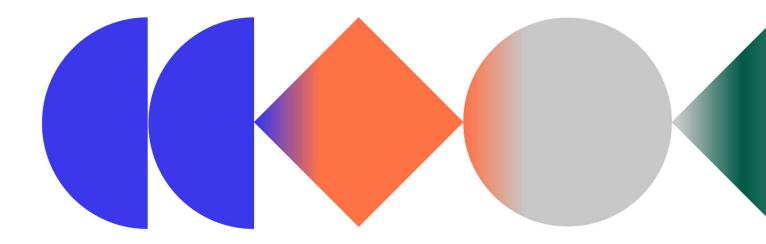
# Horizon Europe 2023 matchmaking, One Health pilot



Matchmaking workshop 22nd September 2022







#### Break-out rooms

13:00-13:30 Introductions, own research interest in relation to the topic

#### Main room

- 13:30-13:40 Welcome Prof. Alessandra Scagliarini, UNIBO, Chair of the Una Europa One Health SSC
- 13:40-13:45 Una Europa + Una.Resin, Elina Tonteri, Una.Resin project Manager
- 13:45-14:00 One Health: Insight on policy and EU funded research: Jean-Charles Cavitte, Research Policy Officer EC
- 14:00-14:15 Break

#### **Break-out rooms**

- 14:15-14:35 Special characteristic of the topic, Facilitators
- 14:35-15:50 Group discussion, On-line canvas with pre-questions (5min break, when suitable)

#### Main room

15:50-16:00 What next, Elina Tonteri, Una.Resin project manager



### Prof. Alessandra Scagliarini, UNIBO, Chair of the Una Europa One Health SSC

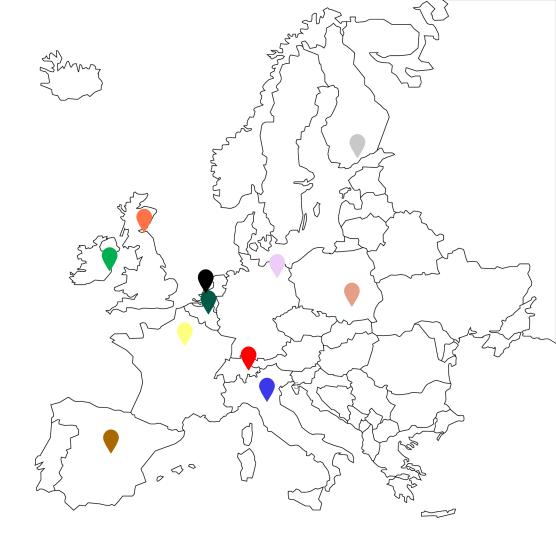


### Horizon Europe Una Europa matchmaking: the UNA-One Health perspective

Prof Alessandra Scagliarini Chair of UNA-OH Self Steering Committee

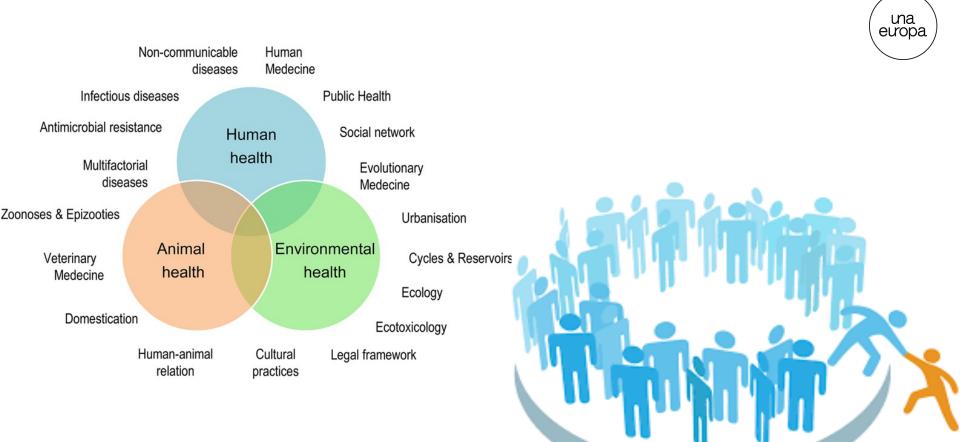


- + Freie Universität Berlin
- + Università di Bologna
- + University of Edinburgh
- + Helsingin Yliopisto
- + Uniwersytet Jagielloński w Krakowie
- + Universiteit Leiden
- + KU Leuven
- + Universidad Complutense de Madrid
- + Université Paris 1 Panthéon-Sorbonne
- + University of Zurich
- + University College Dublin





