International Summer School
Cancer biology and therapeutic strategies
towards personalized medicine
Lipari, Italy June 5-9, 2017

SOCIETÀ ITALIANA DI FARMACOLOGIA

Welcome

The International Summer School of Cancer biology is intended for attendees from Europe interested in the most appealing topics in Cancer Research. This year the School is focused on "Cancer biology and therapeutic strategies towards personalized medicine". During the Summer School, 17 lectures of 90 min (including discussion) will be delivered by experts among the best in the field of basic and clinical cancer research.

Attendees
CISSN is addressed to students, PhD students and Post-Doctoral fellows interested in Cancer Research and CRISPR/Cas9 based therapeutic approches.

Topic
With the presence of some of the most renowned world experts in the field, the Summer School will cover the basic aspects of cancer biology, therapeutic strategies and metastasis development. The new metastatic theory of Genometastasis along with the new therapeutic approach with CRISPR/Cas9 will be also covered.
This instructional course includes both basic science and clinical lectures, highlighting the need of translational approaches in Cancer Research.

Deadlines
Registration February 10, 2017
Fee payment by April 30, 2017

Organizers

Coordinator:
Alessandra Bitto – Department of Clinical and Experimental Medicine University of Messina, Italy

Scientific Committee:
Andrea Ventura - Memorial Sloan Kettering Cancer Center - USA
Carmelo Gabriele Pizzino - Department of Clinical and Experimental Medicine University of Messina, Italy

Travel and accomodation:
Lisciotto Turismo srl, Messina, Italy

Teaching Units and Lecturers

Unit 1: A brief history of cancer: from retroviruses to tumor suppressor genes - *Andrea Ventura*- Memorial Sloan Kettering Cancer Center - USA

Unit 2: Principles of signal transduction - *Kevin Haigis* – Harvard University - USA

Unit 3: Regulation of the cell cycle - *Julien Sage* – Stanford University - USA

Unit 4: Tumor suppressor genes - *Alejandro Sweet Cordero* - Stanford University - USA

Unit 5: The Ras family of oncogenes and APC - *Kevin Haigis*– Harvard University - USA

Unit 6: Modeling cancer in the mouse: from gene targeting to somatic genome editing - *Andrea Ventura*- Memorial Sloan Kettering Cancer Center - USA

Unit 7: Regulation of growth and cell survival: Hippo pathway, Pten, Akt, etc - *Joseph Kissil*- Scripps research institute- USA

Unit 8; Cancer metabolism: mTor, Warburg effect. etc - *Joseph Kissil*- Scripps research institute- USA

Unit 9: Cancer genomics and the promise of personalized medicine - *Alejandro Sweet Cordero* - Stanford University- USA

Unit 10: Targeted therapies - *Al Charest* – Harvard University - USA

Unit 11: Metastasis and microenvironment - *Al Charest* – Harvard University - USA

Unit 12: Genometastasis – *Goffredo Arena* – McGill University - Canada

Unit 13: Tumor immunology and tumor immunotherapy - *Julien Sage* – Stanford University - USA

Unit 14: HER2 assessment in human tumors: methodological aspects and prognostic/predictive role for targeted therapy - *Giovanni Tuccari/Antonio Ieni*– University of Messina - Italy

Unit 15: Molecular features of colorectal cancer : diagnostic, prognostic and therapeutic applications - *Giuseppe Giuffrè* – University of Messina - Italy

Unit 16: Computational Cancer Analysis - *Alfredo Ferro* – University of Catania - Italy

Unit 17: Drug response and resistance to anticancer agents: the importance of pharmacogenetics – *Vincenzo Adamo/Tindara Franchina* – University of Messina - Italy