

The Ri.MED Foundation

FOUNDING PARTNERS











Ri.MED Founding partners













Ri.MED Mission

- Promote, support, and conduct biotech and biomedical research projects to rapidly transfer innovative results in clinical practice with IRCCS ISMETT partner
- Deliver a socio-economic impact in Sicily and south of Italy



TRANSLATE R&D TO PATIENTS



TRAIN AND DEVELOP
NEXT GENERATION
SCIENTISTS



DEVELOP A
SUSTAINABLE
MODEL



PROMOTE ENTREPRENEURSHIP



ACHIEVE INTERNATIONARECOGNITION



Ri.MED Foundation - distinguishing edge

Research, innovation, technology transfer and dissemination are the focus of the Italian government's development policies to make Southern Italy more competitive.

In 1997 **UPMC** led to the establishment in Palermo of IRCCS ISMETT, one of the major organ transplant and high-specialty therapy centers in Europe.

Ten years later, Ri.MED Foundation was established as an international partnership between Italian Government, Region of Sicily, Italian National Research Council (CNR), University of Pittsburgh, and UPMC.

In 2017, the Ri.MED Foundation entered the governance of IRCCS ISMETT.

The alliance between Ri.MED, ISMETT and UPMC integrate translational research and highly specialized care with the goal to rapidly transfer scientific results "from bench to bedside". That means cutting-edge research to improve patient health and economic development of Southern Italy.







Ri.MED Foundation - key goals



From disease biology to preclinical product pipeline

Target product profiles

Project and portfolio management with a hybrid matrix organization



Attract / retaing talented scientists

Train next generation of technicians and scientists

Foster innovative PhD & Post Doc programs (eg 5° cycle of Ri.MED Fellowship @ Pittsburgh)



EU, national and regional OPEX and competitive finance

Generate value with Intellectual Property and Patent Strategy

In kind collaborations for R&D programs to be competitive



Expedite creation of small enterprises for commercialization

Create a flexible environment that facilitate access to market for new start-ups

Attract private investors

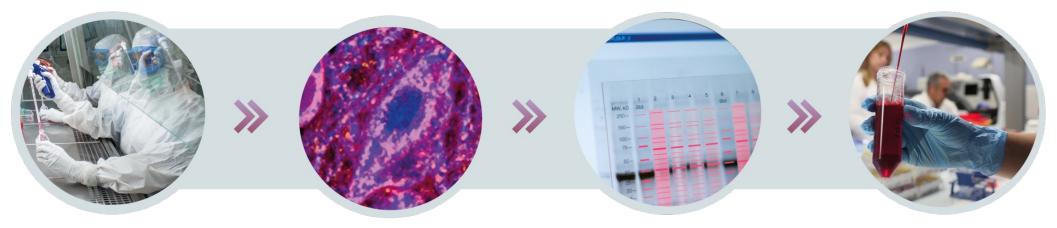


B2B with pharma, biotech, universities, and R&D foundations

Promote UPMC-ISMETT-Ri.MED Sicilian Hub



Advanced Therapeutics Medicinal Products



CELL PRODUCT EXTRACTION

Fetal and adult tissue Stem cell characterization Biobanking Cell biology

CELL PRODUCT CHARACTERIZATION

Phenotyping Genotyping

PRECLINICAL CANDIDATE SELECTION

In vivo efficacy Cell production

PRECLINICAL CANDIDATE **DEVELOPMENT**

Regulatory Tox. In vivo efficacy **GMP Manufacturing** Biomarker ID IND enabling

THERAPEUTIC NEED



DISEASE TARGET



PRODUCT IDENTIFICATION



PRECLINICAL DEVELOPMENT



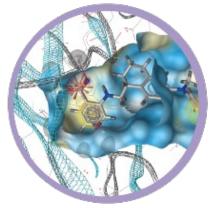
CLINICAL TRIALS PATIENTS



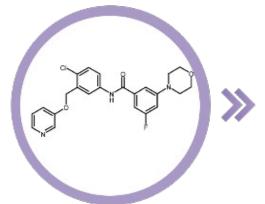




Drug Discovery











FROM SCREEN TO HIT

Protein production **Drug Design** HTS Bioinformatics Structural biology Biophysics

FROM HIT TO LEAD

Medicinal Chemistry Drug Design Pharmacokinetics In vitro screening In vivo screening

FROM LEAD TO PRECLINICAL CANDIDATE

Medicinal Chemistry Development Chemistry Toxicology **Pharmacokinetic** Pharmacodynamic

