

# THE FUTURE OF CANCER THERAPY: THE GENOME EDITING ERA

*8-9th June 2017*



**University Magna Græcia, Catanzaro (Italy)**

**Aula Magna C**  
1° Level Building G

**PRELIMINARY  
PROGRAMME**

# PRESENTATION

*In June 2017, the Italian Association for Cell Cultures (AICC) have organized focused meeting dedicated to "Genome Editing". During the meeting several national and international experts in the field will discuss this interesting technical innovation and its possible applications in basic, translational research and design of novel anti-cancer therapy. Genome editing is a technology that induces specific changes in the DNA of a cell or organism that allows studying their influence in the determination of the phenotypic characteristics. The meeting aims to transfer to the participants the know-how on the currently available methods to induce changes in the DNA of a cell system and how to use them to accurately study the function of different genes, to understand how they work and their definitive biological effects. The meeting will also illustrate several cell and animal models, and will end with a practical demonstration of advanced models for the study of different human diseases in order to design innovative therapeutic approaches. With these specific objectives, the meeting has been approved by Italian Ministry of Health for Continuous Education and Training in medical, biological, pharmaceutical and technological areas.*

*Maria Teresa Di Martino*

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*(IRCCS Rizzoli Orthopedic Institute, Bologna)*

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E-mail meeting: [aicc.umg@unicz.it](mailto:aicc.umg@unicz.it)



10.00 Registration

10.30 Introduction: **Pierosandro Tagliaferri, Pierfrancesco Tassone**

Greetings from the Chancellor and local authorities

**Pre-meeting: "Hot topics in Medical Oncology:  
From genomics to molecular therapies of human cancer"**

Chairs: **Vito Barbieri** (*Catanzaro, Italy*) - **Marco Rossi** (*Catanzaro, Italy*)

11.00 PDL1 analysis and beyond in lung cancer immunotherapy

**Umberto Malapelle** (*Naples, Italy*)

11.20 New generation of kinase inhibitor in the continuum of care of thyroid and renal-cell cancer

**Camillo Porta** (*Pavia, Italy*)

11.40 CDK inhibitors: a new perspectives in breast cancer

**Enrico Ricevuto** (*L'Aquila, Italy*)

12.00 Liquid Biopsy in novel cancer treatment scenario

**Marta Castiglia** (*Palermo, Italy*)

12.20 Genomics of ovarian cancer in predictive oncology: the PARP inhibitors case

**Ettore Capoluongo** (*Rome, Italy*)

12.40 Discussion and closing remarks

13.00 Light lunch\*

14.00 Opening ceremony

Greeting from AICC President **Katia Scotlandi** (*Bologna, Italy*)

Welcome and Meeting introduction **Maria Teresa Di Martino** (*Catanzaro, Italy*)

**Session 1: CRISPR-Cas9-based therapeutic strategies against human diseases**

Chairs: **Stefania Meschini** (*Rome, Italy*) - **Carlo Leonetti** (*Rome, Italy*)

14.30 TALEN gene edited cells for Allogeneic Adoptive Immunotherapy: from clean room to off-the-shelf

**Roman Galetto** (*Cellectis SA, France*)

14.50 Genome editing of T lymphocytes for cancer immunotherapy

**Chiara Bonini** (*Milan, Italy*)

15.10 CRISPR/Cas9 mediated knock-out of RUNX2 in melanoma cells

**Maria Teresa Valenti** (*Verona, Italy*)

15.30 CRISPR/Cas9 rescue of gene dosage in patient-specific models of neurodevelopmental disorders caused by large CNV

**Giuseppe Testa** (*Milan, Italy*)

15.50 Functional genomic in cancer research

**Simona Lamba** (*Turin, Italy*)

16.10 Coffee Break\*

16.30 CRISPR/Cas9 system on zebrafish to generate human disease model

**Gianluca Deflorian** (*Milan, Italy*)

16.50 The use of CRISPR/Cas9 knock-out technology in non-mammalian animal models

**Thomas Vaccari** (*Milan, Italy*)

17.10 CRISPR Gene Editing: Resources for High-Throughput Screening and Disease Models

**Livio Loffarelli** (*Thermo Scientific, Italy*)

17.30 Novel Technologies For Rapid Generation Of Custom Animal Models And Streamlined Cloning Workflows (NOT for ECM evaluation)

**Matthew Wheeler, Kristofer Müssar** (*Cyagen Biosciences GmbH, Europe*)

**Close session and concluding remarks**

**June 9th 2017**

### **Session 2: Insights in Genome Editing Technologies**

Chairs: **Francesca Zazzeroni** (*L'Aquila, Italy*) - **Massimo Donadelli** (*Verona, Italy*)

