



# **Policy Brief**

# The Crete Declaration: Uniting Science for One Health

Christos Arvanitidis<sup>‡</sup>, Olga Ameixa<sup>§</sup>, Alberto Basset<sup>I,¶,#</sup>, Eva Chatzinikolaou<sup>n</sup>, Claudia Coman<sup>«</sup>, Berta Companys<sup>»</sup>, Francesco De Leo<sup>^</sup>, Klaas Deneudt<sup>^</sup>, Federico Drago<sup>l</sup>, John Eriksson<sup>^</sup>, Tiziana Ferrari<sup>°</sup>, Teodor Georgiev<sup>¢</sup>, Giovanni Giuliano<sup>l</sup>, Stefan Gruber<sup>§</sup>, Jens K Habermann<sup>P</sup>, Katharina F Heil<sup>A</sup>, Tim Hubbard<sup>A</sup>, Cristina Huertas Olivares<sup>e</sup>, Georgios Kotoulas<sup>F</sup>, Dimitris Koureas<sup>‡</sup>, Natalia Manola<sup>N</sup>, Vanessa Marrocco<sup>K</sup>, Nicolas Pade<sup>©</sup>, Ana Portugal Melo<sup>†</sup>, Antonello Provenzale<sup>W</sup>, Fotis E Psomopoulos<sup>†</sup>, Niels Raes<sup>‡‡,§</sup>, Susie Robinson<sup>||</sup>, Patrick Ruch<sup>¶</sup>, Dick Schaap<sup>‡‡</sup>, Adrian Stanica<sup>††</sup>, Tassos Stavropoulos<sup>N</sup>, Heliana Teixeira<sup>\*</sup>, Peter van Tienderen<sup>\*</sup>), Costas Tsigenopoulos<sup>^</sup>, Robert M Waterhouse<sup>^</sup>, Giuseppe Aprea<sup>l</sup>, Michel Boër<sup>||</sup>, Ana Casino<sup>\*</sup>, Laurent Delauney<sup>\*</sup>, Jonathan Ewbank<sup>¢©</sup> Michael Mirtl<sup>§©</sup>, Jana Pavlic-Zupanc<sup>P</sup>, Lyubomir Penev<sup>§,§</sup>, Jaume Piera<sup>\*</sup>, Paraskevi Pitta<sup>PP</sup>, Ingrid Puillat<sup>†</sup>, David Richter<sup>§</sup>, Diana Stepanyan<sup>†,©</sup>, Anton Ussi<sup>†,©</sup>,

- ‡ LifeWatch ERIC, Seville, Spain
- § University of Aveiro (Restore4C), Aveiro, Portugal
- | University of Salento, LifeWatch ERIC (SC), Lecce, Italy
- ¶ National Reseach Council, Lecce, Italy
- # LifeWatch ERIC, Lecce, Italy
- ¤ IMBBC, HCMR (LifeWatch ERIC), Heraklion, Crete, Greece
- « MARIS B.V., Nootdorp, Netherlands
- » ICM, CSIC (Project ANERIS), Barcelona, Spain
- ^ IRET, CNR (Project OEMC), Lecce, Italy
- \* Flanders Marine Institute (VLIZ) (Project DTO BioFlow), Ostend, Belgium
- LEGI Foundation (Project ENVRI Hub NEXT), Amsterdam, Netherlands
- <sup>?</sup> EuroBioImaging ERIC, Turku, Finland
- <sup>5</sup> EGI Foundation, Amsterdam, Netherlands
- ¢ Pensoft Publishers, Sofia, Bulgaria
- ${\it \ell\, ENEA\, (Project\, PRO\text{-}GRACE), Rome, Italy}$
- 용 SHARE-ERIC, Berlin, Germany
- P BBMRI-ERIC, Graz, Austria
- ♠ ELIXIR, Hinxton, United Kingdom
- € LifeWatch ERIC (SSO), Seville, Spain
- F IMBBC, HCMR, Heraklion, Crete, Greece
- ₹ Naturalis Biodiversity Center, DiSSCo RI (Project BGE), Leiden, Netherlands
- N OpenAIRE (Project OSTrails), Athens, Greece
- ₭ LifeWatch ERIC (SC), Lecce, Italy
- \$ EMBRC-ERIC, Paris, France
- ? MIRRI-ERIC, Braga, Portugal
- ₩ IGG, CNR (Project ITINERIS), Pisa, Italy
- T CERTH (Project EVERSE), Thessaloniki, Greece
- ‡‡ Naturalis Biodiversity Center, Leiden, Netherlands
- §§ Naturalis Biodiversity Center (Project BMD), Leiden, Netherlands
- || EMPHASIS RI, Ghent, Belgium
- ¶¶ HES-SO HEG Geneva, Geneva, Switzerland

```
## MARIS B.V. (Project Blue Cloud), Nootdorp, Netherlands
¤¤ GeoEcoMar, DANUBIUS RI, Bucharest, Romania
«« CESAM & University of Aveiro (Project GES4SEAS), Aveiro, Portugal
»» University of Amsterdam, LifeWatch ERIC (VLIC), Amsterdam, Netherlands
^^ IMBBC, HCMR, Heraklion, Greece
vv SIB Swiss Institute of Bioinformatics (Project BGE), Lausanne, Switzerland
# AnaEE-ERIC, Paris, France
<sup>??</sup> CETAF, Brussels, Belgium
55 IFREMER, JERICO RI, Plouzané, France
¢¢ ERINHA-AISBL, Paris, France
ℓℓ UFZ, eLTER RI, Leipzig, Germany
% Pensoft Publishers & Bulgarian Academy of Sciences, Sofia, Bulgaria
PP IO, HCMR, AQUACOSM-plus, MESOAQUA, Heraklion, Crete, Greece
AA EMSO ERIC, Rome, Italy
€€ EATRIS-ERIC, Amsterdam, Netherlands
FF IOPAN (Project MARBEFES), Sopot, Poland
科 CSC - IT Center for Science (Project BioDT), Espoo, Finland
```