PRECLINICAL CANDIDATE DEVELOPMENT

Regulatory Tox. PK/PD **GMP Manufacturing** Biomarker ID IND enabling

PATHOPHYSIOLOGY TARGET VALIDATION SCREEN TO LEAD / PoC



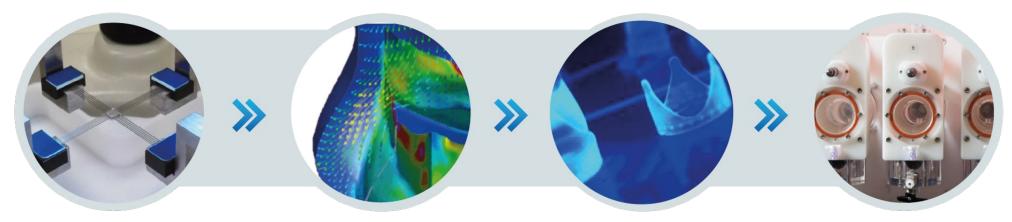








Bioengineering and Medical devices



BIOMATERIAL CHARACTERIZATION

Uniaxial Tensile Test Machine Biaxial Tensile Test Machine Viscometer Optical Microscope Press with Dices **Light Box** Digital Image Correlation

NUMERICAL ANALYSIS AND SIMULATION

ANSYS Package LS-Dyna MSC.Marc/Mentat **ABAQUS CAE** Mimics Innovation Suite Matlab Rhinoceros

PROTOTYPE MANUFACTURING

SLA 3D Printer FDM 3D Printer Oven (600 °C) Laser Cutting Machine **Automatic Sewing Machine** Hot Plate Mixer Vacuum Box

PRECLINICAL DEVELOPMENT OF MEDICAL DEVICES

Cardiac Pulse Duplicator Particle Image Velocimetry High Cycle Test Machine High Speed Camera Peristaltic Pump Centrifugal Pump Syringe Pump

THERAPEUTIC NEED ANALYSIS





DISCOVERY -



PROTOTYPE / PoC



PRECLINICAL CHARACTERIZATION



CLINICAL TRIALS PATIENTS





The Biomedical Research and Biotechnology Center (BRBC)

Ri.MED is engaged in recruiting and training highly qualified staff and has achieved important results, generating intellectual property covered with patents (32 patents up today), and promoting scientific and public engagement events.

Today, Ri.MED has a diversified project portfolio led by a multidisciplinary team with clear product development goals and a "bench-to-bedside" approach.

At the same time, Ri.MED is building the **Biomedical Research and Biotechnology Center (BRBC)** in Carini, next to the International Airport and the city of Palermo.

This center, a 25,000 square meter facility, will be ready in **September 2025**.





Sicily is the ideal location to maximize the impact in the Mediterranean area

The industrial area of Carini has been included in the **Special Economic Zone** (a.k.a ZES) of Sicily, also thanks to BRBC.

- → ZES allows the Municipality to access funds for the infrastructures
- → ZES subsidized tax regime will attract private investments in the area

GOALS:

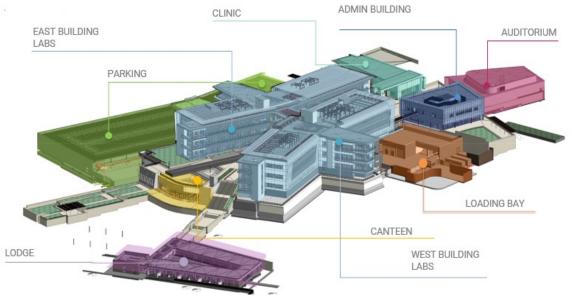
- ✓ Qualify an underdeveloped and risky area
- ✓ Develop strategic international alliances
- Offer job opportunities for qualified professionals, including top researchers and physicians
- ✓ Nurturing new talents and training the next-generation scientist
- ✓ Generate IP and create Small Medium Enterprises
- ✓ Secure public and private funding and investments for scientific research





BRBC: ongoing realization













BRBC: the Director



Prof. Dr. Giulio Superti-Furga

Scientific Director, Ri.MED Foundation

CEO and Scientific Director, CeMM

Professor for Medical Systems Biology Center for Physiology and Pharmacology Medical University of Vienna



Scheduled for completion in 2025, the BRBC will be managed by UPMC, and directed by the renowned molecular biologist Giulio Superti-Furga.

"Already the geographical and historical center of the Mediterranean, Sicily has the potential to become a major hub of scientific innovation. That's why part of our research strategy will focus on fostering a dense network of international cooperation"