



*Fondazione per la Ricerca  
sulla Fibrosi Cistica - ETS  
italian cystic fibrosis research foundation*

# 21<sup>th</sup> Convention

of investigators  
in cystic fibrosis

23 - 25 November 2023

Camera di Commercio, Corso Porta Nuova 96 - Verona

## Full program

(oral presentation)

## Thursday, 23 November 2023

09:30 - 10:30	Registration and poster display
10:30 - 11:15	Introduction and greetings <b>Matteo Marzotto</b> ( <i>President FFC Ricerca</i> ) <b>Gianna Puppo Fornaro</b> ( <i>President LIFC Lega Italiana Fibrosi Cistica</i> ) <b>Francesco Blasi</b> ( <i>Vice President SIFC Società Italiana Fibrosi Cistica</i> ) <b>Callisto Marco Bravi</b> ( <i>Director AOUI Verona</i> ) <b>Carlo Castellani</b> ( <i>Scientific director FFC Ricerca</i> )
11:15 - 12:25 <b>SESSION 1</b>	<b>ANTI-INFLAMMATORY COMPOUNDS AND NEW EXPERIMENTAL MODELS</b> <i>Chair: Giulio Cabrini, Marco Cipolli</i> <ol style="list-style-type: none"><li>1. <b>Alessandra Bragonzi, Federica Ungaro, Valeria Daccò</b> (FFC#5/2023) Beyond the lung: the gut's role in the pathology of cystic fibrosis (8')</li><li>2. <b>Marco Cafora</b> (GMRF#1/2023) Ex vivo pig lung as a new model to study the efficacy of phage therapy against <i>Pseudomonas aeruginosa</i> infection in cystic fibrosis (10')</li><li>3. <b>Roberto Plebani</b> (GMSG#1/2023) Developing a new respiratory 3D model as an innovative strategy to study the inflammation pathology in cystic fibrosis (10')</li><li>4. <b>Mario Romano, Mauro Perretti</b> (FFC#15/2023) Melanocortins to control cystic fibrosis airway inflammation (8')</li><li>5. <b>Ilaria Lampronti</b> (FFC#10/2022) Towards the development of GY-971a as anti-inflammatory drug in cystic fibrosis (10')</li></ol>
12:01 – 12:25	Discussion
12:25 - 13:55	Lunch & Poster session
13:55 - 15:00 <b>SESSION 2</b>	<b>TREATMENTS FOR NONTUBERCULOUS MYCOBACTERIA</b> <i>Chair: Alessandra Bragonzi, Marco Cipolli</i> <ol style="list-style-type: none"><li>6. <b>Laurent Robert Chiarelli, Fiorella Meneghetti, Sonia Covaceuszach</b> (FFC#5/2022) NonTuberculous Mycobacteria in cystic fibrosis: scouting molecules against <i>Mycobacterium abscessus</i> iron acquisition pathways (10')</li><li>7. <b>Federico Giannoni, Emanuele Borroni</b> (FFC#6/2022) Search for drug combinations killing <i>Mycobacterium abscessus</i> in cystic fibrosis (15')</li><li>8. <b>Maria Rosalia Pasca, Riccardo Manganelli, Fabio Saliu</b> (FFC#9/2023) Evaluation of the efficacy of the "VOMG" new antibiotic against <i>Mycobacterium abscessus</i> (8')</li><li>9. <b>Maurizio Fraziano, Daniela Maria Cirillo</b> (FFC#13/2022) Fighting <i>Mycobacterium abscessus</i> infections by a novel combination therapy (10')</li></ol>
14:38 - 15:00	Discussion

15:00 - 16:30  
SESSION 3

## NEW CFTR MODULATOR

*Chair: Giulio Cabrini, Maria Cristina Lucanto*

10. **Enrico Millo, Elena Cichero, Santina Bruzzone** (FFC#9/2021)  
Lead optimization of MKT-077 analogues as Hsp70 allosteric inhibitors combined with F508del-CFTR correctors: a multi-drug approach to contrast cystic fibrosis (15')
11. **Fabio Bertozzi** (FFC#2/2022)  
Characterization of CFTR modulators mechanism of action via Photo-Affinity Labeling (PAL) approach (15')
12. **Maria Luisa Mangoni, Arianna Venturini, Mattia Mori** (FFC#4/2022)  
Esculentin-derived peptides as novel therapeutic agents with antimicrobial and CFTR potentiator activities to address cystic fibrosis lung disease (10')
13. **Paola Barraja, J.V. Galiotta** (Molecole 3.0)

