



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

# FFC RICERCA: AN OVERVIEW OF SCIENTIFIC ACTIVITIES

Mission and key  
achievements to  
enhance therapies and  
improve the quality of  
life for people with cystic  
fibrosis.

**A CURE FOR ALL**

# IDENTITY

The Foundation is a non-profit body recognised by the Italian Ministry of University and Research (MUR) as a promoter of scientific research on cystic fibrosis. It was established in 1997 in order to:



**Promote and fund**  
scientific research of special social interest on cystic fibrosis (CF)



**Train**  
researchers and health professionals working with CF



**Contribute to the management of research laboratories**  
with specific agreements



**Spread information**  
about cystic fibrosis among the general public

## CYSTIC FIBROSIS IN ITALY

It is one of the most common genetic diseases and there is still no definitive cure. The disease is present since birth and is caused by mutations in the CFTR gene that make the bodily fluids more dense, deteriorating the function of lungs, pancreas and other organs. The extent of the lung damage determines the quality of life and the longevity of people with CF.



People with CF have inherited a mutated gene from both their father and mother who are, in most cases, unaware of being carriers of a mutated CFTR gene.

### CF PATIENTS

**6,000**  
estimated people

**2**  
newborns with CF every week

**1**  
child with CF in 3,000 births/year

**2,000**  
known mutations of the CFTR gene

### CARRIERS

**2 million**  
healthy carriers in Italy

**1**  
person in 30

**1**  
couple in 900

At each pregnancy, the newborn

**25%**  
has FC

**25%**  
is healthy, not carrier

**50%**  
is a healthy CF carrier

### Goal 3 “Good health and well-being for all”

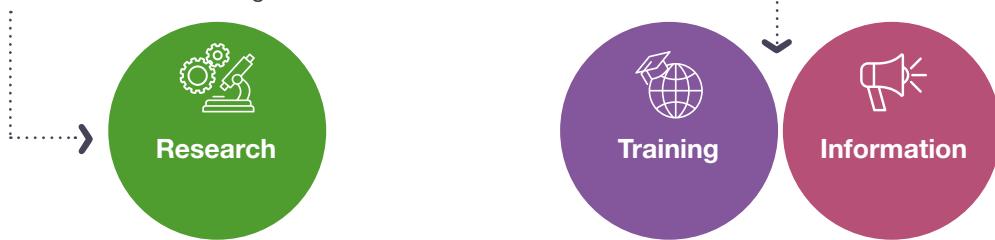
is our primary contribution to the 2030 Agenda for sustainable development.

**3** GOOD HEALTH AND WELL-BEING



# MISSION

These activities cover the goals that the Foundation was established for ....



## HIGHLIGHTS, A SELECTION OF PROGRESS MADE IN 2024



Selected Publications in international scientific journals with high impact factor supported by FFC Ricerca projects

### ★ Evolution and host-specific adaptation of *Pseudomonas aeruginosa*

Science. 2024 Jul 5;385(6704): eadi0908.  
Project: FFC#10/2023  
Investigator: Giordano Rampioni (Roma Tre University)

### ★ Single-Cell RNA Sequencing Shows that Circulating Monocytes Enriched in IFN Signaling Are Associated with Nontuberculous Mycobacteria Pulmonary Disease in Cystic Fibrosis

Am J Respir Crit Care Med. 2024 Sep 15;210(6):834-837.  
Projects: FFC#7/2022 and FFC#23/2020  
Investigator: Nicola Ivan Lorè (San Raffaele Hospital, Milan)

### ★ A functional 3D full-thickness model for comprehending the interaction between airway epithelium and connective tissue in cystic fibrosis

Biomaterials. 2024 Jul;308:122546.  
Project: FFC#14/2019  
Investigator: Paolo Netti (Istituto Italiano di Tecnologia-IIT - Naples; University of Naples, Federico II)

### ★ Prime editing functionally corrects cystic fibrosis-causing CFTR mutations in human organoids and airway epithelial cells

Cell Rep Med. 2024 May 21;5(5):101544.  
Project: FFC#2/2021  
Investigator: Anna Cereseto (CIBIO, University of Trento)

### ★ Tezacaftor is a direct inhibitor of sphingolipid delta-4 desaturase enzyme (DEGS)

J Cyst Fibros. 2024 Nov;23(6):1167-1172.  
Project: FFC#1/2023  
Investigator: Andrea Armiotti (Istituto Italiano di Tecnologia-IIT, Genoa)



