



ASSOCIAZIONE ITALIANA DI
CULTURE CELLULARI
Associazione di Promozione Sociale
(APS)



**November 22th - 24th 2021, Turin
Hybrid meeting**

**Dissecting metabolic circuitries in cancer
cells and microenvironment: how to learn
from bad lessons to develop new
therapeutic opportunities**

PRELIMINARY PROGRAM

**33rd AICC ANNUAL CONFERENCE:
INTERNATIONAL MEETING ON CANCER METABOLISM**

CONFERENCE AIMS

The tumor cell and its microenvironment, including the stroma, the vascular component and the immune infiltrate, are linked by multiple cross talks that allow the adaptation of the cancer cells to unfavorable conditions, such as hypoxia, nutrient deprivation, cytotoxicity induced by radiotherapy and chemotherapy, host's immune system recognition.

In this meeting, internationally recognized speakers will discuss the complexity of the metabolic changes that occur during tumor transformation, progression, and acquisition of resistance to therapy. The metabolic circuits established between the tumor cell and the microenvironment, leading to the selection of more aggressive and resistant clones, will be dissected and analyzed, with the final goal to identify new predictive and prognostic biomarkers for patient's stratification and new therapeutic targets.

Recently, genomics, transcriptomics and proteomics have significantly improved the diagnostic accuracy and the therapeutic approach to the oncological patients, increasingly leading to personalized diagnoses and treatments. The metabolomics is an indispensable complement to the other "omic" techniques, if integrated with single-cell imaging, flow-cytometry or molecular-biology-based assays, currently used at preclinical and clinical levels.

In the era of high-throughput techniques at the service of biomedical research and precision medicine, great importance will be given to the most innovative technologies that allow the metabolic mapping of each cancer and/or the generation of in vitro metabolic "avatars" of the individual patient, to make the stratification procedure and the efficacy of therapeutic treatment more and more accurate. The most relevant brands in the field will be present at the meeting, illustrating the latest innovations in a dedicated technical session.

We believe that the meeting will be highly attractive for a broad spectrum of scientists, working in basic and translational research, as well as in clinic units. Besides the presence of world-class speakers, the AICC meeting continues its long tradition of involving young researchers, dedicating slots for oral communications and posters. The best works presented by young scientists will be awarded by special prizes.

Looking for meeting you,

Prof. Michele Caraglia
AICC President



Prof. Chiara Riganti
AICC Board member
Meeting Organizer



11.00 am - 2:00 pm: **Registration**

2:00 - 2:20 pm: **Opening and Greetings**

- **Prof. Chiara Riganti** (Università degli Studi di Torino, IT), *meeting President*
- **Prof. Michele Caraglia** (Università della Campania, IT), AICC President

Greeting from University of Torino Faculty members

- **Prof. Umberto Ricardi**, Director of the School of Medicine
- **Prof. Federico Bussolino**, Director of the Department of Oncology
- **Prof. Franco Novelli**, Director of the PhD School in Molecular Medicine and Director of the Department of Molecular Biotechnology and Health Sciences
- **Prof. Fiorella Altruda**, Director of the Interdepartmental Molecular Biotechnology Center

OPENING LECTURE

2.20-3.00 pm: **Alexander von Humboldt Professorship 2021 Awardee Lecture**
Fumarate hydratase loss as a paradigm of oncometabolism.

Christian Frezza, MRC Cancer Unit, University of Cambridge, UK & CECAD, and University of Cologne, Germany

SESSION I: I – Emerging metabolic pathways in cancer initiation and progression

3.00-3.20 pm: **Rewiring of acetyl-CoA metabolism supports pancreatic carcinogenesis.** Alessandro Carrer, Veneto Institute of Molecular Medicine (VIMM) and Department of Biology, University of Padova, Italy

3.20-3.40 pm: **A phosphoinositide switch mediates responses to glutamine withdrawal in pancreatic cancer.** Emilio Hirsch, Molecular Biotechnology Center, University of Torino, Italy

3.40-4.00 pm: **Hexosamine Pathway inhibition: one molecule hitting more than one target as promising cancer therapy.** Ferdinando Chiaradonna, Department of Biotechnology and Biosciences, University of Milano Bicocca, Milano, Italy

