Interdisciplinary Thematic Platform on Global Health CSIC (PTI+ Salud Global)

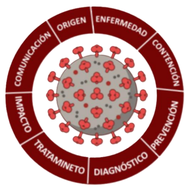
A Comprehensive Approach to Pandemics through R&D&I

PTI+ Global Health Coordination Team:

1. Margarita Del Val; Centro de Biología Molecular Severo Ochoa, (CBMSO-CSIC-UAM), Madrid, Spain
2. Diego Ramiro; Instituto de Economía, Geografía y Demografía (IEGD-CSIC), Madrid, Spain
3. María Montoya; Centro de Investigaciones Biológicas Margarita Salas (CIB-CSIC), Madrid, Spain
4. Mireia Coscollá; Instituto de Biología Integrativa de Sistemas (I2SysBio-UV-CSIC), FISABIO Unidad Mixta de Investigación Infecciones y Salud Pública, Valencia, Spain

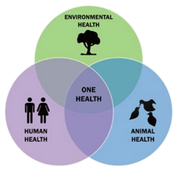
PURPOSE - MISSION - VISION

Interdisciplinary Thematic Platforms (PTIs) are instruments of research and innovation, created to address multidisciplinary challenges of great scientific, economic, and social impact.
The Global Health Platform was created in response to the COVID-19 pandemic and since then it has become an essential tool to prepare for present and future health challenges.

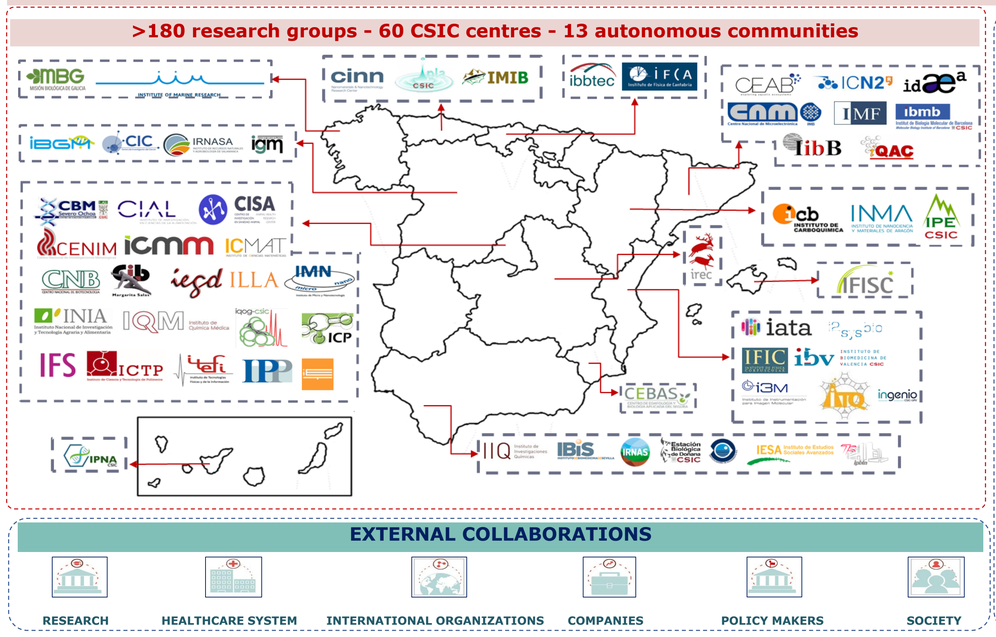


Our aim is to provide a comprehensive response to challenges and threats to Global Health through multidisciplinary strategies and innovative technologies from a One Health perspective.

Our vision is to be a leading Spanish institution in biomedical Global Health research with international recognition based on the ability to provide and communicate to society innovative and comprehensive solutions to major health challenges in infectious diseases.



