



**IRCCS REGINA ELENA NATIONAL CANCER INSTITUTE, ROME** in collaboration with  
**WEIZMANN INSTITUTE OF SCIENCE, REHOVOT, ISRAEL** and **NATIONAL INSTITUTES OF**  
**HEALTH, NATIONAL CANCER INSTITUTE, BETHESDA, USA**

**7<sup>th</sup> WORKSHOP IRE ON TRANSLATIONAL ONCOLOGY**  
**CHALLENGES AND ADVANCES IN DRUG**  
**RESISTANCE AND TOLERANCE IN CANCER**  
**ROME, OCTOBER 20-21, 2025**  
**IRCCS REGINA ELENA NATIONAL CANCER INSTITUTE**

ORGANIZING COMMITTEE

**ANNA BAGNATO, GIOVANNI BLANDINO, FEDERICO CAPPUZZO, GENNARO CILIBERTO, SIMA LEV,**  
**PAOLA NISTICÒ, EYTAN RUPPIN, YARDENA SAMUELS**

## WORKSHOP OVERVIEW

Resilience to anticancer drugs is an increasingly critical challenge in precision oncology. Over time, cancer cells can develop drug resistance or tolerance, significantly impacting therapy outcomes. The multifactorial mechanisms underlying tolerance, resistance, and persistence are being actively investigated, highlighting the urgent need to bridge research from the bench to the clinic—and back again. Addressing the intricate interplay between cellular evolution, metabolism, and plasticity is essential to overcoming therapy resistance. A deeper understanding of these mechanisms holds the promise of developing novel therapeutic strategies that are less susceptible to drug resistance. It also advances our knowledge of both genetic and non-genetic factors driving resistance and tolerance. This workshop will bring together leading experts in therapeutic resistance, fostering an interactive environment where senior and junior scientists, as well as clinicians, can exchange the latest breakthroughs. Discussions will focus on the mechanisms underlying drug resistance, the phenotypic trajectories of resistant cells, and the role of the tumor microenvironment in resistance and tolerance. Through insights from cancer biology, translational research, and clinical studies, this workshop will showcase cutting-edge advances in understanding cellular adaptation to anticancer drugs. By unraveling these complexities, we aim to pave the way for more effective cancer therapies that can ultimately improve patient outcomes.





**ORGANIZING COMMITTEE**

**ANNA BAGNATO**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**GIOVANNI BLANDINO**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**FEDERICO CAPPUZZO**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**GENNARO CILIBERTO**

Takis Biotech  
Rome, Italy

**SIMA LEV**

Weizmann Institute of Science  
Rehovot, Israel

**PAOLA NISTICÒ**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**EYTAN RUPPIN**

National Cancer Institute  
Bethesda, USA

**YARDENA SAMUELS**

Weizmann Institute of Science  
Rehovot, Israel

**SECRETARIAT**

**ROBERTO BERNARDI, TANIA MERLINO, CATIA MINUTIELLO,  
MARIA VINCENZA SARCONE**



via Elio Chianesi 53 - 00144 Rome, Italy  
tel. +39 06 52662728  
email: [dircscire@ifc.it](mailto:dircscire@ifc.it)

**PROGRAM**

**MONDAY, 20 OCTOBER 2025**

11.00-11.30

**Welcome address**

**Livio De Angelis**

General Manager  
Istituti Fisioterapici Ospitalieri  
Rome, Italy

**Giovanni Blandino**

Scientific Director  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Eytan Rupp**

Director of Cancer Data Science Laboratory  
National Cancer Institute  
Bethesda, USA

**Yardena Samuels**

Director of the Moross Integrated Cancer Center (MICC)  
Weizmann Institute of Science  
Rehovot, Israel

**SESSION I**

Chairperson:

**Sima Lev**

Weizmann Institute of Science  
Rehovot, Israel

**Oreste Segatto**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

11.30-12.00

**INNOVATIVE APPROACHES TO FIGHT  
CANCER DRUG RESISTANCE**

**René Bernards**

Netherlands Cancer Institute  
Amsterdam, The Netherlands

12.00-12.30

**THE VARIOUS LAYERS OF INTRATUMOR  
HETEROGENEITY AND THEIR IMPACT ON  
TUMOR IMMUNITY**

**Yardena Samuels**

Weizmann Institute of Science  
Rehovot, Israel

12.30-13.30 Light lunch

**SESSION II**

Chairperson:

**Anna Bagnato**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Silvia Soddu**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

13.30-14.00

**TITLE TITLE TITLE TITLE  
TITLE TITLE**

**Trever Bivona**

University of California San Francisco  
San Francisco, USA

14.00-14.30

**TARGETING DNA MISMATCH REPAIR  
FOR THERAPEUTIC PURPOSES**

**Alberto Bardelli**

University of Turin - School of Medicine  
Turin, Italy

14.30-15.00

**THE DAY AFTER THE DRUG INVESTIGATING  
DRUG-INDUCED CELLULAR MEMORY**

**Yaara Oren**

Tel Aviv University - School of Medicine  
Tel Aviv, Israel

15.00- 15.30 Coffee break

SESSION III

Chairperson:

