



IM2B



Our ambition : develop a network of internationally recognised laboratories to strengthen interdisciplinary research and teaching in microbiology and its applications.

Understanding the diversity and functioning of microorganisms, at the molecular, cellular and ecosystem levels, and their interactions with their environment, is essential for tackling the complexity of the microbial world, exploring its adaptive capacities and developing biotechnological solutions in the fields of energy, the environment and health. The Institute for microbiology, bioenergies and biotechnology (IM2B) brings together research and training players in this field at the Aix-Marseille site, as well as a network of leading technology platforms. It catalyses the initiation of innovative interdisciplinary research, the development of innovative, internationally oriented training courses and the structuring of technology clusters.

Forming a community

11 research units

1 research federation

4 doctoral schools

3 faculties

more than 400 regular staff

more than 530 students (master's and doctoral)



Biodiversity

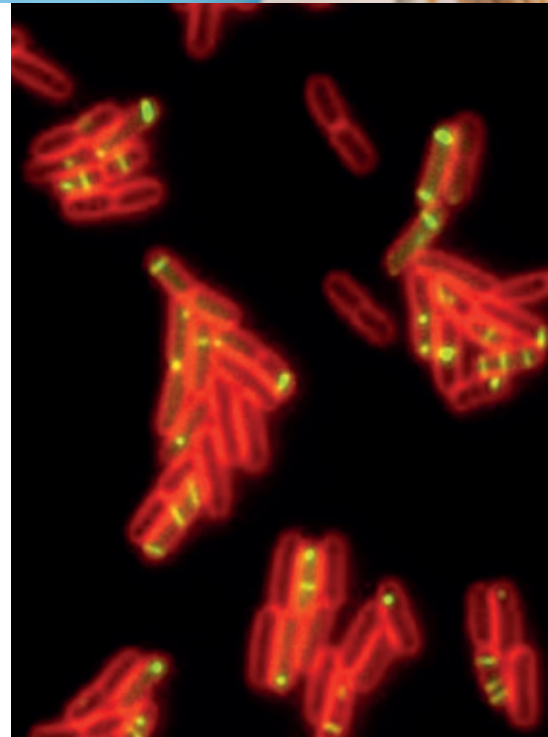
Microorganisms

Molecular machines

Photosynthetic organisms

Catalytic mechanisms

Metabolism



Bringing disciplines closer together

Biology

Biophysics

Chemistry

Bioinformatics

A network of technology platforms structured around 6 clusters

Incentive calls for projects

Grouping teams according to key investments



Acting internationally

Outgoing internship support for students

Grants for PhD and postdoctoral students to take part in international conferences

Support for the organisation of international conferences

Training through and for research

Training in cutting-edge technologies on technology platforms

An interdisciplinary doctoral programme in microbiology

Funding for jointly supervised theses



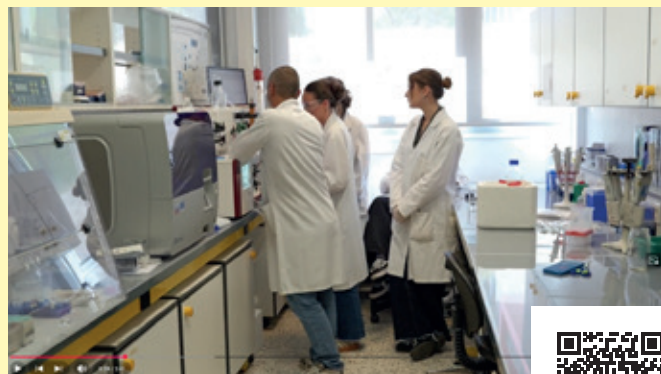
Strengthening partnerships

- Public research bodies
- Competitive clusters
- Research infrastructure
- European universities
- Energy and environment sector companies

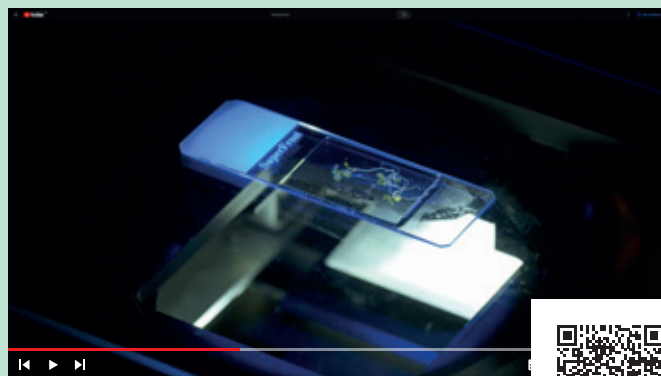
Videos



Watch the institute's animated film



IM2B features innovative training programmes
from master's to post-doctoral level