4.00-4.30 pm: **coffee break and posters/virtual stands view**

4.30-4.50 pm: **Targeting NAD(P) biosynthetic enzymes in cancer cells** Nadia Raffaelli, Polytechnic University of Marche, Ancona, Italy

4.50-5.10 pm: **Multistep reprogramming of myeloid cells in cancer.** Antonio Sica, University of Eastern Piedmont "A. Avogadro", Novara, Italy, and Humanitas Clinical and Research Center – IRCCS, Rozzano, Italy

5:10-5.30 pm: **Targeting NF- κ B/CES1 axis to block colorectal cancer cell metabolic adaptation.** Daria Capece, Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila, Italy

5.30-5.40 pm: **technical talk #1**

5.40-5.50 pm: **selected oral communication #1**

5.50-6.00 pm: **selected oral communication #2**

6.00-6.10 pm: **selected oral communication #3**

6.10 pm: **Closing remarks of day I**

6.15-7.00 pm: **AICC Steering Board** (Board of Directors only)

8:00 - 9:00 am: *Registration*

SESSION II: Metabolic rewiring in tumor progression and response to therapy

9.00-9.40 am: **Novel connections between autophagy pathways and the metabolic control of gene expression in cancer and inflammation**

Patrizia Agostinis, Cell Death Research & Therapy lab, Department of Cellular and Molecular Medicine & VIB Center for Cancer Biology, KU Leuven, Leuven, Belgium

9.40-10.00 am: **Survival pathways triggered by respiratory Complex I**

deficiency in solid cancers. Anna Maria Porcelli, Department of Pharmacy and Biotechnology, University of Bologna

10.00-10.20 am: **P53 modifies the outcome of inducing metabolic collapse as an anticancer strategy. Giuseppe Gasparre**, Medical Genetics Unit,

Department of Medical and Surgical Sciences (DIMEC) and Center for Applied Biomedical Research (CRBA), University of Bologna, Italy

10.20-10.40 am: **Regulation of protein synthesis and respiration by a**

common molecular chaperone to develop novel therapeutic approaches in cancer cells. Franca Esposito, Department of Molecular Medicine and Medical Biotechnologies, Università di Napoli Federico II, Napoli, Italy

10.40-11.00 am: **Cancer metastasis prevention with selective mtROS**

inhibitor. Pierre Sonveaux, Pole of Pharmacology & Therapeutics, IREC Institute, catholic University of Louvain (UCLouvain), Belgium

11.00-11.20 am: **coffee break and posters/virtual stands view**

SESSION III: Dealing with complexity: metabolic plasticity and heterogeneity in cancer progression

11.20-11.40 am: **Unveiling metabolic plasticity in cancer (stem) cells.**
Claudia Piccoli, Department of Clinical and Experimental Medicine,
University of Foggia, Italy

11.40-12.00 am: **Metabolic heterogeneity as a driver of stem cell fate and tumorigenesis.** **Carlos Sebastian**, Department of Cell Biology, Physiology and Immunology, University of Barcelona, Spain

12.00-12.20 am: **The interaction between LOXL2 and BRD4 short isoform drives the expression of DREAM target genes in triple negative breast cancer.** **Sara Sdelci**, Centre for Genomic Regulation, Barcelona, Spain

12.20-12.30 am: **technical talk #2**

12.30-12.40 am: **technical talk #3**

12.40-12.50 am: **selected oral communication #4**

12.50 am-1.00 pm: **selected oral communication #5**

1.00-2.00 pm: **lunch and posters/virtual stands view**

SESSION IV: Disrupting the bad liaisons between tumor and its microenvironment (I)

2.00-2.40 pm: **Harnessing tumor metabolism to overcome immunosuppression**
Massimiliano Mazzone, VIB – KULeuven Center for Cancer Biology, Belgium

2.40-3.00 pm: **Macrophage Immunometabolism: where are we (going).**
Jan Van den Bossche, Department of Molecular Cell Biology and Immunology,
Amsterdam UMC, Vrije Universiteit Amsterdam