9.00 Construction of sgRNA-Cas9 complexes and identification of single-cell mutations to determine editing frequency

**Franco Martinez** (*EuroClone, Italy*)

9.20 How to improve your CRISPR genome editing experiments

**Mirko Vanetti** (*Integrated DNA Technologies, Italy*)

9.40 Rapid and tunable method to temporally control gene editing based on conditional Cas9 stabilization

**Vincenzo Corbo** (*Verona, Italy*)

10.00 CRISPR/Cas9 for the study of the interactions between viral and cellular proteins

**Donato Zipeto** (*Verona, Italy*)

10.20 Targeted Genome Editing using CRISPR Technology (NOT for ECM evaluation)

**Silvia Di Meglio** (*Merck Sigma-Aldrich srl, Italy*)

**Close session and concluding remarks**

10.40 Coffee Break\*

### **Session 3: CRISPR-Cas9 perspectives in genome editing**

Chairs: **Marcello Maggiolini** (*Cosenza, Italy*) - **Michele Caraglia** (*Naples, Italy*)

11.00 A non-integrative strategy to streamline the derivation of isogenic iPSC lines through the Cas9/sgRNA ribonucleoprotein complex

**Sebastiano Trattaro** (*Milan, Italy*)

11.20 Epigenome deregulation and mining in leukemias

**Lucia Altucci** (*Naples, Italy*)

11.40 Genome editing in human repopulating hematopoietic stem cells

**Pietro Genovese** (*Milan, Italy*)

12.00 Genome editing and generation of physiologically relevant model of leukemogenesis

**Giovanni Morrone** (*Catanzaro, Italy*)

12.20 High efficiency Genome Editing using EnGenCRISPR/Cas9 Ribonucleoprotein Complexes (NOT for ECM evaluation)

**Karl Von Laer** (*New England Biolabs, Germany*)

12.35 Efficient delivery of Cas9 and gRNA for in vitro use of CRISPR/Cas9 technology (NOT for ECM evaluation)

**Guillaume Freund** (*Polyplus Transfection, France*)

**Close session and concluding remarks**

12.50 Light lunch\*

### **Session 4: Young investigators meeting and round table on genome editing**

Chairs: **Nicola Amodio** (*Catanzaro, Italy*) - **Cirino Botta** (*Catanzaro, Italy*)

14.10 - 14.40 **Selected oral presentation**

14.50 **Round table**

**Award Ceremony**

# FACULTY

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**Lucia Altucci** (Naples, Italy)  
**Nicola Amodio** (Catanzaro, Italy)  
**Vito Barbieri** (Catanzaro, Italy)  
**Chiara Bonini** (Milan, Italy)  
**Cirino Botta** (Catanzaro, Italy)  
**Ettore Capoluongo** (Rome, Italy)  
**Michele Caraglia** (Naples, Italy)  
**Marta Castiglia** (Palermo, Italy)  
**Vincenzo Corbo** (Verona, Italy)  
**Gianluca Deflorian** (Milan, Italy)  
**Maria Teresa Di Martino** (Catanzaro, Italy)  
**Silvia Di Meglio** (Merck Sigma-Aldrich srl, Italy)  
**Massimo Donadelli** (Verona, Italy)  
**Guillaume Freund** (Polyplus Transfection, France)  
**Roman Galetto** (Collectis SA, France)  
**Pietro Genovese** (Milan, Italy)  
**Simona Lamba** (Turin, Italy)  
**Carlo Leonetti** (Rome, Italy)  
**Livio Loffarelli** (Thermo Scientific, Milan)  
**Marcello Maggiolini** (Cosenza, Italy)  
**Umberto Malapelle** (Naples, Italy)  
**Franco Martinez** (EuroClone, Italy)  
**Stefania Meschini** (Rome, Italy)  
**Giovanni Morrone** (Catanzaro, Italy)  
**Katia Scotlandi** (Bologna, Italy)  
**Kristofer Müssar** (Cyagen Biosciences GmbH, Europe)  
**Camillo Porta** (Pavia, Italy)  
**Enrico Ricevuto** (L'Aquila, Italy)  
**Marco Rossi** (Catanzaro, Italy)  
**Katia Scotlandi** (Bologna, Italy)  
**Pierosandro Tagliaferri** (Catanzaro, Italy)  
**Pierfrancesco Tassone** (Catanzaro, Italy)  
**Giuseppe Testa** (Milan, Italy)  
**Sebastiano Trattaro** (Milan, Italy)  
**Thomas Vaccari** (Milan, Italy)  
**Maria Teresa Valenti** (Verona, Italy)  
**Mirko Vanetti** (Integrated DNA Technologies, Italy)  
**Matthew Wheeler** (Cyagen Biosciences GmbH, Europe)  
**Karl Von Laer** (New England Biolabs, Germany)  
**Francesca Zazzeroni** (L'Aquila, Italy)  
**Donato Zipeto** (Verona, Italy)



