

**BOLOGNA**  
**27-28 NOVEMBER 2018**

**CELL  
COMMUNICATION  
AND SIGNALING**

*How to turn bad language  
into positive one*

**IRCCS ISTITUTO ORTOPEDICO RIZZOLI**  
**Centro di Ricerca Codivilla-Putti, Aula Anfiteatro**  
Via di Barbiano 1/10, Bologna



SERVIZIO SANITARIO REGIONALE  
EMILIA-ROMAGNA  
Istituto Ortopedico Rizzoli di Bologna  
Istituto di Ricovero e Cura a Carattere Scientifico



## WELCOME LETTER

*Dear Members of the Italian Association of Cell Cultures (AICC), Colleagues and Friends,*

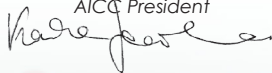
It is our great pleasure to welcome all of you in Bologna to the 31<sup>st</sup> Annual Conference of AICC, that will be held on November 27<sup>th</sup> and 28<sup>th</sup>, 2018. The meeting venue is the Rizzoli Orthopedic Institute, a historic Institution located in a beautiful monastic complex nearby Bologna center city, which embraces both basic research and clinical scientific studies.

"Cell Communication and Signaling: how to turn bad language into positive one", the title of the 2018 Meeting, stresses the challenges of researchers not only to understand the means of cell communication but also to change these languages in order to ensure the effective translation from preclinical results to clinical approaches. Growing evidence is showing the relevance of exosomes and other extracellular vesicles in therapeutic development and functional studies of cancer. The past two years, since the 2016 AICC meeting focused on exosomes in pathological conditions, have witnessed rapid and significant changes in this field, more and more showing the roles of tumor-secreted extracellular vesicles as players of intercellular communication and non-invasive tools with diagnostic, prognostic and potential therapeutic applications. The meeting will also focus on the relevance of 3D models and organoids as systems capable to mimic the complexity of whole organisms by far better than 2D in vitro cultures. We are confident that the novel results and ideas to be presented at the Meeting will significantly contribute to advance the field. We are indebted to members of the Local Scientific Committee and of the AICC Board who shaped a fresh and exciting scientific programme.

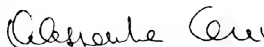
Young investigators are especially invited to participate and take advantage of the dedicated initiatives, including the awards that AICC, The Berlucchi Foundation and the Journal of Experimental and Clinical Cancer Research will offer for the best posters and the best oral presentation.

Really hoping you will appreciate the meeting, we look forward to seeing you all in Bologna!

Katia Scotlandi  
Scientific Coordinator  
AICC President



Alessandra Carè  
Scientific Coordinator



## AICC SCIENTIFIC BOARD

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### President

**Katia Scotlandi**, IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy

### VicePresident

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### Past President

**Carlo Leonetti**, IRCCS Regina Elena National Cancer Institute, Rome, Italy

## SCIENTIFIC AND ORGANISING COMMITTEE

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### Scientific Coordinators

**Alessandra Carè**, Istituto Superiore di Sanità, Rome, Italy

**Katia Scotlandi**, IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy

### Organising Committee

**Alessandra De Feo**, IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy

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**Federica Felicetti**, Istituto Superiore di Sanità, Rome, Italy

**Marika Sciandra**, IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy

**Massimo Serra**, IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy

## ORGANISING SECRETARIAT

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## AICC SECRETARIAT

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Istituto Superiore di Sanità - Via Regina Elena, 299 - 00161 Rome

