

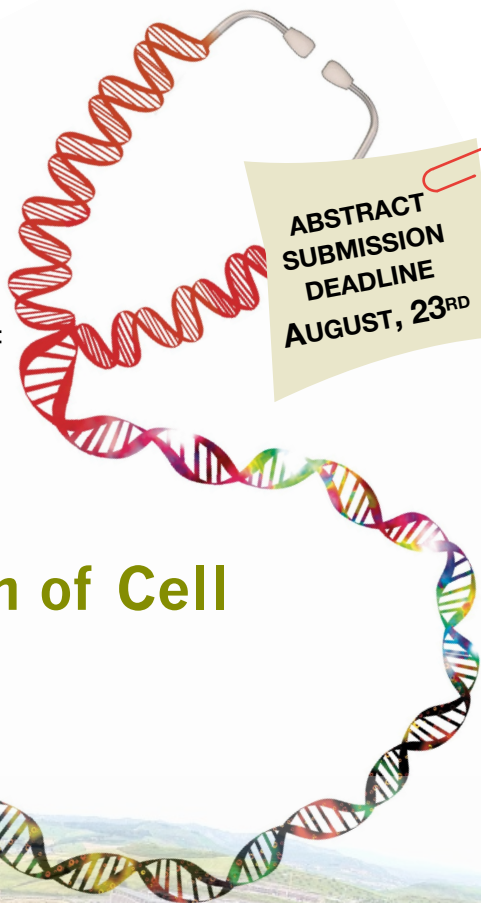


October 1<sup>st</sup> - 2<sup>nd</sup>, 2019  
Catanzaro, Italy

1<sup>st</sup> International  
and 32<sup>nd</sup> Annual  
Conference of  
**Italian Association of Cell  
Cultures**  
(AICC)

**From Single  
Gene Analysis to  
Single Cell Profiling:  
A New Era for Genomic Medicine**

Università Magna Græcia, Catanzaro  
Aula Magna C  
Level 1, building G



PROGRAMME



32<sup>nd</sup>  
Annual Conference

Molecular profiling of DNA and RNA has provided valuable new insights into the genetic basis of non-malignant and malignant disorders. These advances have important implications for future research as well as clinical practice in areas such as molecular diagnostics, gene/pathway-directed targeted therapy, which in turn could drive drug discovery. It is well known that both inherited and somatic genetic alterations contribute to disease predisposition and progression, but also shape responsiveness to therapy and treatment complications.

Recent technological advances have enabled the analyses of genomic and epigenomic variation in a comprehensive, high-throughput fashion using next generation sequencing (NGS). NGS has radically transformed cancer research, showing that each tumor type typically exhibits distinct constellations of genetic alterations targeting one or more key cellular pathways that regulate cell growth and proliferation, evasion of the immune system, and other aspects of cancer behavior. These genetic and epigenetic events have been identified and may now be used as prognostic markers or for monitoring disease progression and treatment response, as targets for new therapies, and in the setting of genetic counseling and disease surveillance.

The conference wants to offer the participants the opportunity to match technological solutions and clinical needs in the era of precision medicine. From circulating biomarkers to mutational, transcriptomics and immunomics landscape, this year meeting will describe a panorama of the renewed platforms for personalization of therapy.

The meeting President  
*Maria Teresa Di Martino*

## Day 1 - October 1<sup>st</sup>

9:00 **Opening ceremony**

Greetings from Academic and AICC authorities

*Chairs: Pierosandro Tagliaferri, Pierfrancesco Tassone*

9:20 **Keynote lecture**

Inducing phenotypes, discovering them, and instantly solving them

**Bruce A. Beutler, Dallas, TX**

10:00 **Distinguished lecture - Day 1**

The BAP1 cancer syndrome: unique mechanisms and clinical characteristics requiring specific medical approaches

**Michele Carbone, Honolulu, HI**

10:30 - 11:00 **Coffee Break and poster visit** ☕

11:00 - 12:30 **SESSION I**

**Biomarkers for diagnosis, monitoring of progression and therapeutic response**

The development of new technology and clinical standards for discovery and use of biomarkers in disease diagnosis, monitoring and response to therapy.

