for advanced pre-doctoral students, post-doctoral researchers from Biological and Health Sciences and other different backgrounds (including bioinformatics and mathematics) that wish to learn more about or move into the complex genomics field.

Tentative Timetable

Monday, June 20		Specific titles *	
08:30-9:00	Registration		
09:00-10:00	Scientific Session	Introduction to Population Genetics	John Novembre
10:00-11:00	Scientific Session	In and out of Africa: our genomic whereabouts	Luca Pagani
11:00-11:30	Coffee break		
11:30-12:30	Scientific Session	GWAS overview	Eleftheria Zeggini
12:30-14:00	Lunch Break		
14:00-15:30	Workshop	Population Structure/Signature of Selection	John Novembre
15:30-16:00	Coffee break		
16:00-17:30	Workshop	Next generation association studies in isolated populations	Eleftheria Zeggini
Tuesday, June 21			
09:00-10:00	Scientific Session	Whole Genome Sequencing	Goncalo Abecasis
10:00-11:00	Scientific Session	Insights from Next Generation Sequencing	Deborah Nickerson
11:00-11:30	Coffee break		
11:30-12:30	Scientific Session	Regulatory variants in individuals, families and populations	Stephen Montgomery
12:30-14:00	Lunch Break		
14:00-15:30	Workshop	NGS variant calling	Carlo Sidore
15:30-16:00	Coffee break		
16:00-17:30	Workshop	Variants databases	Deborah Nickerson
Wednesday, June 22			
09:00-10:00	Scientific Session	From GWAS to function: The example of the Sardinia founder population	Francesco Cucca
10:00-11:00	Scientific Session	Genetics of neuroblastoma: linkage studies of the familial form and GWAS of sporadic cases	Marcella Devoto
11:00-11:30	Coffee break		
11:30-12:30	Poster viewing		
12:30-14:00	Lunch Break		
	Free afternoon		
Thursday, June 23			
09:00-10:00	Scientific Session	From genotype to phenotype: Mind the gap in multi-scale structure of the phenotype	Osamu Ohara
10:00-11:00	Scientific Session	From genes to pathways to therapeutic opportunities and a better understanding of the human immune system	John Todd
11:00-11:30	Coffee break		
11:30-12:30	Scientific Session	Mitochondrial Diseases	Thomas Meitinger
12:30-14:00	Lunch Break		
14:00-15:30	Workshop	RNA sequencing and analysis	Stephen Montgomery
15:30-16:00	Coffee break		
16:00-17:30	Workshop		
Friday, June 24			
09:00-10:00	Students Presentations		
10:00-11:00	Scientific Session	The genetics of multiple sclerosis	Stephen Sawcer
11:00-11:30	Coffee break		
11:30-12:30	Scientific Session	Genetics of Aging	David Schlessinger
12:30-14:00	Lunch Break		
	Adjourn		

* list of titles is provisional and subject to change

Event organized by Institute of Genetic and Biomedical Research of CNR in collaboration with European School of Genetic Medicine, University Residential Centre of Bertinoro and the Center for Advanced Studies, Research and Development in Sardinia (CRS4) - Sponsored by RAS

Language

English is the official language of the school.

Venue

Polaris Technology Park- Loc. Piscinamanna, 09010 Pula (CA), Italy. The Technology Park is located in the territory of Pula, in the hinterland of Cagliari, close to the South-Western coast of Sardinia. Its grounds cover an area of 160 ha, set in a nature park at the foot of the Sulcis mountain range.

Accommodation

Faculty and students will stay at Hotel located near the seaside, a few kilometers from the Polaris Technology Park. A very special rate has been agreed with the Local Organizing Committee.

In order to benefit from the special Summer School rate for accommodation arrangements and reservations, please contact: info_sc2016@irgb.cnr.it

Superior

The rate for a double standard room occupancy (to be share with another participant) is € 92,00/per night per person.

The rate for a double standard single use per person is € 117,00/per night.

Standard

The rate for a double standard room occupancy (to be share with another participant) is € 72,00/per night per person.

All rates include breakfast and dinner and free transfer to and from the Summer School venue.

Applications:

The course is funded by the Regional Sardinian government and registration will be free of charge for all attendees. Selection will be based on CV and a letter stating the motivations for attending the course and future research plans of candidates. A letter of reference from the current supervisor must also be attached to the application.

Registration includes course material, lunches and coffee breaks (not accommodation expenses – see below). Free shuttle services will be provided from Cagliari Elmas Airport to the hotel and from the hotel to the Polaris Technology Park Auditorium.

Deadline for all applications:

June 10, 2016 at 18.00.

Congress Secretariat

Course Organizer: Dr. Andrea Angius

Summer School Secretary: Jessica Bazzoli

Please do not hesitate to contact the Secretariat if you require any additional information or assistance.

Please address all correspondence to: info_sc2016@irgb.cnr.it