**Paola Nisticò**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Fabio Calabrò**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy



15.30-16.00

**CELLULAR ADAPTATION TO CANCER THERAPY  
AND THE TUMOR MICROENVIRONMENT**

**Itai Yanai**

New York University, Grossman School of Medicine  
New York, USA

16.00-16.30

**IMMUNOTHERAPY IN LUNG CANCER**

**Federico Cappuzzo**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

16.30-17.00

**DECIPHERING SPATIAL HETEROGENEITY OF THE  
STROMA AND IMMUNOSUPPRESSION IN  
BREAST CANCER**

**Fatima Mechta-Grigoriou**

Institut Curie  
Paris, France

17.00-17.30

**TUMOR ADAPTIVE RESPONSE AND RESISTANCE  
TO THERAPY**

**Maurizio Scaltriti**

AstraZeneca  
Gaithersburg, USA



**TUESDAY, 21 OCTOBER 2025**

**YOUNG INVESTIGATOR SESSION**

Chairperson:

**Eleonora Petti**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Claudio Pulito**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

9.15-9.45

**EXPLOITING AUTOANTIBODIES FOR  
CANCER IMMUNOTHERAPY**

**Jakub Abramson**

Weizmann Institute of Science  
Rehovot, Israel

9.45-10.00

**DATA-DRIVEN APPROACHES TO REVEAL  
SECRETED PROTEIN REGULATORS OF  
ANTI-TUMOR IMMUNE RESPONSE**

**Peng Jiang**

National Cancer Institute  
Bethesda, USA

10.00-10.15

**TARGETING THE BCL-2 REGULATORY  
NETWORK TO ADDRESS IMMUNOTHERAPY  
RESISTANCE IN PRECLINICAL MELANOMA  
MODELS**

**Marta Di Martile**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

10.15-10.30

**H-MENA REGULATED SECRETORY  
AUTOPHAGY MEDIATES UNCONVENTIONAL  
COMMUNICATION BETWEEN CAFs AND  
CANCER CELLS CONTRIBUTING TO  
IMMUNOTHERAPY RESISTANCE IN NSCLC**

**Annalisa Tocci**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

10.30-11.00 Coffee break

11.00-11.15

**TARGETING ENDOTHELIN-1 RECEPTOR/PIEZO1  
MECHANOSIGNALING TO TACKLE DRUG  
RESISTANCE IN HIGH-GRADE SEROUS  
OVARIAN CANCER**

**Piera Tocci**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

11.15-11.30

**HIGH-THROUGHPUT SCREENING ON ORGANOID  
PLATFORMS: TARGETING CANCER-ASSOCIATED  
FIBROBLASTS TO OVERCOME RESISTANCE  
IN ENDOMETRIAL CARCINOMA**

**Sebastiano Vaccarella**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

11.30-11.45

**FERTILITY SPARING TREATMENTS RESPONSE  
PREDICTION IN YOUNG WOMEN TO PRESERVE  
REPRODUCTIVE CHANCES: UNRAVELING  
IMMUNE-MUTATIONAL PATHWAYS FOR  
RESISTANCE IN ENDOMETRIAL CANCER**

**Valentina Bruno**

IRCCS Regina Elena National Cancer Institute  
Rome, Italy

11.45-12.00  
**DRUG RESISTANCE IN GENITO-URINARY MALIGNANCIES: TREATMENT OPTIONS FOR BCG UNRESPONSIVE BLADDER CANCER AND CASTRATION RESISTANT PROSTATE CANCER**  
**Marilia Consiglia Ferriero**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

12.00-13.00  
**THE DRUG RESISTANCE MARKET LANDSCAPE: UNDERSTANDING THE BUSINESS DRIVERS**  
**MEET THE EXPERT**  
**Luca Quagliata**  
Thermo Fisher Scientific  
Zurich, Switzerland

**SESSION IV**  
Chairperson:  
**Gennaro Ciliberto**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Maurizio Fanciulli**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

14.00-14.30  
**REPROGRAMMING THE COLD PROSTATE TUMOR MICROENVIRONMENT AS AN ACTIONABLE TARGET FOR CANCER THERAPY**  
**Andrea Alimonti**  
Institute of Oncology Research (IOR)  
Bellinzona, Switzerland

14.30-15.00  
**TOWARDS FAST AND ACCESSIBLE PRECISION ONCOLOGY**  
**Eytan Rupp**  
National Cancer Institute  
Bethesda, USA



15.00-15.30  
**MULTI-OMIC INTERROGATION OF PRIMARY AND ACQUIRED IMMUNE RESISTANCE**  
**Lillian Siu**  
University of Toronto,  
Toronto, Canada

