

Technology Transfer and Innovation at Sapienza

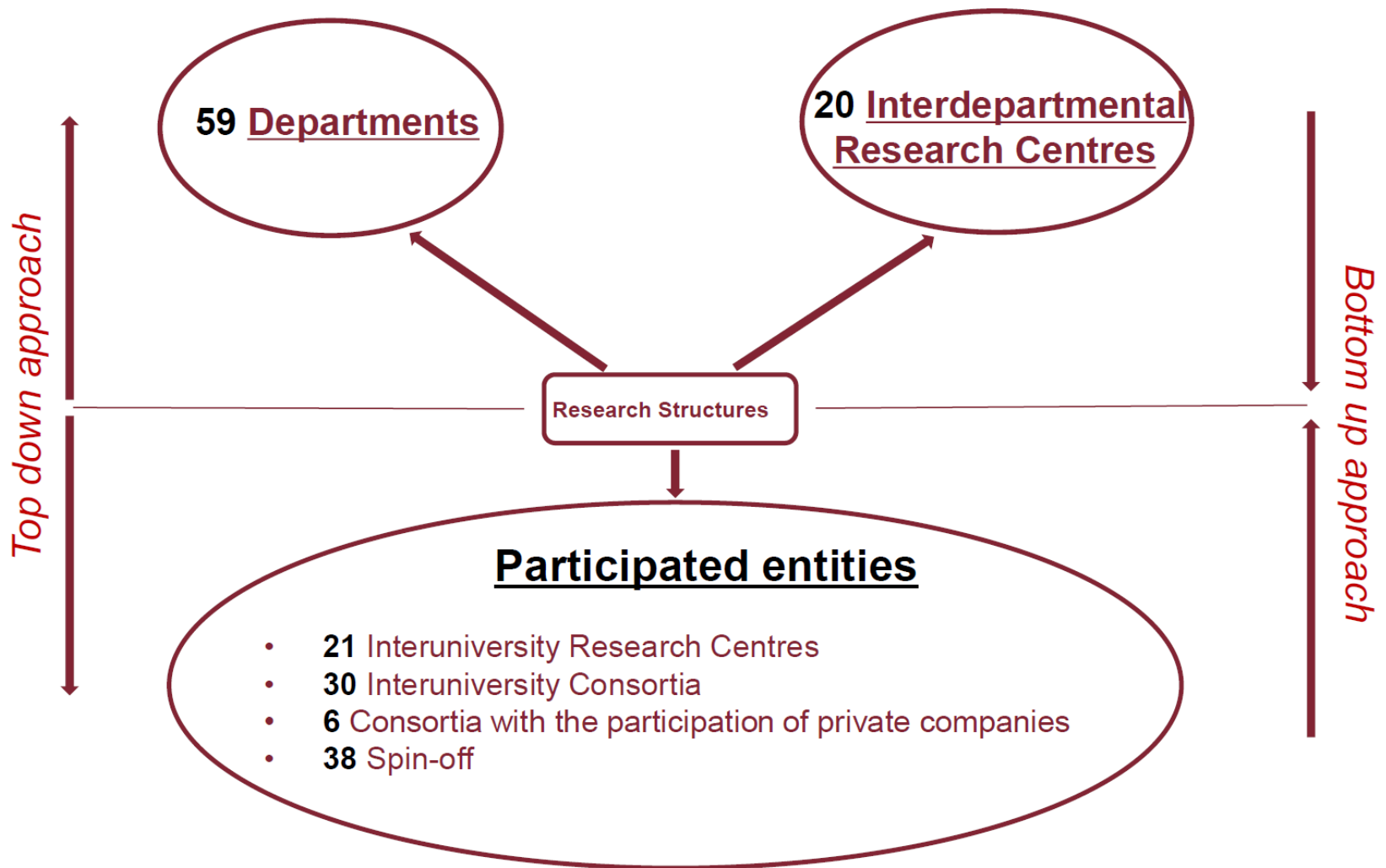
Maria Sabrina Sarto

Deputy Rector for Research Infrastructure and Tools



SAPIENZA
UNIVERSITÀ DI ROMA

Sapienza R&I potential

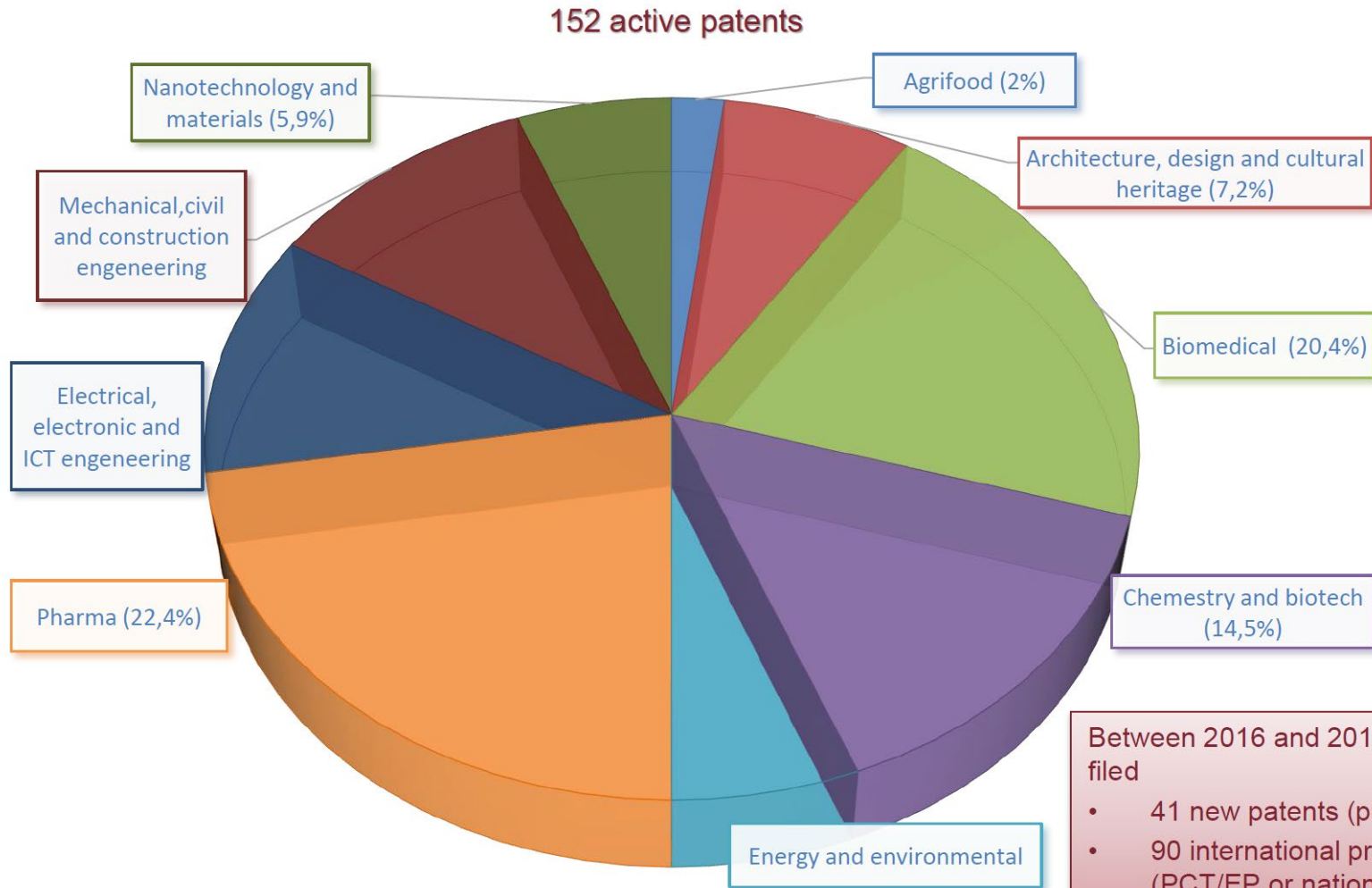


A strategic objective

- To improve and support research productivity and quality, at both national and international levels through:
 - Patent valorization
 - Spin off and start up promotion
 - Participation to technological district, competence center, national cluster
 - Enhancement and increase of technological innovations, infrastructure and tools for excellence research
 - R&D activities in collaboration with industries and SMEs
 - R&D services to industries, SMEs and stakeholders
 - Internationalization and networking

