

Luigi Azzarone

Startup Analyst

Bio4Dreams: who we are

• What we do

Who we are



Bio4Dreams is a privately owned incubator certified by the Ministry of Economic Development operating in the field of Life Sciences. It is fully dedicated to the development of very-early-stage startups and to the promotion of innovation ecosystems.





The founders



- Degree in Medicine and Psychiatry
- MBA @ Bocconi University, Milan
- Top 10 innovative women managers in Italy
- Founder and CEO of several biotechs (including Gentium, IPO at Nasdaq in 2005, exit in 2014)



- Degree in Economics
 @ Bocconi University,
 Milan
- >30 years in Healthcare advisory and management
- Founder and Board Member of many biotech startups



- Degree in Medicine and Master in Health Management
- >14 years as Director of Health International Projects @ S. Raffaele Hospital
- >18 years as Founder and CEO of >10 Startups in Health/Biotech



- Degree in Medicine, Professor of Nephrology
- Visiting Professor in several International univerisities
- Chairman of several initiatives in Genomics and Proteomics: academic, startups & no-profit
- >450 peer-reviewed papers, H-Index 70



• Bio4Dreams: who we are

What we do

Our approach



Supporting innovation and its ecosystem

We help exceptional people to **exploit the results of their scientific research** in Life Sciences, working alongside **all the subjects of the innovation chain** to **create sustainable, pragmatic**, and **long-lasting business paths** with an international scope, as well as contributing to the creation of a **fertile ecosystem that nurtures and promotes innovation** from its very early stages.



BOTTOM-UP INNOVATION

Exploiting research results by working closely with startups' "champions", to strengthen the early stages of their business ideas through the consolidation of the assets.



incubation services and/or direct investments



TOP-DOWN INNOVATION

Promoting innovation ecosystems by collaborating with local institutions in order to create, design and develop a favorable environment for startups' growth.



design, development and management of territorial hubs dedicated to innovation

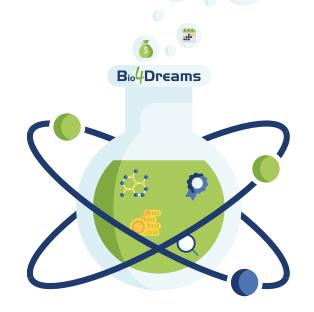


Bottom-up Innovation: every project is one of a kind

Making the jump from research to business is often traumatic

because you are required to **evaluate**, identify and acquire a large number of different resources and skills, about which you know very little.





Bio4Dreams builds unique support programs

helping startuppers to **identify the needs** of their new venture, to **prioritize actions** to be taken and **rationalize available resources**.



Bottom-up Innovation: the incubation activity

SCIENCE & TECHNOLOGY

- Intellectual property services (IP)
 - Patent strategy definition
 - IP management
- Laboratory services for pre-clinical studies
 - Specialist laboratory activities for the preclinical development phases
- Clinical studies
 - Regulatory strategy support
 - Clinical studies management
 - Feasibility and usability studies
- Quality service
 - Support to the development and management of the company quality system
 - Activities aimed at ISO certification

STRATEGY & MARKET

- Business and technical-scientific networking
 - Scientific and clinical networking in the field of Life Sciences
- Fundrasing services
 - Grant office
 - Subsidized finance and tax credit services
- Strategic advisory and business development
 - Business development
 - Marketing
 - Strategic advisory
- Communication services
 - Corporate communication
 - Corporate website development
 - Brand management

MANAGEMENT

- Strategic and managerial support
 - Business Model review
 - Business Plan review
 - MAT (Minimum Asset Threshold)
- Operative support
 - Administration and logistics
 - Accounting and tax compliance
 - Management control
 - Finance
 - HR
 - Legal affairs
- Settlement
 - Work station
 - Laboratories
 - ICT management and personalization
- Workers security
 - RSPP service
 - Occupational medicine
 - Health and safety training



Bottom-up Innovation: the direct investments

DEVELOPMENT STAGE

pre-seed and seed, often intervening directly in the **initial creation** of the company (e.g. company constitution).