3.00-3.10 pm: **technical talk #4**

3.10-3.20 pm: **selected oral communication #6**

3.20-3.30 pm: **selected oral communication #7**

3.30-3.40 pm: **selected oral communication #8**

3.40-4.00 pm: **coffee break and posters/virtual stands view**

SESSION V: Disrupting the bad liaisons between tumor and its microenvironment (II)

4.00-4.40 pm: **Lactate-driven metabolic and epigenetic prostate tumor-stroma crosstalk.** **Paola Chiarugi**, Department of Experimental and Clinical Biomedical Sciences, School of Medicine, University of Florence, Italy

4.40-5.00 pm: **At the crossroads of tumor microenvironment and metabolism: role of acidosis in tumor evolution.** **Cyril Corbet**, Pole of Pharmacology and Therapeutics (FATH), Institut de Recherche Expérimentale et Clinique (IREC), UCLouvain, Brussels, Belgium

5.00-5.20 pm: **Targeting lactate transport as a therapeutic approach in cancer**
Fatima Baltazar, Life and Health Sciences Research Institute (ICVS), University of Minho, Portugal

5.20 pm: **Closing remarks of day II**

5.30-6.30 pm: **AICC general assembly** (AICC members only)

SESSION VI: From the complexity of cancer cell metabolism toward a new therapeutic era

9.00-9.40 am: **Microenvironment and mechanosignalling in cancer: emerging roles of mutant p53 and Pin1.** **Giannino Del Sal**, Department of Life Sciences, University of Trieste, ICGEB-International Centre for Genetic Engineering and Biotechnology-Trieste, and IFOM-Firc Institute of Molecular Oncology- Milan, Italy

9.40-10.00 am: **Repurposing metabolic drugs revealed lipid anabolism as a metabolic vulnerability to kill Triple-Negative Breast Cancer Stem-Like Cells and reduce metastases.** **Luca Cardone**, Institute of Biochemistry and Cell Biology (IBBC)-National Research Council (CNR), Roma, and Tumor Immunology and Immunotherapy Unit, IRCCS Regina Elena National Cancer Institute, Roma, Italy

10.00-10.20 am: **A sound waves-based platform for 3D cancer model development.** **Tiziano Serra**, AO Research Institute Davos, Switzerland

10.20-10.40 am: **Metabolic insights from cell culture to animal models.** **Saverio Tardito**, Oncometabolism Lab - Cancer Research UK Beatson Institute, Glasgow, United Kingdom

10.40-10.50 am: **technical talk #5**

10.50-11.00 am: **technical talk #6**

11.00-11.20 am: **Coffee break and posters/virtual stands view**

CLOSING LECTURE

11.20-12.00 am: **Translating current metabolic knowledge into future cancer therapy.**

Eyal Gottlieb, Laura and Isaac Perlmutter Chair of Cancer Research, Ruth and Bruce Rappaport Faculty of Medicine, Technion – Israel Institute of Technology, Haifa, Israel

12.00-12.30 am: **AWARDS CEREMONY and CLOSING REMARKS**

AICC SCIENTIFIC BOARD

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Michele Caraglia, University of Campania “L. Vanvitelli”, Naples, Italy

Vice President

Stefania Meschini, Istituto Superiore di Sanità, Rome, Italy

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MD/PhD Program of the School of Medicine

PhD School in Health and Life Sciences, University of Torino

PhD program in Molecular Medicine

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PhD program in Experimental Medicine and Therapy

PhD program in Medical Physiopathology

PhD program in Complex Systems for Quantitative Biomedicines

Faculty

Patrizia Agostinis, UCL Louvain, Louvain, Belgium

Fatima Baltazar, University do Minho, Porto, Portugal

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Tiziano Serra, AO Foundation, Davos, Switzerland

Antonio Sica, Humanitas Clinical and Research Center – IRCCS/Università degli Studi del Piemonte Orientale, Italy