## GENERAL INFORMATION

### When:

Thursday 8th - Friday 9th, June 2017

### Where

Magna Graecia University - Campus S. Venuta - Aula Magna C, 1° Level, Building G  
Viale Europa - 88100 Catanzaro, Italy

### Who

The meeting is open to: biologist, medical doctor, pharmacist, laboratory technician, biotechnologist, bioinformatics, researcher, PhD, student and Association.

**Max Participants: 160**

**ECM Credits for 100 participants**

## A REGISTRATION QUOTE IS REQUESTED.

Travel and accommodation costs of participants are not included.

Travel grant or Poster awards will be provided

## CREDITI FORMATIVI ECM / CME CREDITS (FOR ITALIAN PARTICIPANTS ONLY)

I crediti formativi ECM sono certificati dal Provider secondo la nuova regolamentazione approvata dalla Commissione Nazionale per la Formazione Continua il 13 gennaio 2010 e s.m.i.

L'accreditamento del Congresso viene effettuato per l'intero evento in un'unica soluzione, incluso Pre-meeting.

**Sono stati assegnati n. 10 (dieci) crediti.** Provider ID 2112 - Evento n. 190433.

I crediti sono rivolti a Medici specialisti in Anatomia Patologica, Biochimica Clinica, Ematologia, Farmacologia e Tossicologia Clinica, Genetica Medica, Laboratorio di Genetica Medica, Medicina Interna, Microbiologia, Neurologia, Cardiologia, Oncologia, Patologia Clinica - Laboratorio di Analisi chimico-cliniche, Biologia, Biotecnologia, Farmacia, Laureati in CTF, Tecnici di Laboratorio Biomedico. Si ricorda che avranno diritto ai crediti ECM solo coloro che saranno presenti almeno all'80% del programma scientifico congressuale accreditato.

La rilevazione delle presenze avviene tramite la firma su appositi registri posizionati presso il Registration Desk. L'assenza di una sola delle firme necessarie determinerà l'impossibilità di assegnazione dei crediti. Nel materiale congressuale è incluso anche il modulo di valutazione dell'evento da compilare e consegnare alla fine del Meeting.

## REGISTRATION FEES (VAT included)

### **Early registration by April 30th**

AICC Member € 120,00

Non-Member € 170,00 (€ 120,00+50,00 mandatory membership fee)

Student € 50,00

### **On-site registration**

AICC Member € 150,00

Non-Member € 200,00 (€ 150,00+50,00 mandatory membership fee)

Student € 50,00

### **The registration fee includes:**

- Conference kit
- Participation in the Scientific Sessions
- Attendance Certificate
- Admission to the Opening Ceremony, coffee break and lunch.\*  
*Please do want to indicate to the Secretariat any food intolerances.*

### **How to register**

The registration and payment forms are available on line at the website: **[www.aicc.website](http://www.aicc.website)**

For general information please see the websites: **[www.aicc.website](http://www.aicc.website)**

## ABSTRACT SUBMISSION

The Scientific Committee encourage all participants to submit their work to be considered for oral or poster presentation. All works should be submitted as 350 words abstract indicating

- o oral presentations
- o poster presentations (70w x 100h cm)

The Scientific Committee will select the oral presentations for

DEADLINE FOR ABSTRACT SUBMISSION IS April 30<sup>th</sup>

Notification of acceptance for presentation or rejection, information about date and time of discussion, will be sent by the Organizing Secretariat by e-mail

TO BE NOTED: for each accepted abstract, the registration fee of at least one of the Authors will be required. Each author can be entitled to be “presenting author” of one abstract only.

## ADDITIONAL GENERAL INFORMATION

**LANGUAGE:** The official language of the Meeting is English.

**SLIDES:** Slides must be in English. Computer videoprojection will be available in Power Point. Slides should be given to the slide center one hour before the beginning of the session.