Patent valorization

Sapienza's Patents Portfolio



Spin off and start up promotion

Sapienza Startups

- **38 Start Ups of Sapienza University***
- **Turnover of 10 million euros**

| | |
|------------------------------|---|
| Eco Recycling S.r.l. | Electronic and electrical waste |
| Caesar S.r.l. | Renewable and sustainable energy |
| Sis.Ter. Pomos S.r.l. | Green economy and sustainable mobility |
| Sara Envimob S.r.l. | Sustainable development & biodiversity |
| Sed S.r.l. | energy data intelligence |

| | |
|--|---|
| Survey Lab S.r.l. | Geomatic monitoring systems |
| Nhazca S.r.l. | Analysis and monitoring of natural hazards |
| Dits S.r.l. | Transport Systems |
| Smart Structures Solutions S.r.l. | Structural Health Monitoring |
| Diamonds S.r.l. | Diagnostics and Monitoring of Structures |
| Kuaternion S.r.l. | Geomatics solutions |
| Soilmixing S.r.l. | Geotechnical engineering |
| Geeg S.r.l. | Geotechnical engineering |
| Sistema S.r.l. | Transport Systems & infomobility |
| Dream S.r.l. | Building Energy Management Systems |

| | |
|-----------------------------------|-----------------------------|
| Actor S.r.l. | Information Technology |
| Babelscape S.r.l. | Information Technology |
| Ict Innova S.r.l. | Information Technology |
| Obda Systems S.r.l. | Information Technology |
| digizen s.r.l. | Information Technology |
| Lockless S.r.l. | Information Technology |
| Ares2T S.r.l. | Information Technology |
| W Sense S.r.l. | Internet of Things |
| Over S.p.A. | Domotic system |
| Finance For S.r.l. | Financial Analysis Software |
| Alchemical Dynamics S.r.l. | Bioinformatics |
| GH S.r.l. | Infomobility |
| Machine Learning Solutions S.r.l. | Machine Learning |

| | |
|--|-----------------------------------|
| Molirom S.r.l. | Chemistry |
| Archi Web S.r.l. | cultural heritage |
| Aicomply S.r.l. | compliance management |
| BrainSigns S.r.l. | neuromarketing |
| Robotics S.r.l. | space observation services |
| NG Detectors S.r.l. | medical diagnostic systems |
| Digital Med S.r.l. | Medical Solutions |
| Ma.Cro Lifescience Solutions S.r.l. | Life Science |
| 3 Fase S.r.l. | Oil & GAs |
| Best-T S.r.l. | special educational needs |

* Updated to February 2019

Technological district, competence center, national cluster

- **National Technological Clusters:** Industrial research and technology transfer complying with national priorities
 - **Agrifood** - Agro-Industrial Sector
 - **Sustainable Processes and Resources For Innovation and National Growth** - Green Chemistry Area
 - **Made In Italy** -Design, Creativity and Made In Italy
 - **Tiche** – Technology for Cultural Heritage
 - **Energia** - Energy Sector
 - **Trasporti Italia 2020** -Mobility Area
- **National Competence Center:** **Cyber 4.0** – Cybersecurity in: space, health, automotive. A network of universities, research center and industries.
- **Regional Technological District:** **DTC Lazio** –New Technologies for Cultural Heritage: **more than 90 stakeholder**
- **Regional HUB for Technology Transfer:** partnership among 5 public universities in Lazio Region

Enhancement and increase of technological innovations, infrastructure and tools for excellence research

- **Sapienza Research Infrastructure**
 - In the last five years, Sapienza has implemented an investment policy aimed at setting up a **university research infrastructure** consisting of a network of laboratories and large equipment, aimed at supporting research activities of excellence, innovation, technology transfer and business incubation
 - 10.000.000 Euro of investment in 5 years
 - Open to R&D services to industries and stakeholders
 - Multidisciplinary approach