IM2B features a network of state-
of-the-art facilities in life sciences



Our executive office

The entire governance team: <https://url.univ-amu.fr/institut-im2b-gouvernance>



Director :
David Pignol



Deputy research
director:
Éric Cascales



Deputy Co-Director
for Training:
Bruno Faure



Operations manager and
Deputy Co-Director for
Technology platforms and
knowledge transfer:
Agnès Kammoun



Deputy Co-Director for
Technology platforms and
knowledge transfer:
Déborah Byrne



Deputy Co-Director
for Training:
Christophe Laloi

Focus on our network of platforms

IM2B federates a network of 33 technological and educational platforms, open to national and international collaborations, to understand the diversity and operation of living organisms and particularly of the microbial world. Using cutting-edge technologies, some of which are unique in France, sixty engineers who are experts in their field are committed to research, training and innovation. These platforms are used to culture a wide range of organisms, produce and purify different types of biomolecules, reveal their interactions, dynamics and structure, observe living organisms using imaging, and conduct large-scale multi-omics studies for in-depth analysis and understanding of biological systems.



Contact

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David Pignol

Operations manager:
Agnès Kammoun

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Training at IM2B



*Training for, through and in research, with
continuity from master's to doctorate level*



Our training ecosystem

**more than 380
master's students***

3 partner faculties

Faculty of sciences (FS)
Marseille polytech
Faculty of pharmacy

**1 Plinius course -
interdisciplinary
PhD programme**

**around 150 PhD
students***

4 partner doctoral schools

Life sciences (ED 658)
Biomedical research (ED 659)
Chemical sciences (ED 250)
Environmental
sciences (ED 251)

6 key master's

Microbiology
Structural biology, genomics
Life chemistry
Agricultural, food and environmental
science and technology
Biological engineering studies
at Marseille polytech
Bioinformatics

* These figures include students enrolled in master's specialisations affiliated with the institute and PhD students enrolled in our partner doctoral schools.

Explore
our PhD
programme:





Our key actions since 2020

Funding for interdisciplinary theses or theses carried out in partnership with a company

Funding of M2 internships on technology platforms to develop new methodologies or technologies

Practical training in cutting-edge technologies

IGEM international competition for synthetic biology

Internship mobility grants

1 international interdisciplinary PhD programme: Plinius cursus

19 platforms taking part in training courses

18 internships on technology platforms

6 entries (all award-winning) to the iGEM competition

14 inter-laboratory theses

2 partnership theses

14 outgoing internship mobility grants

"An incoming mobility grant from the IM2B institute enabled me to do my Master 2 internship in Marseille in the BBF laboratory. This international experience enabled me to build up a scientific network and continue my scientific career in Marseille, as part of a thesis co-funded by the IM2B institute."



Josiane AZIZI
M2 Biotechnology, Lebanese University, Lebanon
MIO/LISM PhD student

Our international training

CIVIS alliance
European civic university

4 international seasonal schools, as part of CIVIS alliance

2 diplomas in international partnership with the University of Rome - La Sapienza