Applications and achievements of patents and ODD from studies funded by the Foundation



28

on our projects

10

of which are co-owned by FFC Ricerca

1

in the process of acquiring co-ownership

1

Orphan Drug Designation (ODD)



Strategic projects with direct impact on the lives of people with CF, their families and the general population



### ★ Kaftrio in the real life

A study to assess the efficacy and safety of Kaftrio

### ★ 1 in 30 and you don't know it

A campaign for a better comprehension and awareness of the CF carrier test

### ★ Experts together

An educational project on the basis of clinical research addressed to a group of people with CF and their parents

# MISSION ACTIVITIES

# SCIENTIFIC RESEARCH

The Foundation selects and funds innovative studies on cystic fibrosis with the aim of:

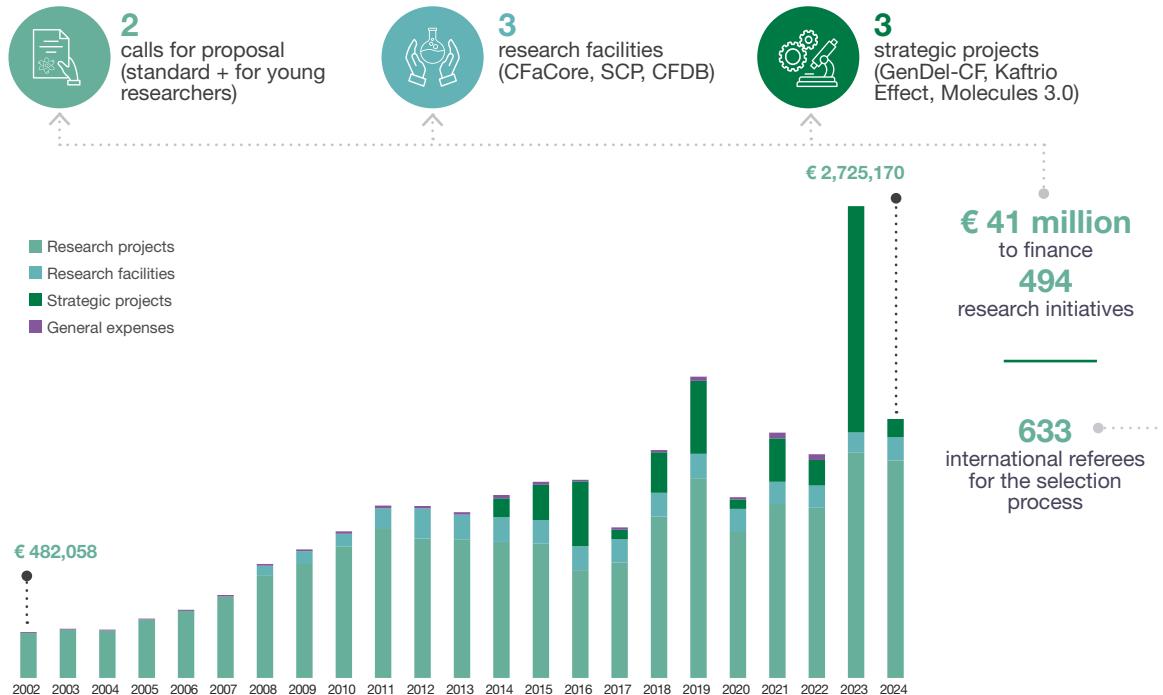
**Developing new therapies** to counter:

- the effects of CFTR mutations, even the rare ones
- bacterial and fungal infections of the airways
- pulmonary inflammation

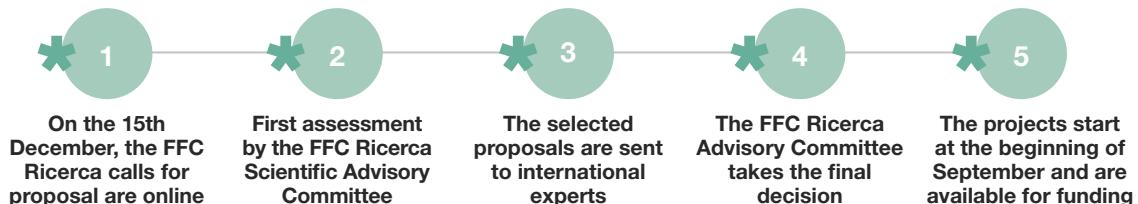
**Evaluating the long-term effects of CFTR modulators**

