



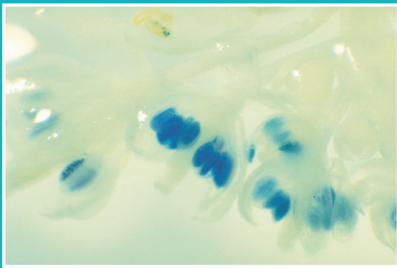
INRAE

Introducing
the French National Research Institute
for Agriculture, Food and Environment

2025

Science for people,
life & earth





Cover image

Arabidopsis thaliana flower expressing
the GUS marker gene in its stamens

© INRAE - P. Mollier

INRAE

Our mission

> The French National Research Institute for Agriculture, Food and Environment (INRAE)

INRAE came into being in January 2020, through the successful merger of the French National Institute for Agricultural Research (INRA) and the French National Research Institute of Science and Technology for the Environment and Agriculture (Irstea)

We operate under the joint authority of the French Ministry of Higher Education and Research and the French Ministry of Agriculture and Food Sovereignty.

Our mission is twofold

- to produce and share scientific knowledge contributing to solve major challenges in Europe and in the world
- to build on our research in order to foster innovation, provide expertise, and lend support to public policy makers at international, European and national level

INRAE – a world leader in agriculture, food and the environment

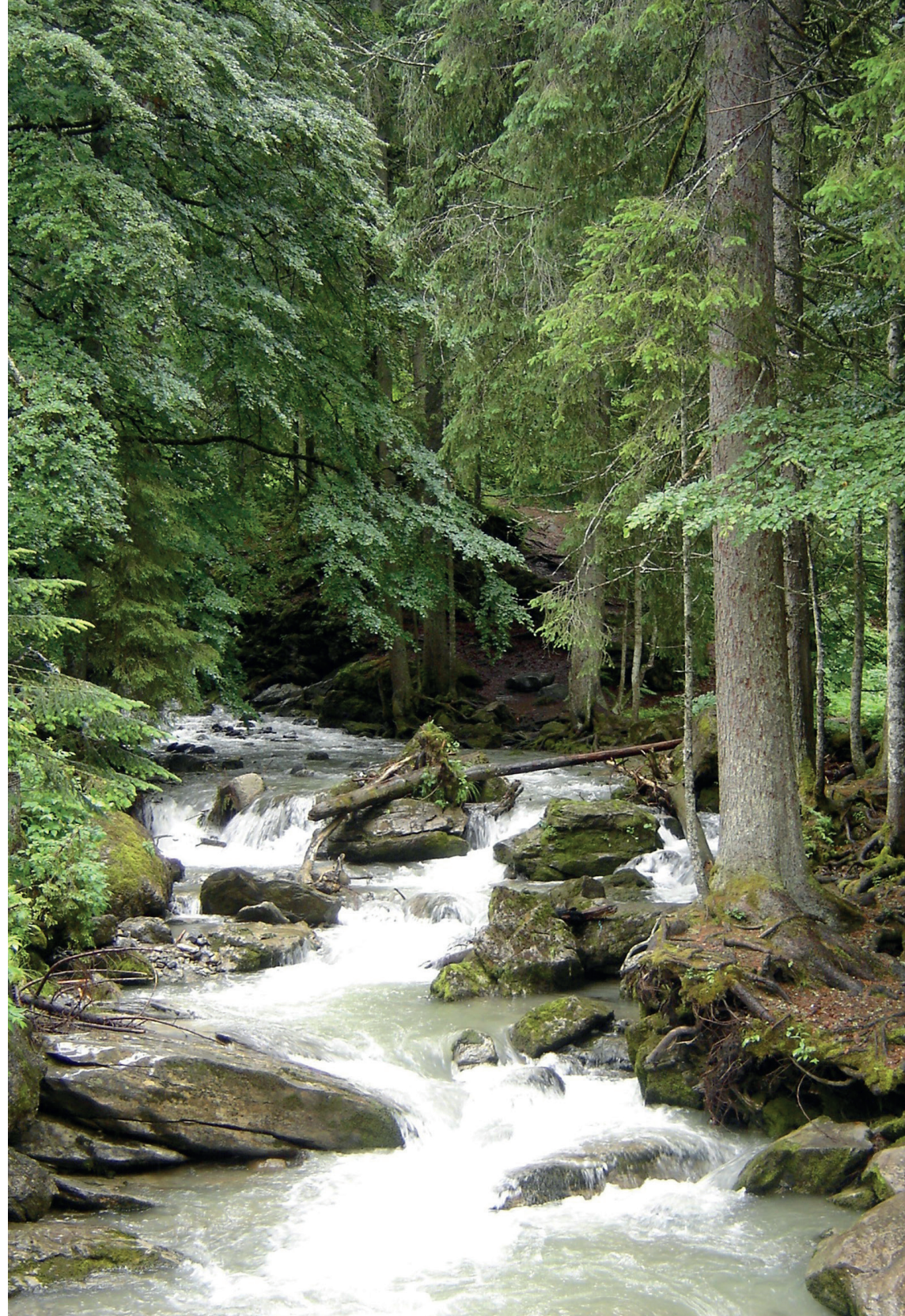


“

Humanity and the Earth are facing global challenges that call for new research objectives. As a public research institute, serving the common good, INRAE is fully committed to carry out science dedicated to life, humans, and the Earth that uncovers solutions to our most pressing concerns.

”

— Philippe Mauguin —
INRAE's CEO



Our roadmap: INRAE 2030



Looking to 2030,
we have defined
our scientific priorities
and objectives for
the next decade.

They arose from a
collaborative, participative
process that took place both
internally and outside of
our institution, welcoming
contributions by international
experts.

5

scientific priorities
(SPs)

SP 1 Responding to
environmental challenges
and their associated risks

SP 2 Accelerating
agroecological and food
transitions while answering
socioeconomic challenges

SP 3 Building a bioeconomy
based on the efficient circular
use of resources

SP 4 Promoting a global
approach to health

SP 5 Facilitating transitions by
mobilizing data sciences and
digital technologies

3

policy priorities
(PPs)

PP 1 Placing science,
innovation, and expertise at
the centre of society-policy
dialogue