**ATTENDANCE CERTIFICATE:** A certificate will be sent to all participants at the end of the Meeting.

**PRACTICAL INFORMATION:** How to reach the meeting venue

**By air:** From International Airport Lamezia Terme, the Campus can be reached by car in about 35 min. Proceed along the SS280 direction Catanzaro, take the exit for Germaneto, continue along Viale Europa.

**By bus:** from Catanzaro railway station take local public transport, routes 47 or 48 and from Catanzaro Lido railway station route 46 (for timetables visit the website [www.amcspa.it](http://www.amcspa.it)).

**By car:** from Catanzaro 15 minutes roughly: proceed along the SS280 direction Lamezia Terme, take the exit to Germaneto, continue along Viale Europa. From A3 motorway, exit Lamezia Terme - Catanzaro, the Campus can be reached in about 35 min.: proceed along the SS280 direction Catanzaro, take the exit to Germaneto, continue along Viale Europa. From Soverato 25 min. roughly: proceed along the Ionian highway 106 northwards up to the intersection of Catanzaro Lido, turn to direction Lamezia Terme, continue along Viale Europa.

## HOTEL ACCOMMODATION

Hotel accommodation can be reserved in Catanzaro through the Organizing Secretariat that has selected hotels with negotiated rates. Agencies or companies in need for group reservations can address their request to [info@organizzazionechronos.it](mailto:info@organizzazionechronos.it) not later 30 April 2017. Rooms will be allocated on a first come - first served basis. After the indicated deadline accommodation cannot be guaranteed although will make every effort to meet the participants' requests upon availability. In order to avoid disappointment, early bookings are recommended. No telephone reservation will be accepted.

## TERMS OF PAYMENT

Please note that your registration and/or hotel reservation cannot be processed without payment. Please submit your payment information together with the completed registration form you have to pay to:

**Registration to:** AICC (Associazione Italiana Culture Cellulari): <http://www.aicc.website/>

**Hotel reservation to:** Administrative Secretariat “Present & Future” - BANCA NUOVA spa - V.le Pio X 67/69 88100 Catanzaro - IBAN IT83Y0513204401824570363682 - Swift code: BPVIIT31824

The participant's and sender's names must be clearly indicated on the transfer order as well as the payment purposes. The copy of the payment advice must be sent together with the registration form

**ATTENTION:** Registrations can be considered valid only after having received the payment. Forms without proof of payment will not be processed.



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## COME RAGGIUNGERE LA SEDE DEL CONVEGNO



### In aereo:

Dall'Aeroporto internazionale di Lamezia Terme (SUF), si raggiunge in auto in circa 35 min.:

procedendo lungo la SS280 dei due mari direzione Catanzaro, prendere lo svincolo per Germaneto, proseguire lungo Viale Europa.

### In auto:

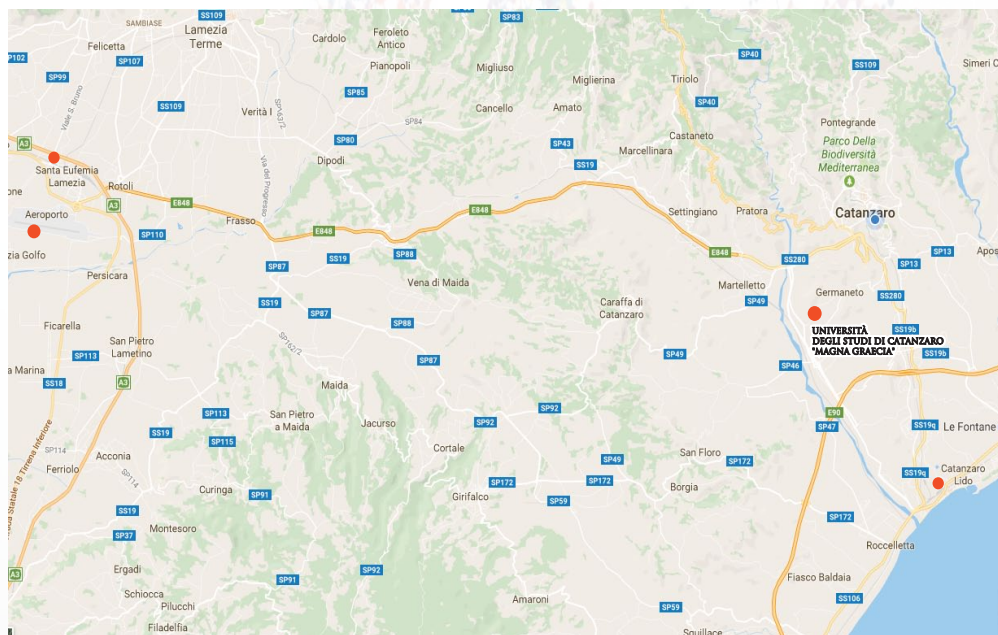
**Dal centro storico di Catanzaro** in circa 15 minuti: procedendo lungo la SS280 dei due mari direzione Lamezia Terme, prendere lo svincolo per Germaneto, proseguire lungo Viale Europa.