Pierre Sonveaux, UCL Louvain, Louvain, Belgium

Saverio Tardito, Beatson Research Institute, Glasgow, UK

Registration fees

Registration fees	Meeting fee (VAT included)
On-site attendance (maximum 100 participants)	200.00 €
On-line attendance (no limit of participants)	150.00 €
PhD students, students of medical specialization schools, undergraduate students (both on-site/on-line) *	75.00 €
PhD students of the School of Health and Life Sciences, students of School of Medicine, University of Torino (both on-site/on-line) **	<i>Free admittance</i>

* Please provide a certificate of your status of student along with the payment receipt to: aicc.meeting@gmail.com

** To register: do not use the link to the Google form, but send the "Registration form for UNITO students" (from: <https://www.aicc.website/>), with a certificate of your enrollment in the PhD School of Health and Life Sciences, or School of Medicine, University of Torino, to: aicc.meeting@gmail.com.

The first 20 registered students from University of Torino have the possibility to attend on-site; from the 21st registration, online attendance is possible (with no limit of participants).

Please notice that in case you have chosen to attend onsite and you change this option/would not be able to attend, you can attend online, but AICC cannot pay back the difference between the onsite and the online fee.

Registration to the meeting includes:

- Admission to all meeting sessions and meeting online material
- Abstract book file (PDF)
- Attendance certificate
- Conference kit
- Coffee break, light lunch

Registration without payment is not considered valid.

PAYMENT

Bank transfer to:

Associazione Italiana di Colture Cellulari

IT97B0538703612000003002045 BPER BANCA S.P.A.

L'Aquila, agenzia 10, Via Campo di Pile, 67100 L'Aquila (AQ)

Reason for payment (causale): please, indicate your surname, name and title of the event.

INFORMATION

To participate to the meeting is required a valid AICC membership.

Membership request forms are available at the following link:

https://docs.google.com/forms/d/e/1FAIpQLSddVWcfO9X4YhgbiLiHcyngR4I8_ne2P_Cm0Gp2XLO2oXj-HA/viewform?usp=sf_link

The admittance on-site is possible only for participants with a valid EU-Green Pass, according to the current Italian Law (D.L. 6 agosto 2021, n. 111).

In case you do not have a valid EU-Green Pass at the time of the conference, you can attend online.

AICC Secretariat

Massimo Donadelli, massimo.donadelli@univr.it

Evelin Pellegrini, evelin.pellegrini@ior.it

Event technical support

Xenia Eventi, info@xeniaeventi.it

On-site Secretariat

Joanna Kopecka, joanna.kopecka@unito.it

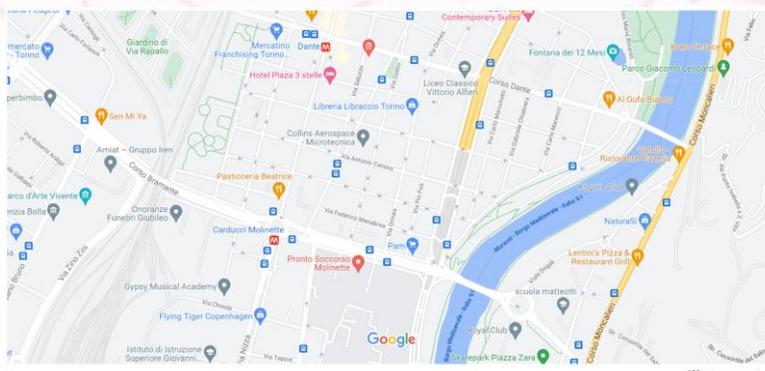
Iris Chiara Salaroglio, irischiara.salaroglio@unito.it

Conference Venue

Meeting Center “Molinette Incontra”

Aula Magna “A.M. Dogliotti”

Address: AOU Città della Salute e della Scienza, Corso Bramante 88, 10126 Torino (Italy)



33rd AICC ANNUAL CONFERENCE:

INTERNATIONAL MEETING ON CANCER METABOLISM

Registration and abstract submission

Opening: 1st October 2021 - **Deadline:** 1st November 2021

To register, please use this link (all participants, except UNITO students):

https://docs.google.com/forms/d/e/1FAIpQLSddVWcfO9X4YhgbiLiHcyngR4I8_ne2P_Cm0Gp2XLO2oXj-HA/viewform?usp=sf_link

Please note that this is a provisional registration; the registration will be confirmed after completing the payment and sending the payment receipt to: aicc.meeting@gmail.com

For UNITO students: please do not use the above link, but send the “Registration form for UNITO students” (from: <https://www.aicc.website/>), along with a certificate of your enrollment in the PhD School of Health and Life Sciences or School of Medicine, to: aicc.meeting@gmail.com

ABSTRACT SUBMISSION

The submission of abstracts for oral presentations or posters is encouraged, particularly from early-career researchers.