*Chairs: Stefania Meschini, Katia Scotlandi*

11:05 Precision Medicine and non-communicable diseases

**Giuseppe Novelli, Rome, IT**

11:25 Microenvironment-driven heterogeneity in cancer: morphological views

**Claudio Tripodo, Palermo, IT**

11:45 PD-L1 and beyond: from PD-L1 detection to the tumor mutation burden

**Andrea Ronchi, Naples, IT**

12:05 Evolution of liquid biopsy concept in oncology

**Umberto Malapelle, Naples, IT**

12:25 Selected oral communication n°1

12:35 Selected oral communication n°2

12:50 - 13:50 **Light lunch and poster visit** 🍴

## Day 1 - October 1<sup>st</sup>

### 13:50 - 15:20 **SESSION II**

#### **Single cell profiling: from bench to bedside**

Highlights on the use of single-cell genomics to increase our understanding of the tumor microenvironment and identify new therapeutic targets.

*Chairs: Chiara Riganti, Carlo Leonetti*

- 13:55 Understanding the molecular mechanisms underlying T lymphocyte differentiation and plasticity using Single Cell RNA-Seq  
**Massimiliano Pagani, Milan, IT**

- 14:15 Genomic principles of signal integration in macrophages  
**Renato Ostuni, Milan, IT**

- 14:35 Single Cell transcriptomics uncovers distinct molecular signatures of therapy-resistant leukemic stem cells  
**Alice Giustacchini, London, UK**

- 14:55 Selected oral communication n°1

- 15:05 Selected oral communication n°2

- 15:20 - 15:50 **Coffee Break and poster visit** 

### 15:50 - 16:15 **TECHNICAL SESSION I**

#### **Insights in single gene analysis technologies**

The section will include innovative technologies for single events identification from different biological matrices and different human diseases.

*Chair: Marco Rossi, Francesco Trapasso*

- 15:55 Bringing precision oncology closer to patients  
**Federica Berti, Thermofisher Scientific**

- 16:10 Role of polychromatic flow cytometry and cell sorting in the evaluation of minimal residual disease in acute leukemias  
**Francesco Gervasi, Beckman Coulter**

- 16:25 Automation and live cell imaging: a new approach in contract research for anticancer drug discovery  
**Francesco P. Fiorentino, Kitos Biotech/Gilson Italia SRL**

16:40 How to resolve heterogeneity: BD multiomics solution  
**Giusy Capuano - Werner Rodriguez, Becton Dickinson Italia**

16:55 *Discussion and Day 1 take-home message*

19:00 - 23:00 *Social Event*

## Day 2 - October 2<sup>nd</sup>

9:00 - 10:50 **SESSION III**

### **Functional genomics in clinical practice**

This section will highlight the role of «precision functional genomics» in phenotypically characterizing genetic variants at scale.

*Chairs: Francesca Zazzeroni, Enrico De Smaele*

9:05 Genomic instability in multiple myeloma  
**Daniele Caracciolo, Catanzaro, IT**

9:25 Genomic landscape of pancreatic neuroendocrine tumors  
**Andrea Mafficini, Verona, IT**

9:45 Analysis of cancer genomic data to achieve better patient stratification and personalized molecular profiling  
**Javier De Las Rivas, Salamanca, ES**

10:05 Novel mechanisms of tumor suppression  
**Giovanni Tonon, Milan, IT**

10:25 Selected oral communication n°5

10:35 Selected oral communication n°6

10:50 - 11:20 *Coffee Break and poster visit* ☕

11:20 **Distinguished Lecture - Day 2**

Title to be announced

**Gerry Melino, Rome, IT**

## Day 2 - October 2<sup>nd</sup>

### 11:50 - 12:50 **TECHNICAL SESSION II**

#### **Insights in single cell profiling technologies**

The section will include innovative technologies for high throughput transcriptomics, genomics, proteomics, immunomics, miRNomics analysis and in vivo models for the dissection of tumor microenvironment.

*Chairs: Daniele Torella, Carmela De Marco*

11:55 Zebrafish model for neuroendocrine tumors: an in vivo platform for personalized therapy

**Giovanni Vitale, Milan, IT**

12:10 Biology at true resolution with 10X Genomics

**Diego Muzzini, Carlo Erba Reagents**

12:25 QIAGEN bioinformatics in NGS: from fastq to interpretation, how to analyze somatic and germline mutations and expression profiling

**Mita Mancini, Qiagen**

12:40 *Discussion*

12:50 - 13:50 *Light lunch and poster visit* 

### 13:50 - 16:00 **SESSION IV**

#### **Functional immunomics in precision medicine**

The section will deal with the use of immunomics as a new research tool in system biology of cellular immune responses, and how this can be exploited to ameliorate cancer immunotherapy