PP 2 Reinforcing our
engagement with academic,
European, and international
partners

PP 3 Establishing social and
environmental responsibility
as a common objective

INRAE 2030

Building a sustainable future through
shared science and innovation

















Key figures

> Our 18 research centres reflect INRAE's involvement locally at the heart of regional dynamics, carrying its commitment to the European Research Area and international collaborations.

14 research divisions

INRAE's 14 research divisions are increasingly working in a cross-cutting and collaborative way to address complex scientific and societal challenges.

-  **Action & Transitions**
Christophe Soulard
-  **Agroecosystems**
Thomas Nesme
-  **Animal Genetics**
Hélène Gilbert
-  **Animal Health**
Muriel Vayssier-Taussat
-  **Animal Physiology & Livestock Systems**
Xavier Fernandez
-  **Aquatic Ecosystems & Water Resources**
Mohamed Naaim
-  **Ecology & Biodiversity**
Catherine Bastien
-  **Economics & Social Sciences**
Pierre Dupraz
-  **Food, Bioproducts & Waste**
Johnny Beaugrand
-  **Human Nutrition & Food Safety**
Lionel Bretillon
-  **Mathematics & Digital Technologies**
Hervé Monod
-  **Microbiology & the Food Chain**
Christophe Chassard
-  **Plant Biology & Breeding**
Norbert Rolland
-  **Plant Health**
Marie-Hélène Ogliastro

Partnerships and innovations

(2024)

210+
start-ups created since 1999

132
declarations of inventions and exploitable research results

24
patent applications

78
new licensed patents, know-how, software, plant variety rights

2,395
PhD students - 33% international, 104 nationalities

Units

(2024)

 **205**
Research units

 **42**
Experimental units

 **23**
Service units



> France 2030 and INRAE at the heart of strategic research and innovation



INRAE leads or co-leads several PEPRs (Priority Research Programmes & Equipment) under France 2030, ambitious multi-partner programmes tackling key global challenges in:

- Agroecology and digital transitions
- Microbiome and food–health interface
- Biodiversity and nature-based solutions
- Biomass and circular bioeconomy
- Crop protection without synthetic pesticides

Impact

- Launched in 2022
- 6 to 8-year programmes
- €538M invested

These programmes strengthen France's research capacity, foster interdisciplinarity, and contribute to European research leadership.