## SPEAKERS

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### Invited Speakers

**Marco Agostini**, *University of Padua, Padua, Italy*

**Massimiliano Bonafè**, *Alma Mater Studiorum - Università di Bologna, Bologna, Italy*

**Carlo Bottari**, *HTG Molecular Diagnostics, Inc / Gilson Srl*

**George Calin**, *MD Anderson Cancer Center, Houston, US*

**Giovanni Camussi**, *University of Turin, Turin, Italy*

**Maria Carafa**, *"La Sapienza" University of Rome, Rome, Italy*

**Emma Nora Di Capua**, *Agilent Technologies SpA*

**Stefano Fais**, *Istituto Superiore di Sanità, Rome, Italy*

**Milena Fini**, *IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy*

**Simona Fontana**, *University of Palermo, Palermo, Italy*

**Susanne Gabrielsson**, *Karolinska Institutet, Stockholm, Sweden*

**Brunella Grigolo**, *IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy*

**Gina Lisignoli**, *IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy*

**Umberto Malapelle**, *University of Naples "Federico II", Naples, Italy*

**Claudia Maldini**, *Miltenyi Biotec SrlU*

**Massimo Negrini**, *University of Ferrara, Ferrara, Italy*

**Francesca Sbrana**, *Schaefer SEE Srl*

**Gabriella Sozzi**, *Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy*

**Anna Maria Teti**, *University of L'Aquila, L'Aquila, Italy*

### Selected Speakers

**Laura Carminati**, *IRCCS Istituto di Ricerche Farmacologiche Mario Negri, Milan, Italy*

**Elisa Cimetta**, *Padova University - Fondazione Istituto di Ricerca Pediatrica Città della Speranza, Padua, Italy*

**Alessandra De Feo**, *IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy*

**Silvia Di Agostino**, *IRCCS Regina Elena National Cancer Institute, Rome, Italy*

**Carmela Ferri**, *University of Campania "L. Vanvitelli", Naples, Italy*

**Iris Chiara Salaroglio**, *University of Turin, Turin, Italy*

**Daniela Verzella**, *University of L'Aquila, L'Aquila, Italy*



## GENERAL INFORMATION

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### Conference Venue

**IRCCS Istituto Ortopedico Rizzoli - Aula Anfiteatro**

Via di Barbiano, 1/10 - 40136 Bologna, Italy

**www.ior.it**

### Registration Fees

The participation in the meeting is reserved to AICC members.

- Annual membership fee: € 50,00
- Meeting registration: € 200,00 for the entire duration  
€ 100,00 for one-day registration  
€ 250,00 on site registration
- PhD Students and Students: € 50,00 for membership fee  
Free meeting registration

The registration fee includes:

- Participation in the Scientific Sessions
- Attendance Certificate
- Conference kit, coffee breaks, lunches

### How to register

The registration and the payment forms are available on line at the website: **www.aicc.website**

### Language

The official language of the Conference is English.

Simultaneous translation will not be provided.

### Slides

Slides must be in English and should be sent to the Organising Secretariat within **26 November 2018**.

Computer video projection will be available in Power Point.

Other requirements should be communicated as soon as possible to:

evelinafiorenza.sciandra@ior.it

## GENERAL INFORMATION

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### Best Poster And Oral Presentation Awards

During the conference AICC will award two poster prizes for researchers under 35 years of age. Each prize is of 500 euros.

Two "Guido Berlucchi Foundation Best Poster Prizes" will be available for researchers under 35 of any nationality, for oncology research implemented in an Italian laboratory. Each prize is of 500 euros.

One prize (500 euros) for the best poster will be awarded, for researchers under 35, from the Journal of Experimental & Clinical Cancer Research.

One "Guido Berlucchi Foundation Best Oral Presentation Prize" will be available for researchers under 40 of any nationality, for oncology research implemented in an Italian laboratory. The prize is of 500 euros, plus a bonus to be used by the winner for the attendance at 2019 events of any Scientific Society in the field of oncology.

### Attendance Certificate

A certificate will be sent to all participants at the end of the meeting.

### Practical Information

How to reach the meeting venue.

The Istituto di Ricerca Codivilla-Putti Congress Centre is located in Via di Barbiano 1/10.

Please find here some useful information.

By road. For the Istituto di Ricerca Codivilla-Putti Congress Centre follow the signs for the Poliambulatorio Rizzoli: when you get to Porta Castiglione on the avenues, go southwards (away from the city - towards the hills) along via Castiglione, which then becomes Via di Barbiano, a narrow road.

The entrance to the pay car park of the Rizzoli Codivilla-Putti Congress Centre is at the Poliambulatorio entrance.

By rail. Bus "A" connects the railway station and the town centre with the Istituto di Ricerca Codivilla-Putti Congress Centre. It runs every 10-11 minutes (depending on the time of day) and takes about 22 minutes to complete the journey. On board there is a ticket machine.

By air. The "BLQ" bus connects G. Marconi airport with Bologna railway station. It runs every 15 minutes and takes 30 minutes to get to the station. From the station you can catch bus "A" as described above.

## SCIENTIFIC PROGRAMME

TUESDAY, NOVEMBER 27<sup>th</sup>

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**09.00** Registration and poster set-up

**09.30 OPENING CEREMONY**

**Greetings from the Authorities**

**Greetings from AICC President**

Katia Scotlandi (*Bologna, Italy*)

**10.00 OPENING LECTURE**

**About Noam Chomsky, genomic immunity, non-codingRNAs and DNAs and human diseases**

George Calin (*Houston, US*)

**10.45** Coffee break

**11.15 SESSION I**

**13.00 CIRCULATING SIGNALS AND CANCER**

*Chairs: Maria Teresa Di Martino and Alessandra Carè*

**11.15 Multiple Approaches for miRNA-based Therapies of Cancer**

Massimo Negrini (*Ferrara, Italy*)

**11.40 Liquid biopsy: exosomal cargo in NSCLC patients**

Umberto Malapelle (*Naples, Italy*)

**12.05 Microenvironment-related miRNAs for risk assesment and therapeutics of lung cancer**

Gabriella Sozzi (*Milan, Italy*)

**12.30 Long Non-coding MIR205HG promotes the progression of Head and Neck Squamous Cell Carcinoma through acting as a miR-590-3p sponge (21)**

Silvia Di Agostino (*Rome, Italy*)

**12.45 Investigating the role of miR-423-5p in cancer and the interaction miRNA-lncRNA (48)**

Carmela Ferri (*Naples, Italy*)