UNA Europa presentation





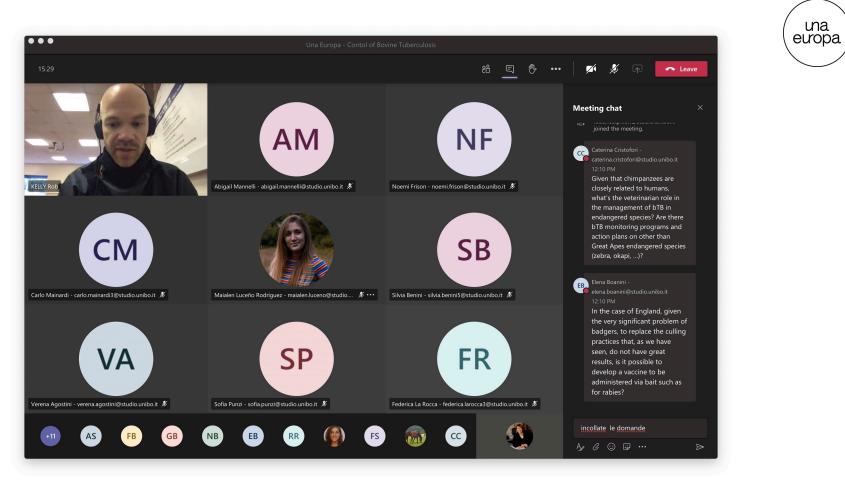
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### Why do this?

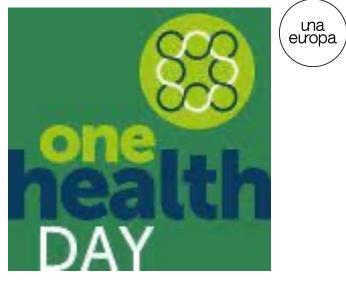
- The future is uncertain
- Opportunity to talk about the future <u>together;</u>
- Offer an inclusive and consultative process;
- Reflect the views and challenges facing all stakeholders;
- A neutral space (the future) for discussion;
- An important tool for organisational learning;
- Stories are more engaging (than numbers or policy papers) to describe strategic issues; and
- Allows detailed analysis blending subjective and objective viewpoints.

# The Future workshop

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Podcast #9

21 Jan 2022 Vertical and Horizontal Cooperation -Podcast #9 on One Health



### One Health Summer School











### One Big Issue: Antimicrobial Resistance

### Una Europa One Health webinar

5 October 2022 | 14:00 - 17:00 CEST





27 Jul 2022

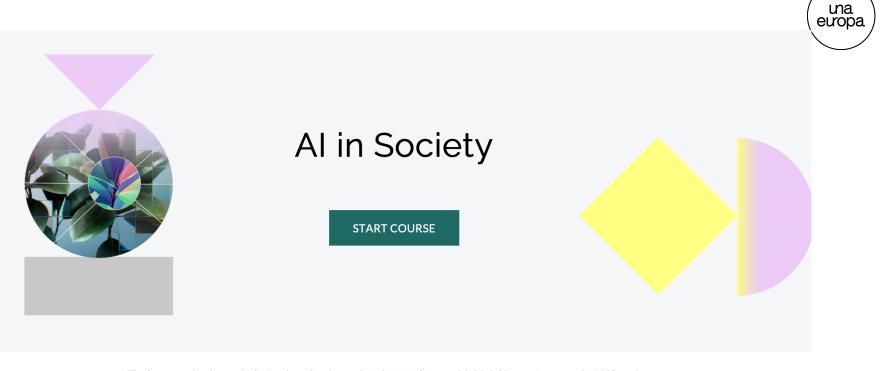
### Una.Universitas gets the Commission's green light



Una.Universitas will further Una Europa's mission to build a joint educational offering fit for the Graduates of the Future.