*Chairs: Marcello Maggiolini, Massimo Donadelli*

13:55 Inflammosomics in the prediction of response to immunotherapy

**Pierpaolo Correale, Reggio Calabria, IT**

14:15 Identification of antigenic targets for cancer immunotherapy

**Luigi Buonaguro, Naples, IT**

14:35 Cancer clonal evolution as therapeutic target

**Mariangela Russo, Turin, IT**

- 15:55 **Closing lecture**  
Driving the CAR beyond the checkpoints  
**Francesco Marincola, California, USA**
- 15:35 **AWARD CEREMONY**
- 16:00 **CLOSING REMARKS**

## **AICC Scientific Board**

### **President**

**Michele Caraglia**, Università Vanvitelli di Napoli, Naples (IT)

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## **AICC Secretariat**

Massimo Donadelli ([massimo.donadelli@univr.it](mailto:massimo.donadelli@univr.it))

Evelin Pellegrini ([evelin.pellegrini@guest.iss.it](mailto:evelin.pellegrini@guest.iss.it))

Meeting e-mail: [aicc.umg@unicz.it](mailto:aicc.umg@unicz.it)

## Faculty

**Federica Berti**, Thermofisher Scientific, Monza (IT)  
**Bruce A. Beutler**, UT Southwestern Medical Center, Dallas (TX)  
**Luigi Buonaguro**, IRCSS Fondazione G. Pascale, Naples (IT)  
**Daniele Caracciolo**, Università degli Studi Magna Græcia di Catanzaro, Catanzaro (IT)  
**Michele Carbone**, University of Hawaii Cancer Center, Honolulu (HI)  
**Pierpaolo Correale**, Grande Ospedale Metropolitano, Reggio Calabria (IT)  
**Javier De Las Rivas**, University of Salamanca, Salamanca (ES)  
**Francesco P. Fiorentino**, Kitos Biotech/Gilson Italia SRL  
**Francesco Gervasi**, Beckman Coulter, Palermo (IT)  
**Alice Giustacchini**, University College London, London (UK)  
**Andrea Mafficini**, University of Verona, Verona (IT)  
**Umberto Malapelle**, Università degli Studi di Napoli Federico II, Naples (IT)  
**Mita Mancini**, Qiagen, Berlin (DE)  
**Francesco Marincola**, Refuge Biotechnologies, Menlo Park (CA)  
**Gerry Melino**, Università Tor Vergata, Rome (IT)  
**Diego Muzzini**, Carlo Erba Reagents, Milan (IT)  
**Renato Ostuni**, San Raffaele Telethon Institute for Gene Therapy (SR-Tiget), Milan (IT)  
**Giuseppe Novelli**, Università Tor Vergata, Rome (IT)  
**Massimiliano Pagani**, Università degli Studi di Milano, Milan (IT)  
**Andrea Ronchi**, IRCSS Fondazione G. Pascale, Naples (IT)  
**Mariangela Russo**, Istituto di Candiolo - IRCCS, Turin (IT)  
**Giovanni Tonon**, Università Vita-Salute San Raffaele, Milan (IT)  
**Claudio Tripodo**, Università degli Studi di Palermo, Palermo (IT)  
**Giovanni Vitale**, Università degli Studi di Milano, Milan (IT)

## Local organizing committee ↑

**Emanuela Altomare**  
**Mariamena Arbitrio**  
**Daniele Caracciolo**  
**Michelangelo Iannone**  
**Marcello Maggolini**  
**Marco Rossi**  
**Francesca Scionti**  
**Pierosandro Tagliaferri**  
**Pierfrancesco Tassone**  
**Giuseppe Vigiiletto**



## General information



**When:** October 1<sup>st</sup> -2<sup>nd</sup>, 2019



**Where:** Università Magna Græcia - Campus Salvatore Venuta - Aula Magna C, Level 1, Building G - Viale Europa - 88100 Catanzaro, Italy

## Registration fees

	Meeting fee (VAT included)	Annual Membership	Total
<b>AICC/GISM members - Entire duration</b>	200,00		200,00
<b>Non-members - Entire duration</b>	200,00	50,00	250,00
<b>AICC/GISM members - One-day registration</b>	100,00		100,00
<b>Non-members - One-day registration</b>	100,00	50,00	150,00
<b>On site registration</b>	200,00	50,00	250,00
<b>Undergraduate and PhD Students</b>		50,00	50,00

The participation to the conference is reserved to AICC and GISM members.

