

#EOSCsymposium23

# European alignment on skills and training

22 September | 09.00 - 10.30

eosc



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SPANISH PRESIDENCY  
COUNCIL OF THE EUROPEAN UNION



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# European alignment on skills and training: Charting the path forward

The session is focussed on the alignment at European level regarding skills and training.

With the help of a panel of experts representing the diversity of stakeholders involved, we will identify a European dimension of training and development of skills to support mobility and interdisciplinarity.

Upskilling and competence enhancement stand as cornerstones in crafting robust research trajectories, and are vital for shaping effective research career paths. The discussion will be centred on the harmonisation and coordination of training activities, which is linked to sustainability and professionalisation.

The concepts of a network of competence centres in the EOSC context as well as the definition of a European curriculum for Data Stewards will be presented to collect needs and expectations. Important linked themes will be touched as the certification and quality assessment.








# European alignment on skills and training: Charting the path forward Agenda



## Introductory talks

- **Skills & careers in the ERA policy agenda - Javier Lopez Abacete**, Policy Officer Directorate for Research and Innovation, European Commission
  - **Skills4EOSC Contribution to the path forward** – Emma Lazzeri, GARR, Skills4EOSC Coordinator
  - **Data Stewardship Curricula and Career Paths Task Force** - Ilire Hasani-Mavriq, Head – RDM Team and Digitalisation of Research Graz University of Technology <sup>3</sup>
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# European alignment on skills and training: Charting the path forward Agenda



**Panel discussion:** moderator, Marialuisa Lavitrano, University Milano Bicocca

## Panelists:

- **Javier Lopez Abacete**, Policy Officer at the European Commission's Directorate for Research and Innovation
  - **Maja Dolinar**, Co-Chair of the Open Science Working Group at Eurodoc
  - **Emma Lazzeri**, GARR, Skills4EOSC Coordinator
  - **Ilire Hasani-Mavriqi**, Head – RDM Team and Digitalisation of Research Graz University of Technology
  - **Celia van Gelder**, Training Programme Manager Health-RI/DTL/ELIXIR-NL
  - **Monica Forni**, Professor at the University of Bologna, quality assurance expert on higher education
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# Skills & careers in the ERA policy agenda

*EOSC Symposium 2023*

***Dr. Javier Lopez Albacete***  
*Open Science & Research Infrastructures*  
*DG R&I, European Commission*

# European Research Area: Deepening a truly functioning internal market for knowledge

**Action 1** – *Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the EOSC*

**Action 3** – *Advance Towards the Reform of the Assessment System for Research, Researchers and Institutions to improve their quality, performance and impact*

**Action 4** – *Promote attractive and sustainable research careers, balanced talent circulation and international, transdisciplinary and inter-sectoral mobility across the ERA*

# European Research Area: Deepening a truly functioning internal market for knowledge

**Action 1** – *Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the EOSC.*

EOSC SRIA 1.1.. GO1. Ensure that Open Science practices and skills are rewarded and taught, becoming the 'new normal'.

**Action 3** – *Advance Towards the Reform of the Assessment System for Research, Researchers and Institutions to improve their quality, performance and impact*

CoARA: Recognise the diversity of contributions to, and careers in, research

**Action 4** – *Promote attractive and sustainable research careers, balanced talent circulation and international, transdisciplinary and inter-sectoral mobility across the ERA*

to foster adequate skilling, up-skilling and re-skilling of researchers throughout their career and the visibility and recognition of researchers' competences.

## ERA Action 4. Measures launched on 13 July

Council Recommendation proposal – A European Framework for Research Careers

New Charter for Researchers (annex to Council Recommendation)

Launch of European Competence Framework for Researchers (ResearchComp) website



# European Framework for Research Careers

## Definition of researcher/research professions

- Frascati definition
- Revised R1-R4 profiles with examples of occupations for each level

## Recognition of research professions and comparability of research careers

- Equal esteem and reward for different career paths
- Mapping of career structures by HR against R1-R4

## Recruitment and working conditions

- OTM-R, attractive working conditions, social protection (RESAVER)
- Specific measures and incentives for R1-R2

## Researchers skilled for inter-sectoral careers and entrepreneurship-innovation

- Skills based on ResearchComp and interaction in ecosystems
- Entrepreneurship

## Career development and progression

- Recognition of all mobility experiences
- Advisory/support services
- Reformed assessment
- Fair accession/progression