TECHNOLOGICAL AREAS

investments are focused on **precise priority sectors of interest**, where Bio4Dreams can boast distinctive skills in the selection and structuring of business projects.



INVESTMENT TICKET

up to €200k in equity, partly in cash and partly in kind, according to the needs of the startups.

INCUBATION CENTRALITY

investing in startups is **always followed by** the creation of a **tailor-made incubation** program. The **incubation activity** plays a **central role** in corporate development.

TIME HORIZON AND EXIT STRATEGY

maintenance of equity investments for a period of at least **5-7 years**, in line with the typical development times of the sector and with the possibility of a **partial exit** in the short-medium term (e.g. round A).

STARTUPS' GOVERNANCE

qualified minority (<30%) in affiliated startups, with direct intervention in strategic management and development direction.



Our current sites

11

sites

international hubs





Turin

MATERIAS ideas come to life

Naples



Trieste

OSPEDALE POLICIINICO SAN MARTINO
SISTEMA Sanitario Regione Liguria
Istituto di Ricovero e Cura a Carattere Scientifico

Genoa

TECHPARK SÜDTIROL/ALTO ADIGE

Bolzano

BIC - BUSINESS INNOVATION CENTER

Trento

AREA PHARMA BIOTECH

Villa Guardia (CO)



Venice



Siena

EUROPE

- UNIVERSITY OF PÉCS
 Pecs (Hungary)
- KLASTER LIFESCIENCE KRAKÓW Cracovia (Poland)

WORLD

PENNSYLVANIA BIOTECH CENTER
 USA



Bio4Dreams @ MIND



The **new headquarter** is a three-floor building featuring a modern and open style. The HQ offers **corporate offices**, **multifunctional areas**, and **research laboratories**, which host **over 60 people daily**, including startups, SMEs, and industrial and institutional partners.

The HQ hosts 16 shared research laboratories, the **SharedLabsTM**, and spaces for **Innovation CircleTM** and **Open Innovation** activities.

2.200_{m²}

16

3,5_{M€}

total area shared research

overall investment

Bio4Dreams











Bio4Dreams is among the leaders of the "Life Sciences & Health Care" thematic area, one of the 11 areas of Federated Innovation @MIND, a new collaboration model between public-private companies for the development of projects, products, and innovative solutions.

The project will offer a space capable of promoting functional contamination and collaboration, even between competitors, thus overcoming the concepts of open innovation and traditional innovation.



- West Gate

Lendlease has signed an agreement with Bio4Dreams to support the strategic design of the new laboratory areas planned at MIND - West Gate, a potential space for new SharedLabsTM of about 40.000m².



The strategic projects



The SharedLabs are **modular research laboratories**, organized and equipped by research function, which can be **shared by different startups** for the time required to validate their scientific activities.

The SharedLabs span accross **5 main thematic areas**:



CHEMISTRY & BIOCHEMISTRY



MOLECULAR BIOLOGY



BIOSENSORS



BIOMATERIALS



CELL BIOLOGY

www.shared-labs.com



The aim of Innovation Circle is to bring together the innovation stakeholders around a working table, to select and provide startup with the key competences they require to jump to the next development step.

Meetings are organized with the project partners in order to analyze entrepreneurial projects and very early-stage startups and to define their development paths.