Registration to the meeting is required to submit an abstract.

Deadline for abstract submission: 1st November 2021

The abstract form is available on the AICC website:

<https://www.aicc.website/>

To submit your abstract, please send the filled abstract form to:

aicc.meeting@gmail.com

Among the submitted abstracts, the AICC Scientific Board will select 8 oral communications (10 minutes).

Instruction for poster format (online format only) will be provided to all participants. Poster presenters are asked to submit a 3-minute pre-registered Power point flash presentation of their work along with their poster.

Participants will be informed of the selection by **10th November, 2021**.

The deadline to submit poster+ flash presentation is **18th November 2021**.

AWARDS

AICC will award best oral presentation(s) by authors younger than 35 years of age.

AICC will also award best poster/flash presentation(s) by authors younger than 35 years of age.

VIRTUAL POSTERS

Posters will be presented online. Poster view and poster flash presentations will be accessible to both on-site and on-line participants with a dedicated free platform provided by Xenia Eventi srl (info@xeniaeventi.it).

VIRTUAL STAND TOURS

During the coffee breaks and lunch time, virtual stands of companies will be accessible to both on-site and on-line participants **in an interactive** way with a dedicated free platform provided by Xenia Eventi srl (info@xeniaeventi.it).

COVID-related procedures and important information

Safety is the priority of AICC meeting.

Please read carefully the instructions below.

The admittance on-site is possible only for participants with a valid EU-Green Pass, according to the current Italian Law (D.L. 6 agosto 2021, n. 111).

The access to the meeting room is subjected to the temperature control and to filling of a specific self-declaration on: the absence of known symptoms related to Sars-CoV-2, the absence of known contacts with persons who tested positive for Sars-CoV-2 in the last 48 h, the absence of the condition of quarantine for the participant.

Participants name will be recorded to guarantee the most efficient traceability.

Participants are asked to:

- wear facial masks (surgical masks or FFP2 masks) during the event, except during the talks
- hygienize their hands with the hydrogels present in the meeting room every time they enter
- follow the indications about the social distancing in the meeting room and during breaks

Facial masks and individual hygienizing hydrogels will be also present at the registration desk and can be provided for free to all participants.

The AICC staff will be happy to provide any further support to grant a safe and enjoyable meeting.

Please note that:

- AICC does not cover the costs of quarantine in case of positivity to Sars-CoV-2 infection
- AICC does not cover the costs of Sars-CoV-2 molecular/antigenic tests required for travelling

Participants are strongly encouraged to provide themselves with a **travel insurance**, to cover the additional costs related to travel cancellation/changes, and with a **health insurance**, to cover the costs of eventual quarantine or additional tests related to Sars-CoV-2 infection.

Travelling in Italy

The information about the rules to enter in Italy from other countries and travelling within Italy can be found at the website of the Italian Ministry of Health (constantly updated):

<https://www.salute.gov.it/portale/nuovocoronavirus/homeNuovoCoronavirus.jsp?lingua=english>

Please regularly check this website.

Diagnostic tests

In case you need a molecular/antigenic tests for Sars-CoV-2, tests can be performed at:

Torino Caselle International Airport:

<https://www.aeroporto torino.it/en/tolive/airport-services/covid-test-point>

Milano Malpensa International Airport:

<https://www.milanomalpensa-airport.com/en/passenger-guide/news/nasal-swab-testing>

Torino train station “Porta Nuova” (h 10.00-18)

Pharmacies in Torino: please do not hesitate to ask to the AICC staff for the pharmacy nearest to the meeting center or your hotel.

With the unrestricted grants of:



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