16:05 - 16:30 Discussion

16:30 - 17:00 Coffee Break

17:00 - 18:15  
SESSION 4

## PERSONALIZED THERAPIES

*Chair: Luis J. V. Galiotta, Graziella Borgo*

14. **Onofrio Laselva, Enza Montemitro** (FFC#6/2021)  
Enhancing the prediction of clinical responses to CFTR modulators by in-vitro assays using patient-derived tissues under conditions mimicking native status of CF airways (15')
15. **Marco Lucarelli, Adriana Eramo** (FFC#8/2021)  
*Therotyping* of cystic fibrosis (15')
16. **Nicoletta Pedemonte, Renata Bocciardi** (FFC#10/2021)  
*Therotyping* orphan mutations in Italian cystic fibrosis patients: meeting unmet needs (15')
17. **Renata Bocciardi** (FFC#3/2023)  
Understanding the mechanisms behind the variable efficacy of CFTR modulators on the N1303K mutation on human primary nasal epithelial cells (8')

17:53 - 18:15 Discussion

08:30 - 09:40  
SESSION 5

## CORRECTING THE CFTR BASIC DEFECT

Chair: Paolo Bernardi, Sonia Volpi

18. **Giorgio Cozza, Federica Rossin** (FFC#4/2021)  
Oxidative stress and autophagy in cystic fibrosis: novel biochemical characterizations and drug discovery approaches (15')
19. **Carlos M. Farinha, Valeria Tomati** (FFC2#/2023)  
Exploring the cellular pathways to promote rescue of mutant CFTR protein in cystic fibrosis (8')
20. **Luis J. V. Galiotta** (FFC#9/2022)  
Effect of inflammatory stimuli on airway epithelium ion transport in cystic fibrosis (10')
21. **Paolo Scudieri, Fabiana Ciciriello** (FFC#11/2021)  
Alternative targets for the treatment of cystic fibrosis basic defect (15')

09:18 - 09:40 Discussion

09:40 - 10:35  
SESSION 6

## TREATMENT OF RARE AND ORPHAN MUTATIONS

Chair: Nicoletta Pedemonte, Maria Cristina Lucanto

22. **Laura Lentini, Ivana Pibiri** (FFC#6/2020)  
Validation of the biodistribution and activity of new optimized leads in mouse model and other CF model systems (15')
23. **Massimo Aureli, Anna Tamanini** (FFC#1/2022)  
A lipid-based therapeutic approach to rescue F508del-CFTR and CFTR with orphan mutations and implications in bacterial infections in cystic fibrosis (10')
24. **Emilio Hirsch** (FFC#3/2022)  
Rescuing rare CFTR mutants with a PI3K $\gamma$  mimetic peptide (10')

10:15 - 10:30 Discussion

10:30 - 11:05 Coffee Break

11:05 - 12:40  
SESSION 7

## FIGHTING ANTIMICROBIAL RESISTANCE

Chair: Antonella Mencacci, Cesare Braggion

25. **Fiorentina Ascenzioni, Bruno Botta, Mattia Mori, Stefano Salmaso** (FFC#12/2021)  
Pharmacological inhibition of colistin resistance in Gram-negative cystic fibrosis pathogens (15')
26. **Andrea Battistoni, Luigi Scipione** (FFC#4/2023)  
A Trojan horse strategy to improve the treatment of *Pseudomonas aeruginosa* lung infections (8')
27. **Silvia Buroni, Antonio Coluccia** (FFC#6/2023)  
Using a Virtual Screening approach to find new drugs against *Pseudomonas aeruginosa* and *Staphylococcus aureus* (8')
28. **Giordano Rampioni** (FFC#10/2023)  
Drug repurposing to inhibit *Pseudomonas aeruginosa* adaptation to the CF lung environment (8')
29. **Barbara Citterio, Massimiliano Lucidi** (FFC#7/2023)  
Evaluation of cefiderocol activity against *Pseudomonas aeruginosa* in cystic fibrosis lung infections (8')

30. **Natalia Cirilli, Luca Tiano, Rosaria Gesuita** (FFC#22/2020)  
Role of viable but non culturable (VBNC) bacterial forms in CF patients in a clinical setting: a translational research (15')

12:14 - 12:45 Discussion

12:45 - 14:05 Lunch & Poster session

14:05 - 15:25  
**SESSION 8**

### NEW STRATEGIES AGAINST BUGS AND MOLDS

*Chair: Emilio Clementi, Michele Gangemi*

31. **Nicola Ivan Lorè, Lisa Cariani** (FFC#7/2022)  
Genomic and phenotypic characterization of *Mycobacterium abscessus* and detection of host biomarkers to define mycobacterial infection in cystic fibrosis (10')
32. **Loris Rizzello, Giulia Degiacomi** (FFC#11/2023)  
Resolving *Mycobacterium abscessus* infections with a phages-inspired therapy (8')
33. **Anna Silvia Pistocchi** (FFC#12/2022)  
Evaluation of phage interactions with host immune system in models of cystic fibrosis: one step toward phage therapy application (10')
34. **Federica Briani** (FFC#16/2023)  
Facing resistance to therapeutic phages observed in *Pseudomonas aeruginosa* isolates from people with cystic fibrosis (8')
35. **Eugenio Notomista, Ivana D'Angelo** (FFC#8/2023)  
Inhalable nanoparticles delivering peptidomimetic/antibiotic combinations for local treatment of CF lung infections (8')
36. **Teresa Zelante** (FFC#15/2022)  
Study on anti-fungal immunoglobulins, as a potential diagnostic biomarker and therapeutic values for allergic bronchopulmonary aspergillosis in children with cystic fibrosis (10')