eurofins













RESEARCH PARTNER













The main partnerships















Partner of the **Invitalia** network "**Sistema Invitalia Startup**" since 2021

A team of close-knit professionals

Multidisciplinary team of 61 young and highly qualified people

Bio4Dreams

Companies in the network

Startups in the network

resources involved resources involved

resources involved

UNIT RESPONSIBLES



Andrea Albertini IT & Marketing



Claudio Gattuso QC & Sicurezza



Fabio Bianco

Marco Gili

Legal Affairs



Cristina Biasizzo External Relations





Trisha Kibaya Innovation Circle



Claudia Casnici Lab Services



Nicola Pastori Finance



Costanza Conti Grant Office



Demetra Pelos Business Nursery

OPERATING SITES RESPONSIBLES



Cristina Biasizzo Sede Genova - S.Martino



Chiara Bortolini Sede Venezia Mestre -Chiostro M9



Barbara Codan Sede Trieste - Regus



Elisabetta Borello Sede Milano - MIND



Claudio Gattuso Sede Villa Guardia - Area Pharma Biotech



Marco Gili Sede Torino - OGR



David Tacconi Sede Trento - Polo Tecnologico



Business Nursery: the numbers

+1400

evaluated projects

+145

selected projects

+40

projects presented to the **Investment Committee**

39

incubated startups
(of which 13 affiliated)



Affiliated companies



Tackles the inflammatory processes related to fibrosis.

DRUGS



Innovative industrial holding that invests in BioHighTech SMEs and startups

E-HEALTH | MEDICAL DEVICES | DIAGNOSTICS | BIOTECH SERVICES



Platform that develops biomarkers of neurodegenerative and neurological diseases.

DIAGNOSTICS



Development of SOCE modulators as a therapy for calcium related diseases.

DRUGS



Digital rehabilitation system, in clinic as at home.

MEDICAL DEVICES



Cloud platform that offers services to promote healthier eating habits.

E-HEALTH



Produces functional protein concentrates and isolates obtained from plant sources.

GREENTECH



Designs, develops, and manages shared research laboratories.

BIOTECH SERVICES



Proprietary nano-molding and microfluidics system applied to Life Sciences.

MEDICAL DEVICES | DIAGNOSTICS



Identifies new targets for the development of innovative drugs also using AI.

DRUGS



A one-stop-shop for preclinical activities, from discovery to first in human

BIOTECH SERVICES



Platform designed to assist the elderly and non-self-sufficient people.

E-HEALTH



Portable genetic analysis laboratory customized for the agri-food sector.

DIAGNOSTICS







SPIN-OFF



BEATRICE RIVA President, CEO & Founder

- Master degree in Biotechnology
- PhD in Pharmacology
- Strong experience in calcium signalling and in drug development



TRACEY PIRALI

CTO & Founder

- Master degree and PhD in Medicinal Chemistry
- Strong experience in click chemistry and in drug discovery

RECOGNIZED AS SME BY EMA

(EMA/SME/228/19/R3)

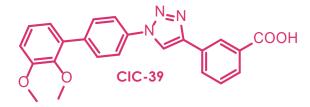
CAP TABLE

- **B.Riva** [49%]
- Bio4Dreams [24%]
- **T. Pirali** [19%]
- **A. Serrao** [8%]

SMALL MOLECULES













high selectivity

good Pk/Pd profile



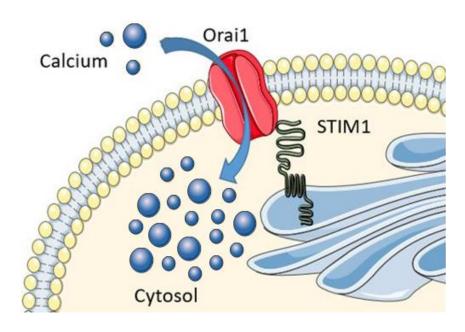


high oral bioavailability



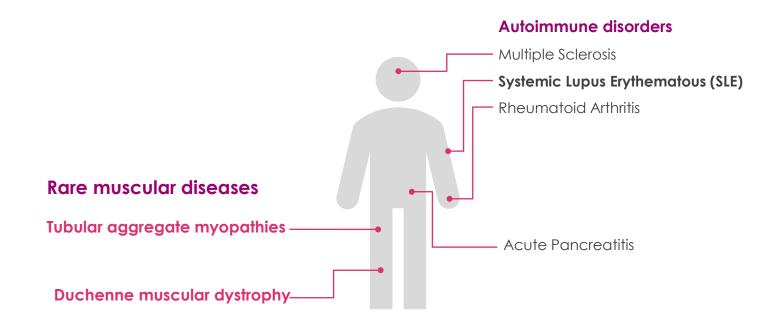


SOCE over-activation



- Ca²⁺ influx mechanism activated by depletion of **intracellular stores**
- Important mechanism in the Ca²⁺ homeostasis maintenance