## Balanced circulation of talents and making Europe an attractive destination

- MS to make research systems more attractive
- EC to support MLEs and monitor flows

## Support actions for research careers

- Strengthen EURAXESS and develop ERA Talent Platform
- New Charter for all sectors and transition measures

## Monitoring of research careers

- Observatory on research careers in addition to ERA monitoring systems

# Part of a package ‘promoting attractive research careers’

## Setting voluntary standards

- **European Framework for attractive Research Careers** (incl. new Charter for Researchers)

## Supporting implementation

- **ResearchComp**, ERA Talent Platform one-stop-shop, R&I Careers Observatory with OECD,

...

## Promoting cultural change

- Reform of research and researcher assessment (*COARA.eu; ERA Action 3*)

## Coordinating investments

- Pilot in Horizon Europe 2024 supporting organisational change – possible upscaling 2026-2027

# ResearchComp: the European Competence Framework for Researchers

- 7 Competence Areas
- 38 Competences
- All competences are equally important & interrelated
- Competences can be acquired via **dedicated training, on-the-job-training, peer-to-peer learning, coaching and mentoring**
- **Each stakeholder** can use the Framework as a starting point to address its **own needs**
- Researchers encouraged to **develop competences in all 7 areas, but should not acquire the same or the highest level of proficiency for all competences**



# Gracias



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Skills  
4 eosC

- Skills for the European
- Open Science
- Commons

# Skills4EOSC Contribution to the path forward

Emma Lazzeri, GARR  
Skills4EOSC project  
coordinator

Supporting

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the European Union



UK Research  
and Innovation



A small, fluffy Pomeranian dog with orange and white fur is wearing large, dark-rimmed glasses and a dark red sweater. The dog is sitting behind a tablet computer. The text on the tablet is white and reads: 

**We need  
Competences to  
Practice Open Science**

# Needs

- Clear definition of skills and competences to practice Open Science, take advantage of and participate in the EOSC
- Train new professional profiles (eg. Data Stewards) and define adequate career paths
- Upskill existing workforce
- Design lifelong learning mechanisms
- Provide adequate support

# What can the answer be?

- Bring together competent people to avoid fragmentation
- Define and update skills and competence profile for relevant roles
- Provide services based on competences
- Unique point of reference for their community
- Allow lifelong learning through peers

Foto di [Shane Rounce](#) su [Unsplash](#)





# Competence Centres



## Strategic Research and Innovation Agenda (SRIA)

### of the European Open Science Cloud (EOSC)

Version 1.1 – 1 November 2022



## Opinion paper on EOSC FAIR data literacy

By the EOSC Steering Board expert group (E03756)

Independent  
Expert  
Report



## EOSC Multi-Annual Roadmap 2025-27

Karel Luyben  
President EOSC Association

EOSC Symposium 2023, Madrid

### EOSC **Compilation of national priorities (2025-2027)**

- Aligning European curricula for data stewardship;
- Establishing cost of data management as eligible;
- Leveraging national Competence Centres;

### EOSC **Compilation of institutional priorities (2025-2027)**

- Offering core Open Science, FAIR and CARE training to researchers and research support units
- Ensuring research support staff to have the required data stewardship skills;
- Engaging in competence centres and networks for data stewards, research software engineers, semantic artifact curators and Open Science communities to share practises;

# Competence Centres, we are not alone!



**We are ENRIO.  
We are all about research integrity.  
Or the lack of it.**

The European Network of Research Integrity Offices (ENRIO) brings together experts who are dealing with questions about research integrity. ENRIO is an informal network and aims to enhance research integrity in a world with growing international cooperation.

31 member organisations within 23 European countries are currently joining ENRIO. Membership is open to representatives of national offices and national organisations as well as other relevant bodies or groups that support the goal of ENRIO with interests in and responsibility for matters of research integrity.

[Learn more about ENRIO](#)

<http://www.enrio.eu>



<https://allpros.eu/events/online-workshop-competence-centres-semiconductors>



The European High Performance Computing Joint Undertaking (EuroHPC JU)

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[Home](#) > [National Competence Centres for High Performance Computing](#)

[CALL FOR PROPOSALS](#) | [Closed](#)

**National Competence Centres for High Performance Computing**

The objective of this call is to support existing NCCs and the creation of new NCCs in the EuroHPC JU Participating States.