INTERDISCIPLINARY COLLABORATIVE RESEARCH



19 External Research Groups – 16 Centres

A SIGHT ON LONG COVID

Perez Mazzali 2026
(DOI: 10.1016/j.jinf.2026.106731)
Long-lasting alterations in T cells and dysregulation of the innate immune (potential biomarkers)

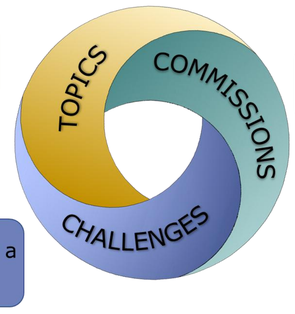
Hai 2026
(DOI: 10.3389/fimmu.2026.1822171)
Lower levels of anti-Spike antibodies and changes in IgG subclasses associated with vaccination and reinfection

Rossi 2025
(DOI: 10.3389/fimmu.2025.1670324)
Elevated anti-nucleocapsid IgA and C3 consumption (potential biomarkers)

Pérez-Cózar 2025
(DOI: 10.1002/jmv.70435)
Specific immune profiles following COVID-19 and influenza, regardless of persistent symptoms

GOVERNANCE: OPERATIONAL LEVEL

Thematic areas to be prepared and react to new challenges.



Improve decision-making and operational capacity of the PTI

Working groups dedicated to a specific issue in global health.

Current disease status, symposia, contacts, strategies, reports, consultancy.

CHALLENGES

Mpox
The rapid spread of the virus has led the WHO to declare this situation an international emergency

Vector-borne diseases
Climate change, globalisation and urbanisation have led to an increase in the number of cases of these diseases

Antimicrobial resistance
The misuse of antimicrobials has made antimicrobial resistance one of the most pressing global threats

Zoonotic influenza
Avian influenza is currently a major concern due to its impact on animal health and the threat it poses to public health

Re-emerging pathogens
Identifying pathogens that can cause public health emergencies helps to optimise research efforts

Climate and Health
The climate crisis poses a direct threat to global health and calls for an emergency response

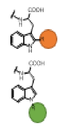
Genomics and Immunology for public policy
Essential for translating scientific findings into decisions that have a positive impact on society

MAIN ACHIEVEMENTS

PROTECTED RESULTS **96**
MARKETED PRODUCTS **2**

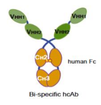


Therapies: Drug repurposing and new antiviral families



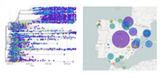
- ✓ **Antimicrobial screening platforms.**
- ✓ **New families of antimicrobials: CSIC Chemical Library**
- ✓ **Drug repurposing:** 2 phase-3 clinical trials EudraCT 2021-001227-41 and EudraCT 2021-001228-17.
- ✓ **Recombinant antibodies (*nanobodies*) to SARS-CoV-2.**
- ✓ **Oral antiviral spray for SARS-CoV-2**





Prevention, containment and protection measures





- ✓ Genomic surveillance platform: **MicroReact Spain. SeqCOVID.**
- ✓ **Mosquito Alert App**, citizen science for vector-borne diseases.
- ✓ Epidemiological surveillance platform: **wastewater** surveillance**.**
- ✓ **Nanofiber filter masks**.

COMMUNICATION, DISSEMINATION AND TRAINING ACTIONS



Master's Degree on Global Health Infectious Challenges (UIMP-PTI SG)

- > 18.000 — Press
- > 101.300 — Digital media
- > 2100 — TV + radio
- > 62.500 — New social media followers

COVID-19 vaccines under development



- ✓ **5 vaccine prototypes** under development, using **different approaches**: poxvirus MVA, RNA, DNA and protein.
- ✓ **Preclinical stages** concluded or in progress.
- ✓ **MVA vaccine. Medicines Patent Pool (MPP).**

Diagnostics



- ✓ Serological tests to detect SARS-CoV-2. **Medicines Patent Pool (MPP)**
- ✓ **Direct detection of viral RNA (*PCR-less*)**

Population and Elderly

- ✓ Assesment of **management of Nursery Homes.**
- ✓ **Branyas** project, integral multidisciplinary approach to address **vulnerability of the elderly** in nursing homes + Survey on the elderly and COVID-19
- ✓ **Census of elderly and day care homes** in Spain
- ✓ Measurement of the effect of **Mobility** on COVID-19 diffusion
- ✓ **Population and epidemiological** models platform **– FACE**
- ✓ Multimodal **AI tools and technologies**



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https://pti-saludglobal.csic.es/
pti.saludglobal@csic.es
@SaludglobalCSIC