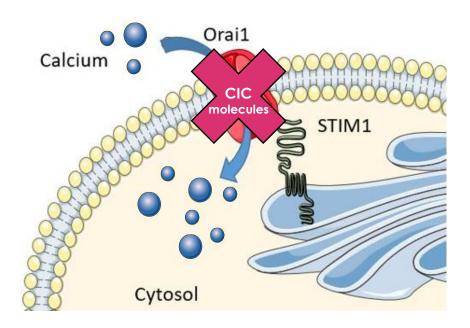
Transversal mechanism in many disease contexts



Solution: Novel SOCE inhibitors

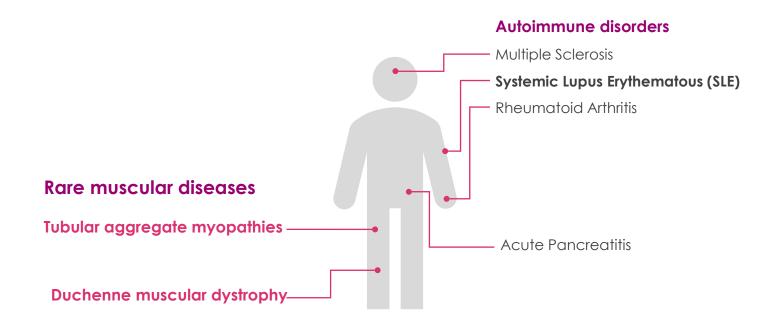


SOCE over-activation



- Inhibition of overactivated SOCE
- Ca²⁺ restored to physiological levels

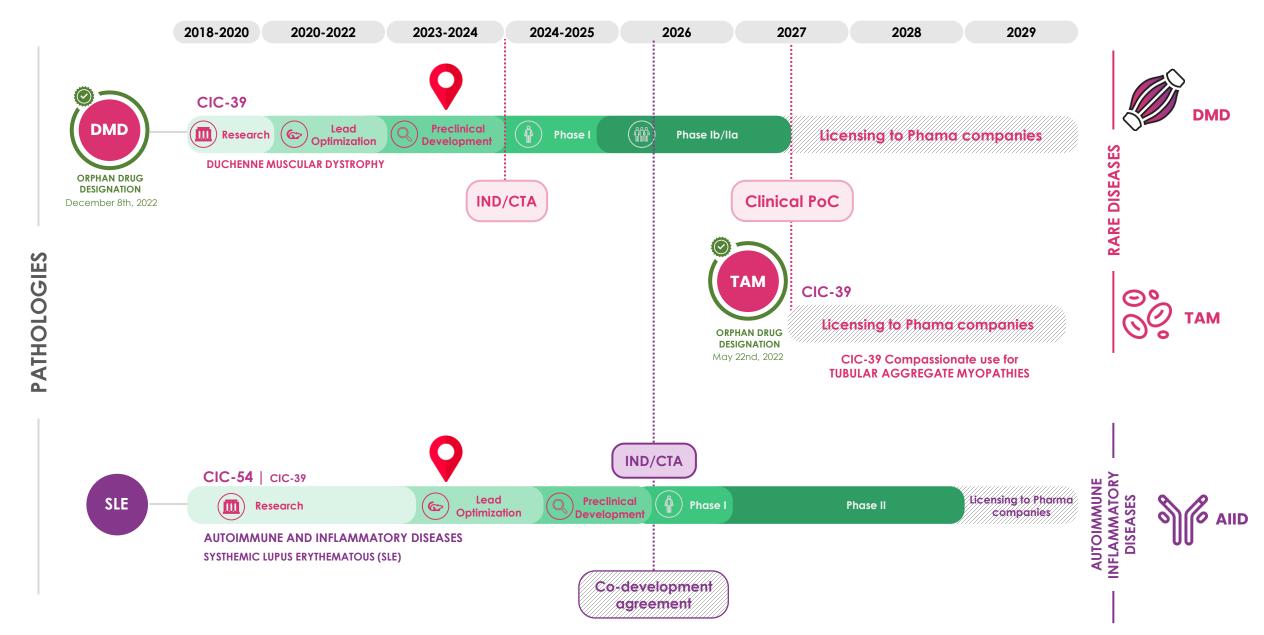
Transversal mechanism in many disease contexts