**Dall'autostrada A3**, uscita Lamezia Terme - Catanzaro, si raggiunge in circa 40 min.: procedendo lungo la SS280 dei due mari direzione Catanzaro, prendere lo svincolo per Germaneto, proseguire lungo Viale Europa.

### In treno:

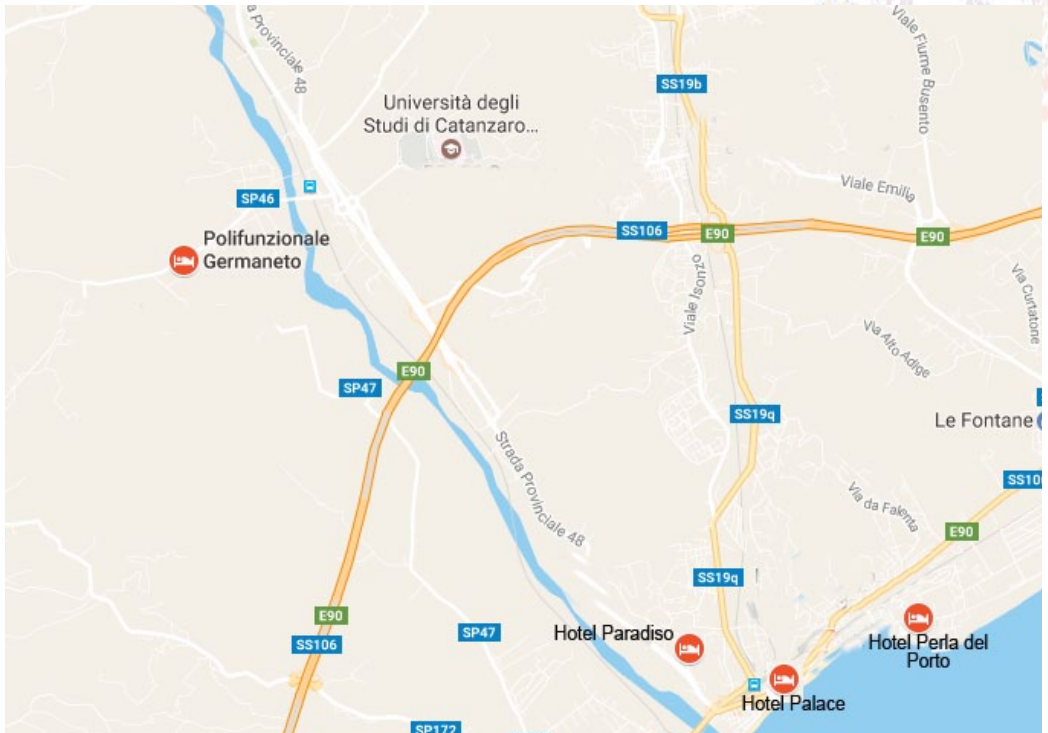
Dalla stazione di Catanzaro (destinazioni e orari si possono trovare sul sito web di Trenitalia, [www.trenitalia.com](http://www.trenitalia.com)), usufruire dei trasporti pubblici locali, linee 47 o 48 (AMC, [www.amcsa.it](http://www.amcsa.it)).

Dalla stazione di Catanzaro Lido (destinazioni e orari si possono trovare sul sito web di Trenitalia, [www.trenitalia.com](http://www.trenitalia.com)), usufruire dei trasporti pubblici locali, linea 46 (AMC, [www.amcsa.it](http://www.amcsa.it)).





## HOTEL ACCOMODATION



### **BEST WESTERN PLUS Hotel Perla Del Porto**

Via Martiri di Cefalonia, 64, 88100 Catanzaro

### **Hotel Palace**

Via Lungomare Stefano Pugliese, 221, 88100 Catanzaro

### **Hotel Paradiso:**

Viale Europa 2, 88100 Catanzaro (Italy)

### **Polifunzionale Germaneto:**

Strada Provinciale 46 per San Floro

Loc. Difesa, snc, 88050 Caraffa di Catanzaro CZ

#### LOCAL ORGANIZING COMMITTEE

**Nicola Amodio**  
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#### ADMINISTRATIVE SECRETARIAT



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