WUT-amU Franco-Chinese Institute: 1 double diploma in Microbiology

30% of PhD students funded by the IM2B are international

Contact

Deputy Co-Directors for Training:
Bruno Faure and Christophe Laloi

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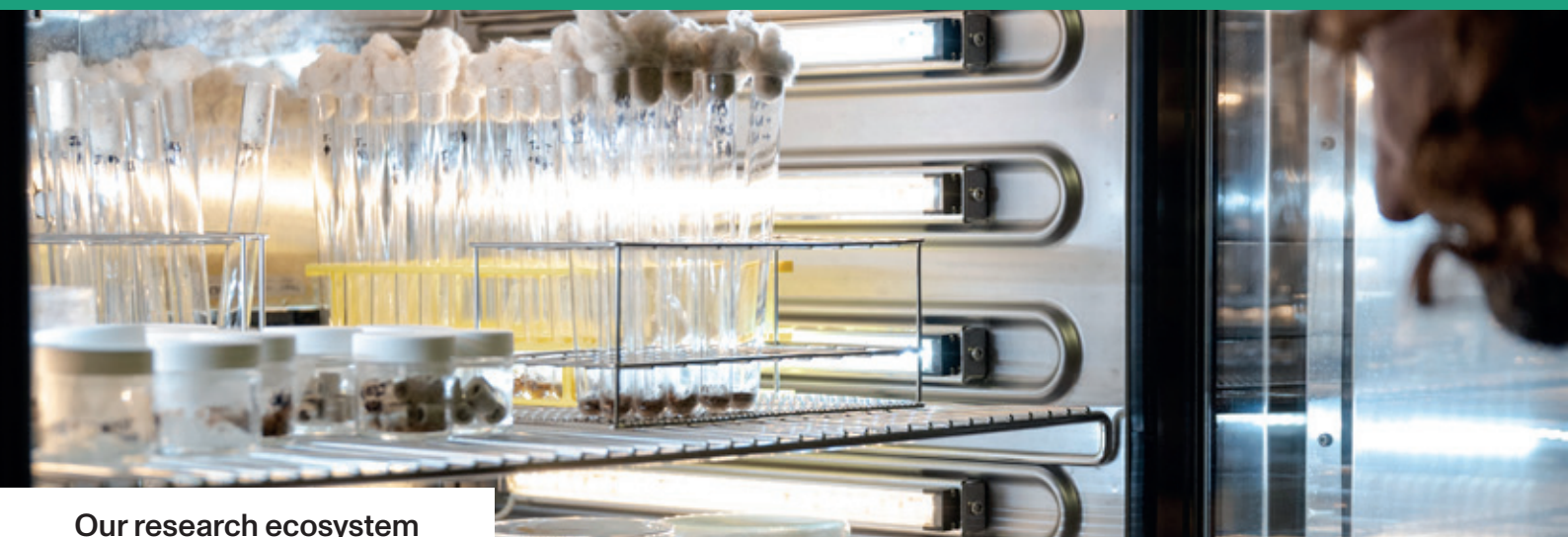
<https://institut-im2b.univ-amu.fr/>



Research at IM2B



*Bringing together the strengths in microbiology
of the Aix-Marseille site to consolidate
our international scientific position*



Our research ecosystem

11 research units

Energy

Fungal biodiversity and
biotechnology lab (BBF)
Aix-Marseille biosciences and
biotechnologies (BIAM)
Bioenergetics and protein
engineering (BIP)

Environment

Mediterranean institute of
oceanography (MIO)

Health and life sciences

Architecture and function of biological
macromolecules (AFMB)
Genomic & structural information (IGS)
Bacterial chemistry laboratory (LCB)
Laboratory for macromolecular
systems engineering (LISM)
Membranes and therapeutic
targets (MCT)

Advanced science and technology

Marseille institute for molecular
science (ISM2)

Mechanics, modelling and clean
processes laboratory (M2P2)