Novel target in pharmacology

- Few SOCE modulators are in clinical trials
- No SOCE modulator has reached regulatory approval

R&D Pipeline





BEATRICE RIVA

Pharmacologist **President & CEO Founder**

- · Master degree in Biotechnology
- PhD in Pharmacology
- Strong experience in calcium signalling and in drug development



TRACEY PIRALI

Medicinal Chemist CTO **Founder**

- Master degree and PhD in Medicinal Chemistry
- Strong experience in click chemistry and in drug discovery



LUIGI AZZARONE

Neuroscientist **Research Assistant**

- Bachelor's degree in Biology
- International Master's degree in Neuroscience
- Experience in neurobiology research and in the start-ups analysis



DEMETRA PELOS

Biomedical engineer **IP Porfolio Manager**

- Strong experience in microfluidic devices and platform for research and diagnostic purposes
- In-depth start-ups valuation and management on the job experienced



NICOLA PASTORI

Economist CFO

- Degree in Economics @ Università Bocconi. Milan
- Strong experience in Financial Management and Business start-up analysis



SIMONA SOMAINI

Biologist Regulatory / QC

- Bachelor's degree in Biology
- Master Degree in Molecular Biology
- Strong experience in Quality Control in pharma companies, GCP and GMP regulations



MARCO GILI

Legal expert **Legal & General Affairs**

- Degree in Law Executive Master in **Business** Management
- Strong experience in legal and financial aspects concerning SMEs and start-ups

BIO4DREAMS TEAM MEMBERS

- Team consolidation
- Heterogeneous skills
- Highly qualified experts in the sector

INVESTORS

Bio4Dreams: 132K €

CDP Venture Capital, Fondo Rilancio Start-up: 300 K € *SAFE "simple agreement for future equity

Share capital: 23.714,29€

Bio4Dreams main support

Incubator's main support

- Intellectual property services (IP)
 - Patent strategy definition
 - IP management
- Network
 - IRCCS (institute for treatment and research)
 - Pharmaceutical companies
 - Stakeholders
- Strategic advisory and business development
 - Business development
 - Strateaic advisory
- Settlement
 - Work station
 - Laboratories
- **Operative Support**
 - Administration and logistics
 - · Accounting and tax compliance
 - Management control
 - Finance
 - HR
 - Legal affairs
- **Fundraising**
 - Grant office
 - Fundraising activities

Orphan Drug Designation





Duchenne Muscular Dystrophy

December 8th, 2022 from EMA





Tubular Aggregate Myopathies

May 22nd, 2022 from EMA (🖎)



Future challenges



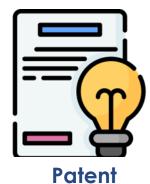
Regulatory support

Strengthen regulatory support

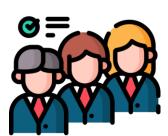


Ecosystem

Highly fragmented ecosystem



- IP valorisation
- Dialogue and collaboration with TTOs



Key Players

Chain of key players for follow-up (TRL3-6)





Let's keep in contact

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www.bio4dreams.com