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The hero section image is derivative of an image by <u>Alan Warburton</u> / © BBC / <u>Better Images of AI</u> / Plant / <u>Licenced under CC-BY 4.0</u>

### An Una Europa MOOC

**GIVE FEEDBACK** 



### Prof Alessandra Scagliarini

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### Chair of the UNA EUROPA One Health Self Steering Committee UNA\_OH Dipartimento di Medicina Specialistica, Diagnostica e Sperimentale Via Massarenti 9, Bologna Alma Mater Studiorum Università di Bologna (Italia) e-mail: alessand.scagliarini@unibo.it



### Dr. Elina Tonteri, Project manager, Una.Resin, University of Helsinki

### Una Europa in nutshell



#### 1Europe



- Building a truly European interuniversity environment for collaboration in education, research and innovation
- Developing a truly European Joint
   Doctorate

#### Una.Resin



- Aimed at building an Una Europa Research ecosystem
- Shared Una Europa Research & Innovation Strategy setting the overall R&I direction of the Alliance and laying the foundations for further high impact research collaborations

#### Una Europa roll-out project



- Supporting the SSCs to evolve into hubs for interdisciplinary education and research
- Strong focus on Early Career Researchers – training, networking and mobility opportunities

### **External funding opportunities to support ECRs**

### Una.Resin: Towards a Common R&I Ecosystem

Our common R&I eco-system will enable barrier-free collaboration, sharing of infrastructure, knowledge, resources, local communities and non-academic partners, between staff and researchers from all Una Europa universities

Infrastructure

& Resources

| Developing a format             | Devel   |
|---------------------------------|---------|
| for supporting                  | existin |
| systematic collaboration on the | betwe   |
| priority global challenges      |         |

Developing a concept for a Una Europa collaboration platform.

Research

& Innovation

Developing formats to share existing data infrastructures between Una Europa partners

Exploring paths to widen access to existing data infrastructures to citizens and non-academic partners. Strengthening team science approach to research activities, mainstreaming open science practices within the research community, strengthening the role of citizen science in the research activities, strengthening research cooperation with non-academic sectors

Strengthening

Human Capital

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# What can we offer to researchers?



Scouting for external funding and support matchmaking to promote collaboration



Providing advice on how to build successful joint proposals, including links with stakeholders, where possible



Facilitating proposal development through project team approach, developed by lead university with input from academics and professional experts

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### Mr. Jean-Charles Cavitte, Research Policy Officer EC



### One Health: some insight on policy and EU funded research

### Una Europa – European alliance of European research universities

22 September 2022

The presentation shall neither be binding nor construed as constituting commitment by the European Commission JCh Cavitte – Research Policy Officer DG AGRI F2 – Research and Innovation

# One health, a concept



### No single definition of One Heath; scope can be very large:

- ✓ 'A collaborative, international, cross-sectoral, multidisciplinary mechanism to address threats and reduce risks of *detrimental infectious diseases* at the *animal-human-ecosystem interface*.' (former FAO definition)
- 'One Health is the collaborative effort of multiple health science professions, together with their related disciplines and institutions working locally, nationally, and globally to attain optimal health for people, domestic animals, wildlife, plants, and our environment.' (One Health Commission)
- 'One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the *health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems)* are closely linked and inter-dependent. The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to *foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development.*' (One Health High Level Expert Panel OHHLEP; supported by Quadripartite; <u>https://www.fao.org/3/cb7869en.pdf</u>)

✓ Etc.

# The environmental pillar

- ✓ Reference is sometimes made to ECOHEALTH, where interest is more focused on the environmental health, i.e. health of ecosystems
- ✓ "When one considers the multiple factors at play and the complexity of public health issues, it is clear that the "One Health" holistic approach cannot be disassociated from the notion of ecological health (EcoHealth)... Researchers in "Ecohealth" and its practitioners implement systemic and integrated practices to promote sustainable ecosystemic services linked to the concept of health (human, animal, and ecosystem) and to social stability" (Destournieux-Garzón D et al. The One Health Concept: 10 Years Old and a Long Road Ahead. Front. Vet. Sci. 5:14. doi: 10.3389/fvets.2018.00014.

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- ✓ According to IPBES report 'human activities that drive climate change and biodiversity loss also drive pandemic risk'
- ✓ With SARS-Cov2, a strong attention is put on prevention and preparedness to avoid/reduce the impact of such threats

See also OneMedicine, Global Health, Planetary Health

How to address this complex challenge?

