



**21ST
CONVENTION
OF INVESTIGATORS
IN CYSTIC FIBROSIS**
XXI CONVENTION D'AUTUNNO
DEI RICERCATORI IN FIBROSI CISTICA

CENTRO CONGRESSI CAMERA DI COMMERCIO
Corso Porta Nuova, 96 · Verona

VERONA
23-25
November 2023

PROGRAM



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

Thursday, 23 November 2023

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

15:00 - 16:30 SESSION 3	NEW CFTR MODULATORS <i>Chair: Giulio Cabrini, Maria Cristina Lucanto</i>
	<p>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')</p> <p>11. Fabio Bertozzi (FFC#2/2022) Characterization of CFTR modulators mechanism of action via Photo-Affinity Labeling (PAL) approach (15')</p> <p>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')</p> <p>13. Paola Barraja, Luis J. V. Galiotta (Molecole 3.0) New generation of pharmacological modulators to rescue mutant CFTR protein (25')</p>
16:05 - 16:30	Discussion
16:30 - 17:00	Coffee Break
17:00 - 17:55 SESSION 4	PERSONALIZED THERAPIES <i>Chair: Luis J. V. Galiotta, Graziella Borgo</i>
	<p>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')</p> <p>15. Marco Lucarelli, Adriana Eramo (FFC#8/2021) Therotyping of cystic fibrosis (15')</p> <p>16. Nicoletta Pedemonte, Renata Bocciardi (FFC#10/2021) Therotyping orphan mutations in Italian cystic fibrosis patients: meeting unmet needs (15')</p> <p>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')</p>
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. Galletta** (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 γ 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')
12:07 - 12:40	Discussion
12:40	Group photo at Auditorium
12:50 - 14:05	Lunch & Poster session
14:05 - 15:25 SESSION 8	NEW STRATEGIES AGAINST BUGS AND MOLDS <i>Chair: Emilio Clementi, Michele Gangemi</i>
	31. Nicola Ivan Lorè, Lisa Cariani (FFC#7/2022) Genomic and phenotypic characterization of <i>Mycobacterium abscessus</i> and detection of host biomarkers to define mycobacterial infection in cystic fibrosis (10')
	32. Loris Rizzello, Giulia Degiacomi (FFC#11/2023) Resolving <i>Mycobacterium abscessus</i> 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 <i>Pseudomonas aeruginosa</i> 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 prospects Anna Cereseto (20')
16:15 - 17:15 SESSION 9	DNA AND RNA EDITING <i>Chair: Giulio Cabrini, Carlo Castellani</i>
	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 and 2789+5G>A CFTR defects (15')
	39. Aldo Di Leonardo (FFC#5/2021) <i>In vitro</i> 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') (*speaker Riccardo Ciprandi*)
49. **Riccardo Percudani, Gianfranco Pasut, Rosaria Casciaro** (FFC#14/2022)
Actin-resistant acidic DNase for the treatment of CF pulmonary symptoms (10') (*second speaker Giulia Mori*)

10:50 - 11:05 Discussion

11:05 - 11:35 Coffee Break

Insieme per l'obiettivo più alto, vincere la fibrosi cistica



Emma, ragazza con la fibrosi cistica e Gianmarco Tamberi, campione olimpico di salto in alto



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