Corresponding author: Christos Arvanitidis (ceo@lifewatch.eu)

Received: 26 Oct 2025 | Published: 04 Nov 2025

Citation: Arvanitidis C, Ameixa O, Basset A, Chatzinikolaou E, Coman C, Companys B, De Leo F, Deneudt K, Drago F, Eriksson J, Ferrari T, Georgiev T, Giuliano G, Gruber S, Habermann J, Heil K, Hubbard T, Huertas Olivares C, Kotoulas G, Koureas D, Manola N, Marrocco V, Pade N, Portugal Melo A, Provenzale A, Psomopoulos F, Raes N, Robinson S, Ruch P, Schaap D, Stanica A, Stavropoulos T, Teixeira H, van Tienderen P, Tsigenopoulos C, Waterhouse R, Aprea G, Boër M, Casino A, Delauney L, Ewbank J, Mirtl M, Pavlic-Zupanc J, Penev L, Piera J, Pitta P, Puillat I, Richter D, Stepanyan D, Ussi A, Węsławski J, Zuquim G (2025) The Crete Declaration: Uniting Science for One Health. Research Ideas and Outcomes 11: e176120.

### **Abstract**

The interdependence of human, animal, plant and ecosystem health necessitates systemic, cross-domain collaboration to address global challenges, such as emerging diseases, climate change and biodiversity severe change. Through the Crete Declaration, Europe's (e-)infrastructures, organisations and projects that focus on the functioning of our biosphere commit to jointly advancing the One Health approach. In doing so, the signatories aim to strengthen Europe's resilience and leadership through the sharing of data and expertise, the development of innovative solutions and the promotion of evidence-based policies.

# Keywords

One Health, systemic approach, Research (e-)Infrastructures, organisations and collaborative projects, open innovation, policy support

#### Preamble

We, the undersigned, representing Europe's large-scale Research (e-)Infrastructures, organisations and collaborative projects dedicated to understanding the living component of Biosphere, commit to joining forces to advance the **One Health** approach, recognising the intimate and inseparable link between the health of people, animals and plants and how they interact within ecosystems.

The world faces urgent, interconnected challenges — emerging diseases, epidemics and antimicrobial resistance; food safety and sustainable production; water scarcity, environmental contamination and **severe change** in biodiversity — all intensified by the widespread impact of climate change. These global threats demand a fundamental shift towards systemic, integrated solutions. Several major EU initiatives already address parts of these challenges, including the partnerships for pandemic preparedness (Be Ready Now), animal health and welfare (EUPAHW) and One Health Antimicrobial Resistance (EUPOHAMR).

One Health calls for a "whole of society" approach to health hazards and a systemic change of perspective in the management of risks with a long-term strategic vision for action. Research Infrastructures in Europe are in a pivotal position to **provide solutions** that are firmly grounded in robust science and evidence-based insights into the functioning of our living environment. Through collaboration and co-creation with users and stakeholders, research actors provide unified data and service integration and firmly commit to open science as a driver for scientific and social innovation.

# Our Shared Ambition

- Promote multidisciplinary and cross-domain research to address the most urgent One Health challenges;
- Unite our complementary strengths to provide information for EU and national policies with robust scientific evidence, embedding preparedness by design scientific knowledge into policies and practice;
- Support and advance open innovation through shared resources that enable technological and societal responses to human-induced and natural stressors, thus strengthening Europe's resilience and global leadership;
- Accelerate the uptake of emerging methods, including observational, experimental and computational technologies, with a special focus on the responsible use of artificial intelligence in One Health applications.

### Our Commitment

#### We hereby commit to:

- Strengthen Strategic Collaboration. Invest in structured and sustained collaboration on One Health challenges and jointly engage with stakeholders and national and European funding agencies to prioritise actions and work on the realisation of common goals;
- Advance Data Integration and FAIR Principles for Open Science. Ensure
  equitable access to relevant data resources, software, workflows, standards and
  protocols across domains (both technological and socio-economic);
- Support Open Innovation. Establish trusted, inclusive platform for stakeholder engagement, accelerating innovation across public and private sectors in critical areas such as species and ecosystems conservation, sustainable food systems, antimicrobial resistance and water security;
- 4. **Inform Policy and Public**. Provide integrated scientific knowledge to provide information for effective, evidence-based policy-making and engage citizens. Policies anchored in reliable data are robust and, when rooted in societal participation, they will become more feasible, impactful and widely adopted.

# **Next Steps**

This Declaration was developed during a special assembly held in Crete in June 2025, hosted by the Institute of Marine Biology, Biotechnology and Aquaculture, Hellenic Centre for Marine Research. We invite all European stakeholders committed to One Health, including policy-makers, Science Clusters and the private sector, to endorse this Declaration and join efforts towards a federated and coordinated approach to One Health research and innovation in Europe.

## Conflicts of interest

The authors have declared that no competing interests exist.

**Disclaimer:** This article is (co-)authored by any of the Editors-in-Chief, Managing Editors or their deputies in this journal.