Agralife

agence de programme

INRAE also leads the Agralife Programme Agency dedicated to coordinating and structuring research and innovation in sustainable food, agriculture, forests, and natural resources.

Key missions

- Steering interdisciplinary research
- Assessing and developing critical infrastructures to support cutting-edge research
- Strengthening France's leadership in European research programmes



VISION

Our contribution to global challenges

> An integrated approach



The United Nations Agenda 2030 comprises 17 Sustainable Development Goals (SDGs).

INRAE is a major contributor worldwide to research concerning SDGs 12, 13, 15 and is ranked 4th for SDG 2 Zero Hunger.*

Number of INRAE publications by SDG

(using Elsevier 2023 mapping in SciVal, WoS 2019-2024 data)



“

As the world faces multiple and converging crises, INRAE has a responsibility to address the global challenges they pose. With its integrated approach to agriculture, food and the environment, the institute is not only well positioned to develop wide-ranging solutions—it is fully committed to doing so. From supporting agroecological transitions and healthier diets, to tackling climate change, land degradation, water scarcity and food insecurity, these efforts call for both scientific excellence and sustained international engagement.

”

— Thierry Caquet —
Vice-President
of International Policy



International scientific cooperation

INTERNATIONAL



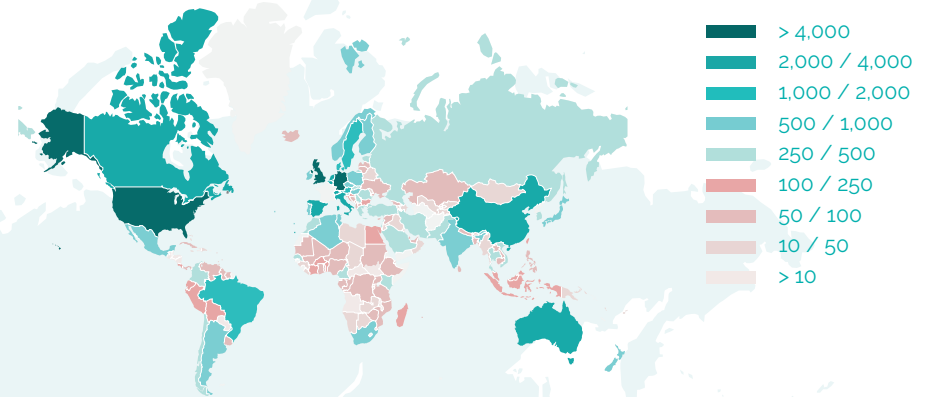
Working together with international scientists and students to respond to global challenges

More details



Our co-publications with others in 150+ countries around the world

(Web of Science Data, DipSO processing – DRI 2024)



A set of instruments to structure international scientific cooperation

LIA - International associated laboratories where scientists from INRAE and its international counterparts work together to build long-term shared projects of excellence

2RI - International research networks focused on specific themes

JLC - Joint linkage calls funded to foster new professional relationships and the creation of collaborations, with a specific focus on young scientists

Over **40 instruments** across all continents.



International Research Initiatives (IRIs)

INTERNATIONAL



Bringing together the international scientific community on key issues and contributing to science-policy dialogue

We have the ambition to drive research initiatives bringing together national, European and international partners on priority themes contributing to the 2030 Agenda: the International Research Initiatives (IRIs). An IRI is a shared vision, a roadmap, a strategic research agenda shared by an international community of researchers.

An IRI aims to

Rally the international scientific community around major challenges and align research efforts on key issues;

Favor comparative approaches to achieve better complementarity and consistency;

Scale up scientific cooperation and production on key issues;

Build up funding opportunities at national, European and international levels.