14:59 - 15:25 Discussion

15:25 - 15:55 Coffee Break

15:55 - 16:15  
**KEYNOTE  
SPEECH**

### Gene therapy for cystic fibrosis: challenges and perspectives

**Anna Cereseto** (20')

16:15 - 17:15  
**SESSION 9**

### DNA AND RNA EDITING

*Chair: Giulio Cabrini, Carlo Castellani*

37. **Giulia Maule** (GMSG#1/2022)  
Development of CRISPR-Cas delivery system for genome editing applications in cystic fibrosis (10')
38. **Anna Cereseto, Daniele Arosio** (FFC#2/2021)  
Harnessing CRISPR-Cas technology to revert F508del CFTR defect (15')
39. **Aldo Di Leonardo** (FFC#5/2021)  
*In vitro* evaluation of novel sequence-specific RNA editing tools to rescue nonsense mutant CFTR transcript (15')

16:55 - 17:15 Discussion

17:15 - 17:55  
SESSION 10

## REACHING OUT: TRAINING AND INFORMING

*Chair: Nicoletta Pedemonte, Graziella Borgo*

40. **Carlo Castellani** (1 in 30 and You Don't Know It)  
A campaign for a better comprehension and awareness of the cystic fibrosis carrier test (15')
41. **Michele Gangemi** (Experts together)  
Inclusion and activation of CF Community as partners in the various stages of the research process (10')

17:40 - 17:55 Discussion

20:00 Social Dinner

## Saturday, 25 November 2023

09:00 - 10:10  
SESSION 11

## TRIGGERING THE IMMUNE SYSTEM

*Chair: Cristina Cigana, Cesare Braggion*

42. **Domenico Mattoscio** (FFC#11/2022)  
Targeting platelet activation with pro-resolving mediators: an innovative strategy to dampen lung inflammation in cystic fibrosis (10')
43. **Moira Paroni, Clelia Peano** (FFC#14/2023)  
Identification of molecular mechanisms which underpin the activation of pathogenic pulmonary Th1/17 cells in cystic fibrosis (8')
44. **Mauro Piacentini, Valeria Raia** (FFC#8/2022)  
Targeting the STING/Transglutaminase 2-regulated Interferon response as a novel host-direct approach to fight bacterial infections in cystic fibrosis (15')
45. **Edoardo Scarpa, Daniela Maria Cirillo** (FFC#12/2023)  
Fostering pathogen host-mediated clearance to neutralize *Mycobacterium abscessus* infection (8')
46. **Marco Sette, Mattia Falconi, Marco Rinaldo Oggioni** (FFC#13/2023)  
Building simple molecules containing regions of *Pseudomonas aeruginosa* to stimulate the immune system against this pathogen (8')

09:49 - 10:10 Discussion

10:10 - 11:05  
SESSION 12

## CLINICAL STUDIES

*Chair: Roberto Buzzetti, Graziella Borgo*

47. **Vittorio Scaravilli** (FFC#27/2019)  
Right ventricle dysfunction in cystic fibrosis patients undergoing lung transplantation (15')
48. **Gianluca Serafini** (FFC#21/2021)  
Mental health in cystic fibrosis patients: the prognostic role of temperament, personality and attachment styles (15')
49. **Riccardo Percudani, Gianfranco Pasut, Rosaria Casciaro** (FFC#14/2022)  
Actin-resistant acidic DNase for the treatment of CF pulmonary symptoms (10')

10:50 - 11:05 Discussion

11:05 - 11:35 Coffee Break

11:35 - 13:00  
SESSION 13

## KAFTRIO UNVEILED

*Chair: Emilio Clementi, Roberto Buzzetti*

50. **Sonia Volpi, Maria Cristina Lucanto, Cesare Braggion** (Effetto Kaftrio)  
Post-marketing studies on effectiveness and safety of elexacaftor/tezacaftor/ivacaftor (ETI) in Italian people with cystic fibrosis (25')
51. **Andrea Armirotti, Valeria Tomati, Rosaria Bassi** (FFC#1/2021, FFC#1/2023)  
Investigation of Kaftrio secondary effects on sphingolipid synthesis (15')
52. **Cristina Cigana, Daniela Girelli, Ersilia Fiscarelli** (FFC#16/2021)  
Linking elexacaftor/tezacaftor/ivacaftor to infections in cystic fibrosis lung disease (10')
53. **Alberto Battezzati, Carla Colombo, Maria Cristina Lucanto, Vincenzina Lucidi, Andrea Mari** (FFC#24/2019)  
Early derangements of glucose tolerance in cystic fibrosis: effect of CFTR modulators (15')

12:40 - 13:00 Discussion

13:00 - 13:10 Closing remarks

13:10 - 14:00 Poster detachment

## Notes

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