# EC services' work on One Health



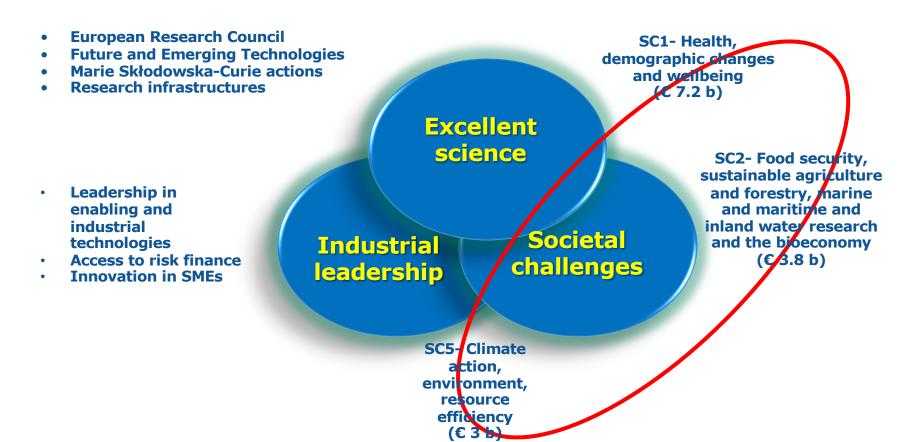
- ✓ Is there a One Health policy at EU level? Yes, to a certain extent
  - ✓ One Health AMR action plan (2017)
  - One Health in research : One health European Joint Programme co-fund (H2020), One Health mentioned in Horizon Europe (e.g. planned Horizon Europe co-funded partnership on One Health AMR)

### In most cases, no unique entry point for One Health

- DG SANTE (public health -initiator of HERA; veterinary/food legislation, coordinating OH AMR action plan, together with DG RTD; lead of Farm to Fork strategy)
- ✓ DG ENV (e.g. pharmaceutical strategy on AMs)
- ✓ DG CLIMA (e.g. European Climate and Health Observatory: <u>https://climate-adapt.eea.europa.eu/en/observatory</u>)
- ✓ DG AGRI (AMR and 'greening' in CAP; lead on agriculture research planning)
- DG RTD (co-creation with other DGs under Horizon Europe; RTD lead on health and environmental aspects; RTD and SANTE co-chairs on Health (Cluster1); RTD, AGRI and ENV co-chairs on Cluster 6)
- ✓ DG INTPA (international cooperation)
- ✓ DG TRADE (e.g. trade barriers; agreements); JRC (e.g. data; observatories);
- ✓ Agencies i.e. EFSA (RA, scientif opinions); ECDC, EEA (observatory), EMA ...(see JIACRA reports)

### Horizon 2020 (2014–2020)







\* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme



# Examples of One Health (partly) operationalised



### Collaborative projects:

- COMPARE: COllaborative Management Platform for detection and Analyses of (Re-)emerging and foodborne outbreaks in Europe (<u>https://cordis.europa.eu/project/id/643476</u>; H2020 SC1&SC2)
- ✓ VEO: Versatile Emerging infectious disease Observatory (<u>https://cordis.europa.eu/project/id/874735</u>; H2020 SC1)
- MOOD: MOnitoring Outbreak events for Disease surveillance in a data science context (<u>https://cordis.europa.eu/project/id/874850</u>; H2020 SC1)

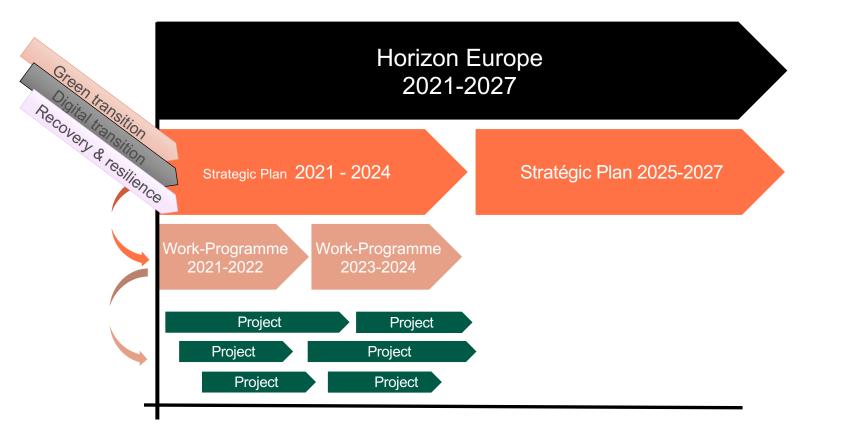
### Public-public partnerships:

- ✓ JPI AMR (Member States driven; supported by H2020 SC1; https://www.jpiamr.eu/)
- ✓ **EJP One Health co-fund** (<u>https://onehealthejp.eu</u>; H2020 SC2)
- ✓ Biodiversa (H2020 SC5) followed by Biodiversa+ (HE Cluster 6) <u>https://www.biodiversa.org/;</u>
- ✓ Public-Private partnership: ZAPI (part of IMI-2; <u>www.zapi-imi.eu</u>; H2020 SC1)
- ✓ **International cooperation** (INTPA): e.g. Sustainable Wildlife Management programme