Sapienza
Nanotechnology and
Nanoscience Laboratory

SNNLab

<https://web.uniroma1.it/sapienzanano/en>

**Large
University
Equipment**

<https://www.uniroma1.it/en/pagina/research-infrastructure>

SRI

Sapienza Research Infrastructure

https://web.uniroma1.it/saperi_co/en

Saperi&Co

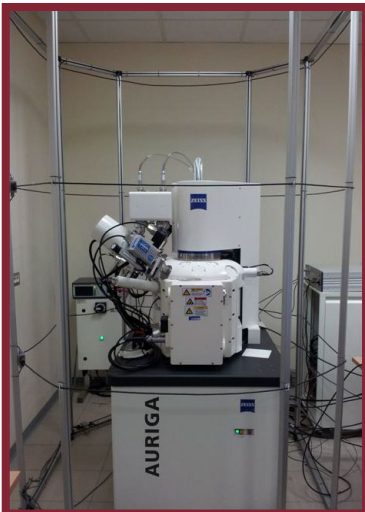
Sapienza
enhances Research
Innovation &
Coworking

ATOM

Advanced
TOMography and
Microscopies

MICROSCOPES AND NANO-CHARACTERIZATIONS

FE-SEM + EDX +
nanomanipulator +
EBL + FIB



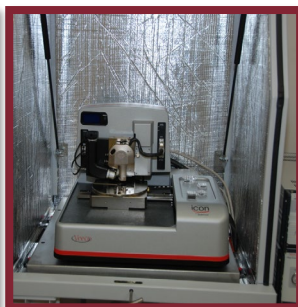
Fluorescence
microscope +
correlative



XRD



AFM: ICON and Multimode



NANOFABRICATION, PRODUCTION OF NANOSTRUCTURES AND NANOMATERIALS

MWCVD / PECVD
deposition system



Rotational rheometer
with electrorheology



Ultramicrotome



Furnace of
nanostructure
production



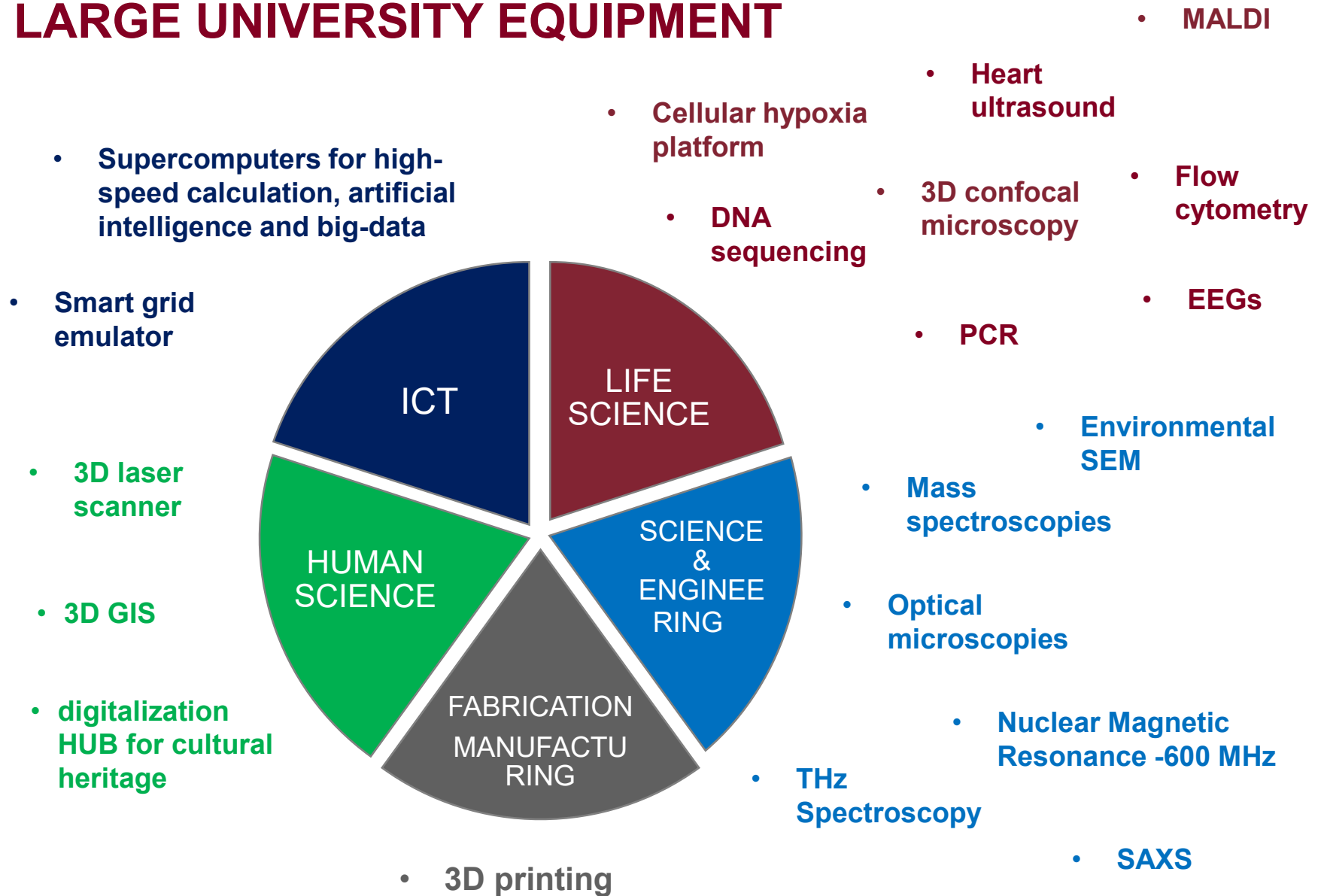
Saperi&Co. - Sapienza enhances Research Innovation and Coworking