**Increasing the knowledge** about the disease

With the following tools:



## THE SELECTION OF PROJECTS PROPOSAL



# FFC RICERCA SCIENTISTS NETWORK

2002-2024

**1.040**  
researchers



**225**  
principal  
investigators

2024

**148**  
researchers



**50**  
↓  
58% | 42%  
women | men  
44,7 Years  
average age

↑  
**44**

**293**  
partner  
research  
units

↑  
**58**

**548**  
fellowships

→  
**43**  
proceedings and  
40 publications  
in 2024

**589**  
conference  
proceedings  
and **955**  
publications  
in scientific  
journals

## 2002-2024 Scientific institutions financed



**198**  
scientific  
institutes  
financed

→ 168

Italy  
**30**  
International

10,4%  
international  
researchers  
2024



## Fellowships

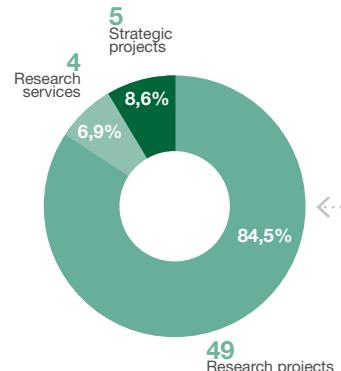
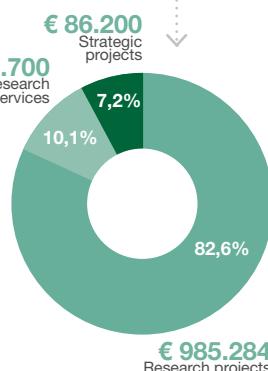
2002-2024

**548**  
Number of fellowships  
+11,84% (in 2024)

2024

**58**

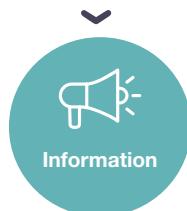
→ **€ 11.113.559**  
Total funded  
+12% (in 2024)



# MISSION ACTIVITIES

# INFORMATION AND TRAINING

Strategic projects and awareness-raising initiatives that aim at informing and training. These comprise



## FFC RICERCA STRATEGIC PROJECTS

### 1 in 30 and you don't know it

Information and awareness-raising campaign on the CF carrier test

### Experts together

Enhancing collaboration and aligning shared goals between the CF community and the research field

## 2024 INITIATIVES AND MEETINGS

### Transparent Research



**69**

sponsors received the results of the research they funded

### CF community Seminar



**250**

participants

Highlights of the event are available at



### Convention of Investigators

**250**



### CONVENTION OF FFC RICERCA INVESTIGATORS

For over 20 years the FFC Ricerca Foundation, in mid-November, has been organizing a three-days meeting of the research network financed. The event is addressed to medical doctors, researchers and experts in the CF field. In last years the official language of the meeting switched from Italian to English with also the opportunity to follow the event online streaming.





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

c/o Azienda Ospedaliera Universitaria Integrata  
Piazzale Stefani 1  
I-37126 Verona  
Tel. +39 045 8123438  
CF 93100600233

[fondazione.ricercafc@aovr.veneto.it](mailto:fondazione.ricercafc@aovr.veneto.it)

For further information



[www.fibrosicisticaricerca.com](http://www.fibrosicisticaricerca.com)

## TO DONATE TO THE FONDAZIONE RICERCA FIBROSI CISTICA

- Online on the website: [dona.fibrosicisticaricerca.it](http://dona.fibrosicisticaricerca.it)
- UniCredit Bank transfer (no commission at UniCredit Bank branches)  
IT 47 A 02008 11718 000102065518  
BIC SWIFT code (for payments from abroad): UNCRITM1N58
- Banco BPM: IT 92 H 05034 11708 000000048829  
BIC SWIFT code: BAPPIT21008
- Postal account nr.: 18841379
- 5x1000 (0.5% income tax credit scheme) tax code: 93100600233



FFC Ricerca is recognised  
by the Italian Institute of  
Donation, which certifies  
the transparent and  
effective use of funds  
raised, to protect the rights  
of donors.

Follow us on