### From political priorities to R&I activities

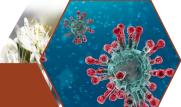
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### Some topics relevant to One Health in Cluster 6 WP 2021-2022



| -                 |  |
|-------------------|--|
|                   | Destination 1 Biodiversity and ecosystem services  |
|                   | <ul> <li>HORIZON-CL6-2021-BIODIV-01-11: What else is out there? Exploring the<br/>connection between biodiversity, ecosystems services, pandemics and epidemic<br/>risk</li> </ul> |
|                   | <ul> <li>HORIZON-CL6-2021-BIODIV-01-16: Biodiversity, water, food, energy, transport,</li> </ul>   |
| - Carlos          | Destination 2 Sustainable food systems from farm to fork   |
| and a file of the | HORIZON-CL6-2021-FARM2FORK-01-06: Vaccines and diagnostics for priority animal diseases  |
|                   | HORIZON-HORIZON-CL6-2021-FARM2FORK-01-18: One Health approach for<br>Food Nutrition Security and Sustainable Agriculture (FNSSA)   |
|                   | Destination 3 Circular and bioeconomy  |
|                   | Destination 4 Clean environment and zero pollution   |
|                   | Destination 5 Land, oceans and water for climate action  |
|                   | Destination 6 Resilient, inclusive, healthy and green rural communities  |
|                   | <ul> <li>HORIZON-CL6-2022-COMMUNITIES-02-02-two-stage: Developing nature-based therapy for health and<br/>well-being</li> </ul>  |



### Biodiversity and human health topics included in WP 2021-2022 of Horizon Europe – projects starting

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6. Biodiversity and Health

### What else is out there? Exploring the connection between biodiversity, ecosystems services, pandemics and epidemic risk

- Re mid
- Molecular and phylogenetic characterisation of potential emerging pathogens and their hosts in natural areas for us as pre-leads for future vaccines and antimicrobials.
  - Relationship of biodiversity loss, land use change and ecosystems dynamics with the evolution and spread of microbiomes within the broader context of socio-economic driving forces, climate change, public health, and increasing resilience.

### **Nature Therapy**

A bridge between health, wellbeing, biodiversity conservation and NBS.

- Quantify and demonstrate health benefits from biodiversity and its integration into medical practice, therapies, healt
  policy, hospital architecture, urban planning, etc.
- Facilitating transformational changes in health business, building on the OneHealth approach at EU and global leve Biodiversity, water, food, energy, transport, climate and health nexus in the context of

#### transformative change

• Approaches, tools and knowledge to influence policies at the adequate level for transformative change

## Some topics somewhat relevant to One Health in Cluster 6 una draft WP 2023-2024



Destination 1 Biodiversity and ecosystem services
 Interlinkages between biodiversity loss and degradation of ecosystems and the emergence of zoonotic diseases



Destination 2 Sustainable food systems from farm to fork

- European partnership on animal health and welfare
- Agro-pastoral/outdoor livestock systems and wildlife management



- Towards sustainable livestock systems: European platform for evidence building and transitioning policy
- European partnership on sustainable food systems for people, planet and climate
- Climate change and food safety: effects of climate change on food safety across food systems



Destination 4 Clean environment and zero pollution

• Optimisation of manure use along the management chain to mitigate GHG emissions and minimize nutrients/contaminants dispersion in the environment