1 research federation

Mediterranean institute for microbiology

more than 400 regular staff

Aix Marseille Université

CNRS

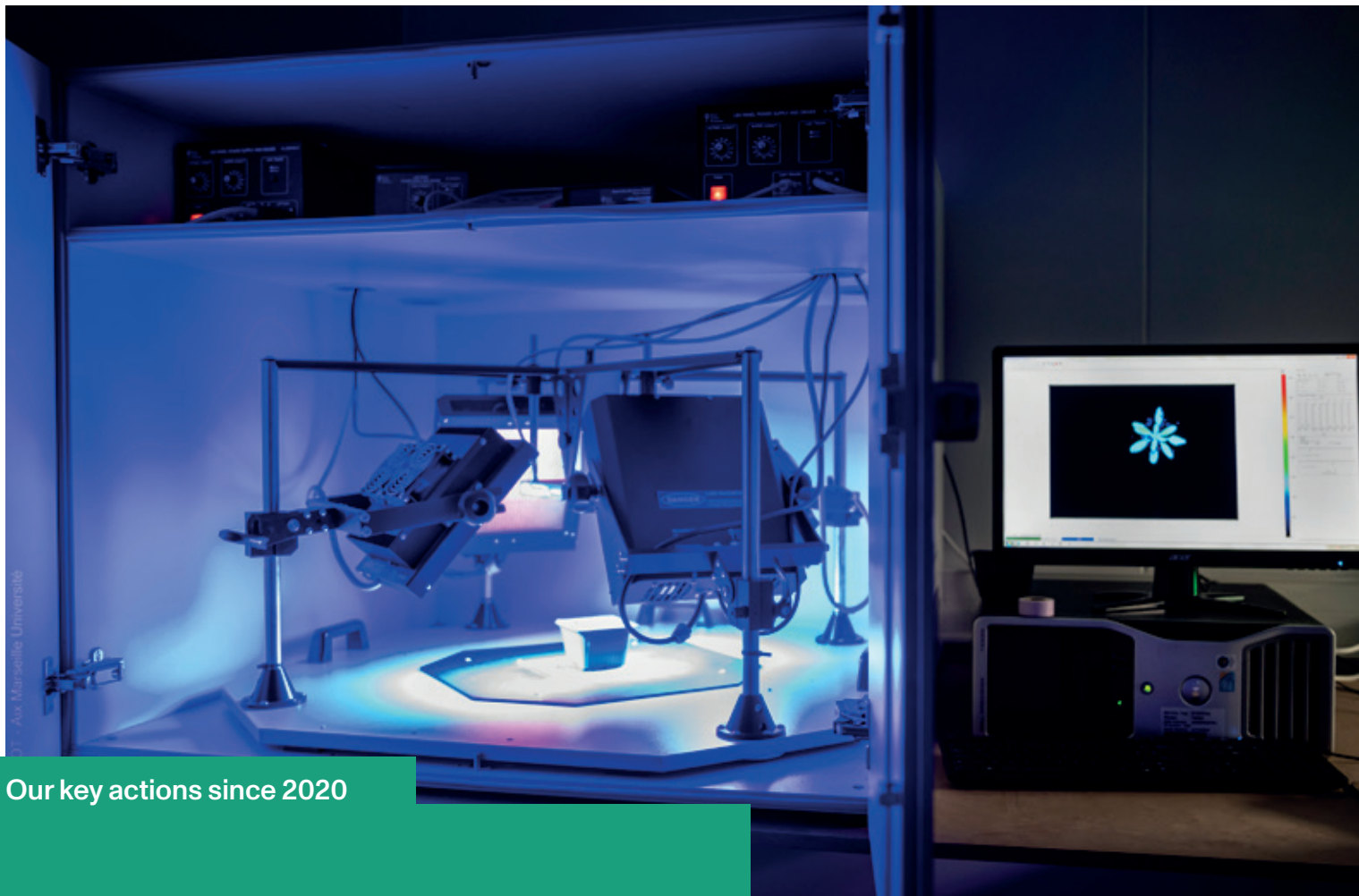
CEA

INRAE

Inserm

IRD

Centrale Méditerranée



Our key actions since 2020

Support for new inter-laboratory collaborations to tackle interdisciplinary questions

Launch of new research areas

Support for innovation and technology transfer

Scientific events organised by and for IM2B members

International scientific conferences jointly organised and supported by the institute

16 “Interdisciplinarity” awardee projects

36 “Newcomer” winners

2 “Proof of concept” awardee projects

18 scientific events

32 international scientific conferences

Our main areas of research

Biodiversity, molecular mechanisms and machines

Diversity of metabolisms and cellular approaches

Inter-organism dialogue (micro/macro-organisms)

Biotechnologies: bioenergy, environment, health

Contact

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Eric Cascales

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"I am the coordinator for the FeShijack project, supported by the IM2B institute and winner of the Amiidex Interdisciplinarity call for projects. This collaborative project, led by 3 teams from the BIP, IGS and LCB laboratories, is exploring the role of ironsulphur centres in giant viruses. IM2B has been a real catalyst in launching this emerging theme and positioning us for future calls for projects."



Bénédicte BURLAT
Senior lecturer, amU



IM2B partnerships



Strengthening and developing special links with academic and institutional players and the socio-economic and cultural world



"IM2B has always been an active member of the community of companies and research laboratories run by the competitiveness cluster.

This is reflected in project certifications, the organisation of joint events and our very interesting participation in the institute's Scientific Advisory Board.

We appreciate the ambition, high level of research and interdisciplinary approach."