Current IRIs

- Soils and Climate Change
- Microbiom and Planetary Health
- PREZODE (PREventing ZOonotic Disease Emergence)
- Agroecological crop protection
- One Forest Vision
- One Water Vision
- Agroecological transitions for food systems facing water scarcity

➤ TSARA, Transforming Food Systems and Agriculture through Research in Partnership with Africa



EUROPE

Advancing European research



More details



Our scientific strategy aligns with the European Union's strategic priorities, which have been shaped by the Green Deal, and are supported through Horizon Europe. We have developed a leadership in European networks through Joint Programme Initiatives and public-private partnerships at the European level.

➤ **3rd French beneficiary** on Pillar 2 "Global Challenges"

➤ **3rd European beneficiary** on Cluster 6 "Food, Bioeconomy, Natural Resources, Agriculture and Environment"

➤ **Leading role in numerous networks and partnerships** such as PEER (Partnership for European Environmental Research)

Our institute is very active in a range of European projects and infrastructures, as a coordinator and a partner, and contributes to leading initiatives like EJP SOIL, FutureFoodS, and Agroecology partnerships.

We are involved in

- Around **200 projects** (Horizon Europe, launched in 2021), coordinating 56
- Previously involved in **500+ Horizon 2020 projects**
- Several **ERC-funded projects**



Research infrastructures open to researchers from abroad

INRAE's research
infrastructures (RIs) supply
scientific communities
with data production and
processing services,



along with support for
training, innovation and the
development of technology,
from the molecular scale to
entire ecosystems.

More details



INRAE is involved in:

- 17 national research infrastructures, coordinating 8
- 8 ESFRI infrastructures at the European level, coordinating 1 – IBISBA.EU (for industrial biotechnology and biomanufacturing)

As part of the National Roadmap and Horizon Europe, they support scientific excellence and innovation across 6 major domains:

Food, nutrition, health,
emerging diseases,
and zoonoses

Biological and genetic
resources, collections

Phenotyping of cultivated
plants and production
animals

Ecosystem observation
and associated
experimentation

High-throughput
molecular analysis (Omics)
and bioinformatics

Biotechnologies
and processes for
the environment
and industry

Providing expertise and policy support

At INRAE we place great emphasis on giving society the scientific and technical knowledge,



tools and methods needed to clarify, design, implement and evaluate public policies. Our expertise contributes to the development and implementation of international agreements, as well as to European Directives, national and local policies.

At the international, European and national level, **we provide support and expertise throughout the entire public policy lifecycle.**

➤ **INRAE provides scientific expertise and support to multilateral institutions** (FAO, World Bank, UNEP)



Our international experts tell us more

➤ **We are involved in a number of international initiatives**, emanating from our contributions to major international events (UN Climate Change Conferences, UN Biodiversity Conferences, World Water Forums)

➤ **Framework agreements signed with public non-academic partners:** 20 national, 3 European and 2 International agreements



Thierry Caquet on INRAE's role in global research to address climate and food challenges

➤ **7 collective scientific assessments, foresight studies, and advanced studies** over the last 5 years



Soil Quality: towards an indicator system for public policy



Find out more about the DEPE

Upcoming collective assessment: Plastics in agriculture and food (May 2025)

➤ **12 permanent public policy support mechanisms**



Epidemiological surveillance platform





We are committed to science accessible to all, focused on **quality, transparency** and the **replicability of results**.

Open science



Innovative peer review processes from methodology to the findings of our research

Digital infrastructures to manage and disseminate data and knowledge, in keeping with national and European policies

Building long-term relationships with non-profit organisations based on trust

Strong support given to participatory research

More details



Involving international peers

- › to define our scientific orientations
- › to assess our institution
- › to select INRAE Awards recipients

They also take part in our Scientific and Ethics Committees.

Join us

INRAE offers a wide range of career opportunities for researchers, engineers, technicians and PhD students from all over the world.



Introducing
the French National Research Institute
for Agriculture, Food and Environment

2025



147 rue de l'Université
75338 Paris Cedex 7
Tel.: +33 (0)1 42 75 90 00

Join us:



inrae.fr/en



**RÉPUBLIQUE
FRANÇAISE**

*Liberté
Égalité
Fraternité*

INRAE