# **Overview of 49 candidate European Partnerships (2021-2024)**

#### PILLAR II - Global challenges & European industrial competitiveness

#### PILLAR III - Innovative Europe

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| CLUSTER 1: Health                          | CLUSTER 4: Digital, Industry<br>& Space | CLUSTER 5: Climate, Energy & Mobility      | CLUSTER 6: Food,<br>Bioeconomy, Agriculture,            | EIT                   | SUPPORT TO INNOVATION<br>ECOSYSTEMS |
|--|---|--|---|-----------------------|-------------------------------------|
| Innovative Health Initiative               | Key Digital Technologies                | Clean Hydrogen                             | Circular Bio-based Europe                               | InnoEnergy            | Innovative SMEs                     |
| Global Health Partnership                  | Smart Networks &<br>Services            | Clean Aviation                             | Rescuing Biodiversity to Safeguard Life on Earth        | Climate               |                                     |
| Transformation of health systems           | High Performance                        | Single European Sky<br>ATM Research 3      | Climate Neutral,  | Digital               |                                     |
| Chemicals risk                             | Computing                               | Europe's Rail                              | Sustainable & Productive<br>Blue Economy                | Food                  |                                     |
| assessment                                 | European Metrology<br>(Art. 185)        | Connected and Automated<br>Mobility (CCAM) | Water4All   | Health                |                                     |
| ERA for Health                             | Al-Data-Robotics                        |  | Animal Health & Welfare*                                | Raw Materials         |                                     |
| Rare diseases*                             | Photonics                               | Batteries                                  | Accelerating Farming                                    | Manufacturing         |                                     |
| One-Health Anti Microbial<br>Resistance*   | Made in Europe                          | Zero-emission<br>waterborne transport      | Systems Transitions*                                    | Urban Mobility        |                                     |
| Personalised Medicine*                     | Clean steel – low-carbon<br>steelmaking | Zero-emission road<br>transport            | Agriculture of Data*<br>Safe & Sustainable Food         | Cultural and Creative |                                     |
| Pandemic Preparedness*<br>Co-funded or co- | Processes4Planet                        | Built4People                               | System*   |                       |                                     |
| programmed                                 | Global competitive space                | Clean Energy Transition                    | CROSS-PILLARS II AND III<br>European Open Science Cloud |                       | 11                                  |
| Institutionalised Partnerships (A          | systems**<br>rt 185/7)                  | Driving Urban Transitions                  |   |                       | oud                                 |

Institutionalised partnerships / EIT

Co-Programmed

Co-Funded

\* Calls with opening dates in 2023-24

\*\* Calls with opening dates not before 2022

### HE - The Biodiversity Partnership: Biodiversa+







- 38 funding agencies/foundations
- 18 ministries in charge of environment
- 9 ministries in charge of research
- 8 environment protection agencies
- 4 other ministries/regional actors



#### ✓ Biodiversa+ SRIA

- First call: "Supporting the protection of biodiversity and ecosystems across land and sea"
- ✓ Second call on Biodiversity monitoring

### **Biodiversity Partnership Biodiversa+: Possible Flagship Programme** Biodiversity and (One)Health / (Eco)Health



Emerging from proposals by prospective Members of the Partnership and the BiodivERsA Advisory Board

- Possibly 4 years: calls + other activities (mapping, foresight, monitoring)
- Probably after 2023
- Build on outcomes of the BiodivERsA 2018-2019 Call for proposals
- Possible links with other relevant Partnerships focusing on (One)Health issues. Also IPBES nexus assessment
- Interactions between biodiversity and plant, animal and human health, including but not restricted to fundamental research on underlying causes of pandemics as well as science- based solutions to prevent such outbreaks, from local and low-cost solutions to management of wild species to broader, system-wide solutions, including nature-based solutions;
- International global component

### Conclusions



One Health is more than a buzzword from an EU research funding perspective. One Health is operationalised at least in part, through many projects, some directly (examples provided), many more indirectly.

The interdisciplinary approach exists, but various obstacles exist: different communities, players, interests. Until recently, the environmental dimension has probably not been addressed as intensively as other dimensions

Various other concepts (e.g. eco-health, planetary health etc) emerged and tend to enlarge the concept/system

How to better address One health in a systems' approach?

The presentation shall neither be binding nor construed as constituting commitment by the European Commission

# Thank you

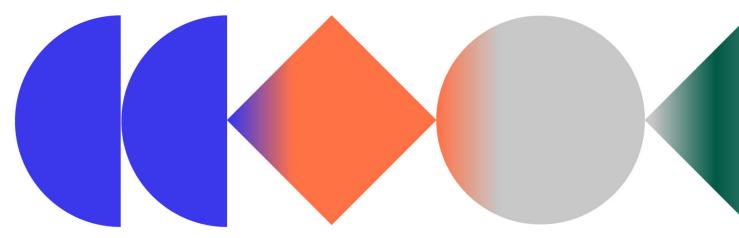


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### Take a 15 minute break back @14:15 CET!

### **Please stay in Zoom**



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### Next steps

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- Discussion with the potential coordinators
- Summary report sent to all EoI participants (including non-Una)
- Setting the date and place for on-site workshop together with the coordinators
- Helping to set up a team to support the proposal writing
- Scaling the learnings of this pilot to give the optimal support in coming years

• Una Europa R&I strategy outlining the priority actions and services for Una Eruopa research collaboration will be launched in 2023.

### Thank you!