Registration fees include:

- Admission to all meeting sessions
- Admission to the exhibition areas
- Abstract book
- Attendance certificate
- Conference kit
- Coffee break, light lunch

*\*Please indicate any food intolerance on the registration form.*

Registration fees do not include travel and accommodation costs.

The registration form and payment details are available online at the link: [www.aicc.website](http://www.aicc.website)

Registration without payment is not considered valid.

The maximum number of participants is 160.

## Additional information

Language: the meeting official language is English

Slides: slides must be written in English, and should be handed to the slide centre one hour before the beginning of each session. Computer video projection will be available in Power Point format.

Attendance certificate: a certificate of attendance will be sent to all participants at the end of the meeting.

Meeting WiFi: a specific open WiFi network will be available. 

## Abstract submission

The Scientific Committee encourages all participants to submit their work to be considered for oral or poster presentation. All works should be submitted as 350 words abstract indicating the author's preference for oral versus poster presentation.

Among the participants, n.6 posters will be selected for oral presentation. The Scientific Committee will select the oral presentations.



**Abstract submission opens June 17<sup>th</sup>, 2019**

**Abstract submission closes July 19<sup>th</sup>, 2019**

Each author can be the Presenting Author of one abstract only. For each accepted abstract, at least one of the authors has to be registered to the conference.

Submitted abstract should focus on the following topics:

- Biomarkers in malignant and non-malignant disease
- Cancer genetics, genomics and epigenetics
- Cancer immunotherapy
- Cell metabolism
- Gene/pathway-directed targeted therapy
- Genetic screening
- Mechanisms of metastatic spreading
- Transcriptomics
- Tumor-associated immune and stromal cells

## Awards

AICC will award a number of prizes for best oral or poster presentation by authors younger than 35 years of age. Each award is worth 500 euros.

One 500 euro prize will be awarded to the best poster presentation by an author younger than 35 years of age by the Journal of Experimental and Clinical Cancer Research.

## Social Events

All participants will be admitted to a guided tour of Catanzaro old city. This will be followed by a social dinner held in the beautiful San Giovanni Terrace.

## How to reach the meeting venue



**From Lamezia Terme International Airport:** it takes a 35 minutes-drive to reach Università Magna Graecia from Lamezia Terme International Airport (SUF). From the airport, take SS280 towards Catanzaro, proceed until the exit for Germaneto, and continue onto Viale Europa till the University Building. Alternatively, take the bus to either Germaneto, Catanzaro or Catanzaro Lido. Several bus services are available from Monday to Saturday: for more details on timetables and fees, visit <https://lameziaairport.it/trasporti/>. A local public shuttle connects the airport to Lamezia Terme Centrale railway station. For timetables, visit <http://www.lameziamultiservizi.it>



**From Lamezia Terme Centrale Railway Station:** take the train to either Catanzaro or Catanzaro Lido. For timetables, visit [www.trenitalia.it](http://www.trenitalia.it)

### **From Catanzaro Railway Station:**

- by public transportation: take either one of the buses U1/U2/U3/U4/U5 towards «CAMPUS». Info on [www.amcspa.it](http://www.amcspa.it)

- by car (15 min): take SS280 towards Lamezia Terme, proceed until the exit for Germaneto, and continue onto Viale Europa till the University Building.

### **From Catanzaro Lido Railway Station:**

- by public transportation: take the U1 bus towards «CAMPUS». Info on [www.amcspa.it](http://www.amcspa.it)

- by car: take Strada Provinciale 48 towards Catanzaro until the intersection with Viale Europa, proceed on Viale Europa until the University Building



**From Soverato (25 min):** take the Ionian highway 106 northwards up to the intersection with Catanzaro Lido, take a turn towards Lamezia Terme and continue onto Viale Europa.

**From A3 motorway (Salerno-Reggio Calabria):** take the exit for Lamezia Terme/Catanzaro, proceed along SS208 towards Catanzaro until the exit for Germaneto and continue onto Viale Europa.



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## Hotel accommodation

Affiliated hotels:

Hotel Palace, Via Lungomare, 221 

Hotel Niagara, Viale Crotona, 170 

The meeting will provide scheduled shuttle services for transfers between Lamezia Terme International Airport, Lamezia Terme Centrale Railway Station, the conference venue and the affiliated hotels.

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