**SESSION V**  
15.30-17.00  
**ROUND TABLE**  
**BREAKING BARRIERS: ADVANCING CLINICAL TRIALS TO TACKLE DRUG RESISTANCE IN CANCER**  
Chairperson:  
**Eytan Rupp**  
National Cancer Institute  
Bethesda, USA

Discussants:  
**Anna Mondino**  
Fondazione AIRC  
Milan, Italy

**Robert Nisticò**  
AIFA  
Rome, Italy

**Yardena Samuels**  
President EACR  
Weizmann Institute of Science  
Rehovot, Israel

**Maurizio Scaltriti**  
Vice President Astrazeneca  
Gaithersburg, USA

**Lillian Siu**  
President-Elect AACR  
University of Toronto  
Toronto, Canada

17.00- 17.30  
**CLOSING REMARKS**  
**Giovanni Blandino**  
Scientific Director  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Eytan Rupp**  
Director of Cancer Data Science Laboratory  
National Cancer Institute  
Bethesda, USA



FACULTY

**Jakub Abramson**  
Weizmann Institute of Science  
Rehovot, Israel

**Andrea Alimonti**  
Institute of Oncology Research (IOR)  
Bellinzona, Switzerland

**Anna Bagnato**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Alberto Bardelli**  
University of Turin - School of Medicine  
Turin, Italy

**René Bernards**  
Netherlands Cancer Institute  
Amsterdam, The Netherlands

**Trever Bivona**  
University of California San Francisco  
San Francisco, USA

**Giovanni Blandino**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Valentina Bruno**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Fabio Calabrò**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Federico Cappuzzo**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Gennaro Ciliberto**  
Takis Biotech  
Rome, Italy

**Marta Di Martile**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Maurizio Fanciulli**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Marilia Consiglia Ferriero**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Peng Jiang**  
National Cancer Institute  
Bethesda, USA

**Sima Lev**  
Weizmann Institute of Science  
Rehovot, Israel

**Fatima Mechta-Grigoriou**  
Institut Curie  
Paris, France

**Anna Mondino**  
Fondazione AIRC  
Milan, Italy

**Paola Nisticò**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Robert Nisticò**  
AIFA  
Rome, Italy

**Yaara Oren**  
Tel Aviv University - School of Medicine  
Tel Aviv, Israel

**Eleonora Petti**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Claudio Pulito**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Luca Quagliata**  
**Thermo Fisher Scientific**  
Zurich, Switzerland

**Eytan Ruppín**  
National Cancer Institute  
Bethesda, USA

**Yardena Samuels**  
Weizmann Institute of Science  
Rehovot, Israel

**Maurizio Scaltriti**  
AstraZeneca  
Gaithersburg, USA

**Oreste Segatto**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Lillian Siu**  
University of Toronto  
Toronto, Canada

**Silvia Soddu**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Annalisa Tocci**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Piera Tocci**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

**Sebastiano Vaccarella**  
IRCCS Regina Elena National Cancer Institute  
Rome, Italy

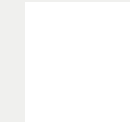
**Itai Yanai**  
New York University, Grossman School of Medicine  
New York, USA

## GENERAL INFORMATION

### VENUE

**Regina Elena National Cancer Institute - Centro formazione Bastianelli**

via Fermo Ognibene, 23 - Rome



### REGISTRATION

Registration is free of charge. Please complete the process to register at our site [www.mitcongressi.it](http://www.mitcongressi.it)

## CME INFORMATION

The event will be accredited by the Italian Ministry of Health.

The CME Provider is Ifo -Istituti Fisioterapici Ospitalieri (ID 1270).

Course ID: .

This CME event will be held in presence (CME - RES).

**The scientific sessions will be accredited for ALL THE MEDICAL SPECIALTIES**

## HOW TO GET CME CREDITS

- Register on <https://ifo.sailportal.it/>
- Select the course from the catalogue.
- Click on "Access the course".
- Participants are required to attend at least 90% of the accredited sessions and the detection of the presence.
- At the end of the event, you will receive 2 paper questionnaires (satisfaction and evaluation questionnaire). You will need a score of 75% or higher on the learning assessment questionnaire.
- CME Certificate will be available on the Educational Platform in your personal area.

**For any further information please contact [dirscire@ifo.it](mailto:dirscire@ifo.it)**

## CME PROVIDER & SCIENTIFIC SECRETARIAT

**IFO Ifo -Istituti Fisioterapici Ospitalieri**

Via Chianesi 53 - 00144 Roma

[dirscire@ifo.it](mailto:dirscire@ifo.it)

Provider Nr. 1270

## PCO

### MI&T Srl

Legal Headquarters: viale Carducci 50 - 40125 Bologna

Address: Centro Direzionale Bolomnia via Guelfa 5 - 40138 Bologna

Mobile +39 345 168 5168

Tel. 051.220427 - Fax 051.0822077

[segreteria@mitcongressi.it](mailto:segreteria@mitcongressi.it)

[www.mitcongressi.it](http://www.mitcongressi.it)

## NOTES



WITH THE SUPPORT



SPONSORED BY