Co-funded by  REGIONE LAZIO



Law of Lazio Regional Authorities n. 13/2008 (promotion of R&D and TT)

LARGE UNIVERSITY EQUIPMENT



ATOM

Co-funded by  **REGIONE LAZIO**



TEM
Transmission Electron
Microscopy

SEM
Scanning Electron
Microscopy



AFM
Atomic Force
Microscopy



Bio-printing



Members



Partners



Patch clamp



**Holographic
Tomography**



**Phase
Contrast
X-Tomography**



**Acoustic
Tomography**

Technology Transfer & Innovation at
Sapienza

A large network of industrial collaboration in the field of system technology integration in order to:

- **Promote technology innovation** inside high-tech laboratories
- **Promote multidisciplinary approach**
- **Promote integration** between University, Research Centers, Enterprises and Industries
- **Promote a «research-on-demand» approach:** research and innovation activities oriented and tailored towards the needs of society and industry.
- **Provide a competitive support** to innovation, creativity and internationalization of **local and national enterprises**

Nicoletta Amodio

Research and innovation for Confindustria

Giuseppe Lenzo

Senior Vice President of Marketing and Sales of Telespazio

Cristina Valente

Head of Commercial Coordination and Institutional Markets Development of Telespazio

Lucrezia Calderaro

Chief Technology Innovation Officer of Leonardo Corporate

Luigi Iavarone

President of Aerospace Mediterranean Company

Francesco Maria Monti

Board member of Aerospace Mediterranean Company

Ignazio Dimino

Italian Centre Aerospace Research, Adaptive Structures Division

Fabio Sbianchi

Founder of OctoTelematics

Vito Avantiaggiati

Senior Principal at TDK-Invensense

Antonio Cianci

Co-founder of Airlite

Marco Balucani,

CEO and Founder of Rise Technology

Giuseppe di Lella

Vox gentium

Silvio Palomba

Marketing Manager, BASF Construction Chemicals

Giorgio Klinger

Director of Sicamb Martin-Baker Aircraft

Michela Cecotti

Chief Executive of Sultan

Marco Guarna

Partner of Digital Magics

Sergio D'Alberto

General Affairs Senior Manager of Lfoundry

Fabrizio Famà

HR and Corporate Affairs Vice President of Lfoundry