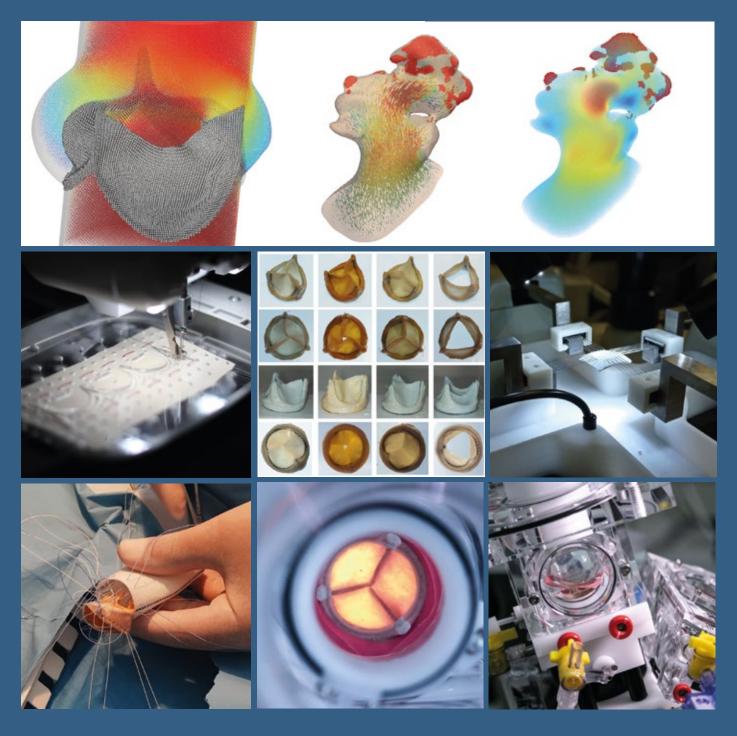


# Bioengineering Group (a) Ri.MED

We apply the engineering analysis and design to biological systems and biomedical technologies.







- Development and translation of innovative therapeutic treatments
- Next generation medical devices
- Advanced diagnostic solutions
- Therapeutic planning



- Assist local healthcare institutes
- Provide engineering support to clinical decisions
- Facilitate development of next generation therapies and diagnostics
- Medical devices development and assessment



#### **EXPERTISE AND RESOURCES**

- · Treatment and characterisation of biomaterials and biofluids
- · Numerical simulation of complex and multi-physics physiological systems
- Development of in-vitro set-ups to reproduce physiological models
- Prototyping and manufacturing of medical devices
- State of the art instruments for preclinical validation of cardiovascular devices
- · Skilled researchers with expertise in the different bioengineering areas
- Experience in the design and development of marketed cardiovascular devices
- State of the art instruments for preclinical validation of cardiovascular devices



### OUTCOME

- 3 novel cardiovascular technologies licensed to international companies
- IP portfolio including surgical and non invasive cardiovascular solutions
- Collaborations with multinational biomedical companies
- In average, over 5 articles per year in major international journals
- Contribution to a number of academic courses in the bioengineering area



## COLLABORATIONS

- · ISMETT- IRCCS, Palermo, ITA
- · Università degli Studi di Palermo, ITA
- · Università degli studi di Padova, ITA
- · Université de Technologie de Compiègne, FRA
- University College London, UK
- · University of Bristol, UK
- University of Pittsburgh Medical Centre, USA
- University of Pittsburgh, USA
- · Adeka, Japan





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