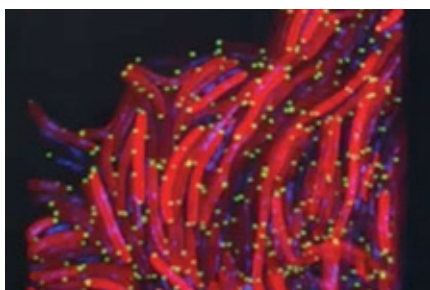
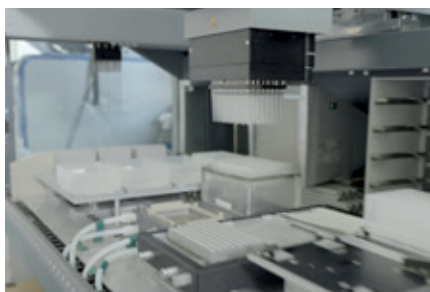
Anne-Marie Perez
Managing Director
of Capenergies

Our key actions

Co-organisation with Capenergies and Novachim of a Business-Research conference on "Biofuels for sustainable mobility"

Organisation of a series of research seminars in biochemistry, in partnership with CIVIS alliance

Partner of the BiotechnoSud forum, a conference dedicated to the professional integration of junior scientists





Our key partner include

Internationally

University of Namur
Philipps Universität, Marburg
Technische Universität, Berlin
La Sapienza University, Rome
Industrial Biotechnology Innovation and
Synthetic Biology Acceleration (IBISBA)

In France

National centre for scientific research (CNRS)
French atomic energy commission (CEA)
French national research institute for
agriculture, food and the environment (INRAE)
French national institute for health
and medical research (Inserm)
French national research institute for
sustainable development (IRD)
Infrastructures in biology, health
and agronomy (IBiSA)
Companies in the energy and environme

In the Aix-Marseille area

Centrale Méditerranée
CEA tech
Capenergies competitiveness cluster
PIICTO Association
Novachim



Contact

Deputy Co-Directors for Technology
Platforms and Knowledge Transfer:
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The IM2B institute
brings together
teams on 8 university
and scientific sites

Arbois technology park site



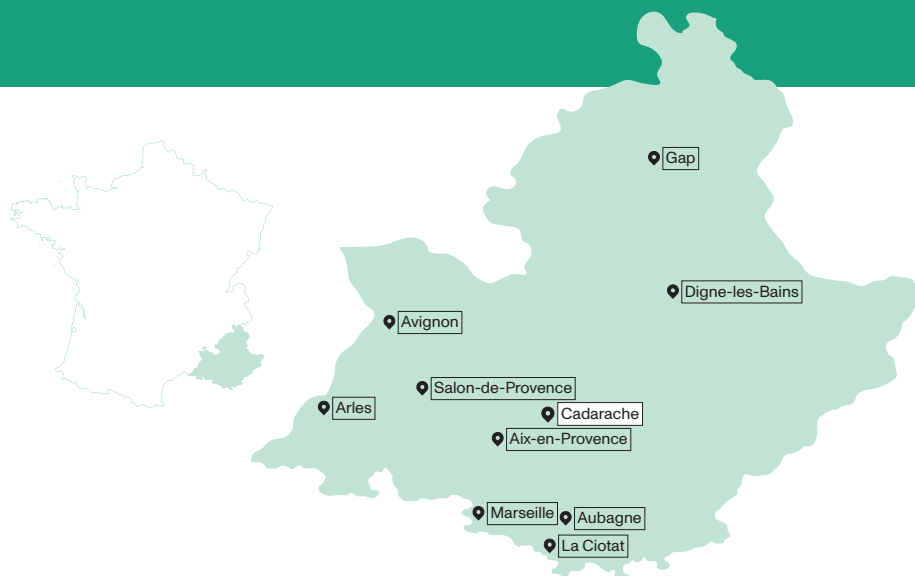
Saint-Charles Site



Timone Site



Main site: Joseph Aiguier



Cadarache site



Château-Gombert Site



Saint-Jérôme Site



Luminy Site



The Aix Marseille Université institutes are coordinated by the Amidex foundation

amidex Aix
Marseille
Université



Aix Marseille Université institutes: facilitators to strengthen the research-training link, interaction with the economic and cultural world, interdisciplinarity and internationalisation around twenty or so strategic fields of research. Their core unifying role: training a new generation of academics to meet the scientific and societal challenges of our time!

The Aix-Marseille Excellence Initiative, a consortium between Aix Marseille Université and 8 partners

amU Aix
Marseille
Université



Inserm



Centrale
Méditerranée

sciencespo.aix

Hôpitaux
Universitaires
de Marseille

ap
hm
INSTITUT PAOLI-CALMETTES
unCancer Marseille