**13.00** Lunch

**14.00** Poster viewing

## SCIENTIFIC PROGRAMME

TUESDAY, NOVEMBER 27<sup>th</sup>

### 15.00 SESSION II

#### 17.10 TUMOUR-MICROENVIRONMENT INTERACTIONS

*Chairs: Claudia Chiodoni and Francesca Zazzeroni*

#### 15.00 Microenvironmental acidity and exosome levels interplay in tumor malignancy

*Stefano Fais (Rome, Italy)*

#### 15.25 Endosteal niche and tumour dormancy

*Anna Maria Teti (L'Aquila, Italy)*

#### 15.50 Tea break

#### 16.15 Role of Extracellular Vesicles in Tumor-microenvironment Interactions

*Giovanni Camussi (Turin, Italy)*

#### 16.40 Antimetastatic activity of trabectedin in cutaneous melanoma (8)

*Laura Carminati (Milan, Italy)*

#### 16.55 GADD45B loss ablates innate immunosuppression in cancer (29)

*Daniela Verzella (L'Aquila, Italy)*

#### 17.10 AICC General Assembly and Board Election

#### 19.00 Adjourn



## SCIENTIFIC PROGRAMME

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### WEDNESDAY, NOVEMBER 28<sup>th</sup>

#### 09.00 **SESSION III**

#### 11.15 **CLINICAL POTENTIAL OF EXOSOMES**

*Chairs: Michele Caraglia and Marika Sciandra*

#### 09.00 **Extracellular vesicles in endocrine therapy resistant breast cancer**

*Massimiliano Bonafè (Bologna, Italy)*

#### 09.25 **Niosomes: a versatile approach to nanomedicine**

*Maria Carafa (Rome, Italy)*

#### 09.50 **Exosome-mediated signalling in cancer**

*Simona Fontana (Palermo, Italy)*

#### 10.15 *Coffee Break*

#### 10.45 **CD99-deprived Ewing sarcoma exosomes shape a tumor suppressor phenotype in recipient cells (18)**

*Alessandra De Feo (Bologna, Italy)*

#### 11.00 **Use of microfluidic bioreactors ( $\mu$ BRs) to study the role of hypoxia-induced exosomes in Neuroblastoma aggressiveness (6)**

*Elisa Cimetta (Padua, Italy)*

#### 11.15 **SESSION IV**

#### 12.35 **NOVEL INSIGHTS IN EXOSOME EVALUATION**

*Chairs: Massimo Donadelli and Alessandra De Feo*

#### 11.15 **New tools for exosomes isolation**

*Claudia Maldini (Miltenyi Biotec Srl)*

#### 11.35 **Extraction-free gene expression profiling on the HTG EdgeSeq – ultra-low sample input workflow for the study of oncology and other disease biomarkers**

*Carlo Bottari (HTG Molecular Diagnostics, Inc/Gilson Srl)*

#### 11.55 **4D HoloTomographic correlative Microscopy: opens new era for label-free live cell imaging**

*Francesca Sbrana (Schaefer SEE Srl)*

#### 12.15 **Real-time, live cell metabolic analysis for life science research**

*Emma Nora Di Capua (Agilent Technologies SpA)*

#### 12.35 *Lunch and poster viewing*

**SCIENTIFIC PROGRAMME**  
**WEDNESDAY, NOVEMBER 28<sup>th</sup>**

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**14.00 SESSION V**

**15.45 3D-ORGANOIDS MODELS AS NEW TOOLS FOR BIOMEDICAL RESEARCH AND APPLICATION**

*Chairs: Massimo Serra and Stefania Meschini*

**14.00 Patient-specific meniscus prototype based on 3D bioprinting of human cell-laden scaffold**

*Brunella Grigolo (Bologna, Italy)*

**14.25 Human derived 3D cultures for studies on bone metastases**

*Milena Fini (Bologna, Italy)*

**14.50 Three-dimensional patient-derived acellular scaffold of colorectal cancer and liver metastases as an ex vivo model of liver metastatic colonization**

*Marco Agostini (Padua, Italy)*

**15.15 Mesenchymal stem cells and synoviocytes: development of an in vitro co-culture model**

*Gina Lisignoli (Bologna, Italy)*

**15.30 3D-models of breast cancer: a step over 2D-cultures to study chemoresistance (2)**

*Iris Chiara Salaroglio (Turin, Italy)*

**15.45 Tea break**

**16.00 AWARD CEREMONY**

*Chairs: Katia Scotlandi and Carlo Leonetti*

**Best poster and oral presentation awards from  
Fondazione Guido Berlucchi, Journal of Experimental &  
Clinical Cancer Research and AICC**

**16.30 CLOSING LECTURE**

**Potentiating exosomes for immunotherapy in cancer**

*Susanne Gabrielsson (Stockholm, Sweden)*

**17.15 Closing Remarks**

*Under the patronage of*



*Fondazione Guido Berlucci*



Journal of Experimental &  
Clinical Cancer Research



ALLEANZA  
CONTRO  
IL CANCRO



Rendiamo il cancro sempre più curabile.



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA  
DIPARTIMENTO DI MEDICINA SPECIALISTICA  
DIAGNOSTICA E SPERIMENTALE

*With the unrestricted grant of AICC supporters*

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