<https://www.eurocc-access.eu/>  
[https://eurohpc-ju.europa.eu/national-competence-centres-high-performance-computing\\_en](https://eurohpc-ju.europa.eu/national-competence-centres-high-performance-computing_en)

# Competence Centres



- Address the **skills shortage** by offering access to **training**, including workforce upskilling and reskilling, on semiconductors
- Facilitate effective use of capacities and facilities of the Chips for Europe initiative, including access to **design platform** and **pilot lines, funding opportunities** etc.
- **Connect** stakeholders to national and international programs, and resources linked to semiconductors
- Act as an **access point** to the **network** of competence centres

# Competence Centres



- Address the **skills shortage** by offering access to **training**, including workforce upskilling and reskilling, on ~~semiconductors~~ **Open Science**
- Facilitate effective use of capacities and facilities of the ~~Chips for Europe~~ **EOSC** initiative, including access to ~~design platform and pilot lines~~, **funding** opportunities etc.
- **Connect** stakeholders to national and international programs, and resources linked to ~~semiconductors~~ **Open Science**
- Act as an **access point** to the **network** of competence centres

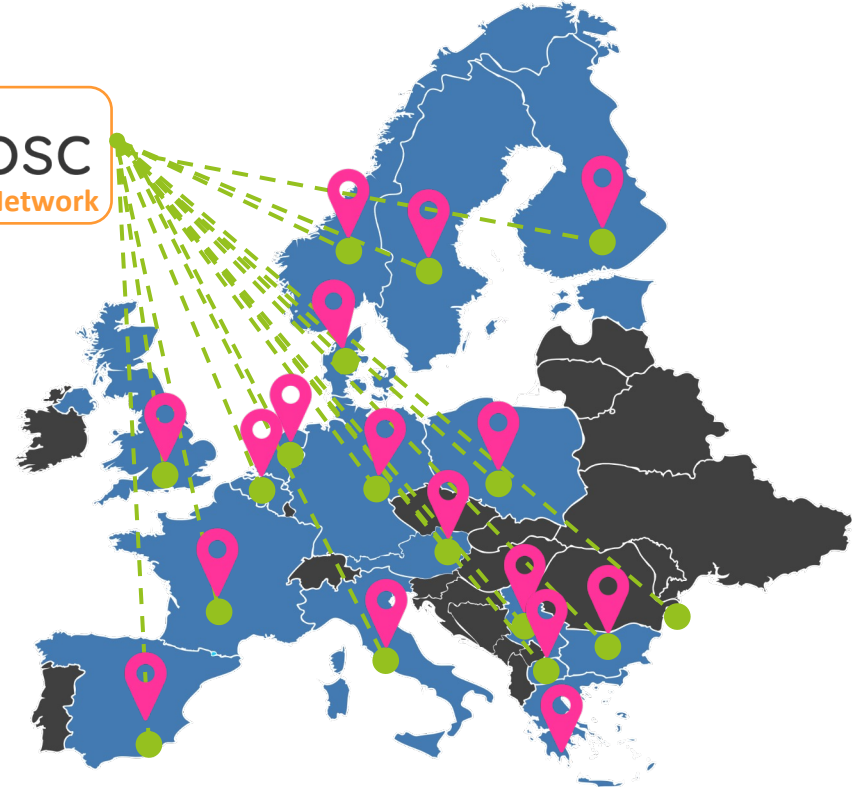
# Skills4EOSC Competence Centre Network



Skills4EOSC aims at building a Coordination Network of Competence Centres for Open Science, FAIR and EOSC in Europe (CCNet).

The Skills4EOSC CCNet will be based on a lightweight mechanism to align and coordinate the network nodes.

The nodes are the Skills4EOSC Competence Centres (CCs).



# Skills4EOSC Competence Centre

Skills4EOSC CC represent **a single point of reference** in a specific Country/Region/Theme to find key **competences** to enable the practice of **Open Science** with adequate knowledge of standards, applications and tools and best practices for delivering, managing, re-using, sharing and analysing **FAIR** data, as well as other digital research objects.

## Competences



## People and Institutions

22



## Services



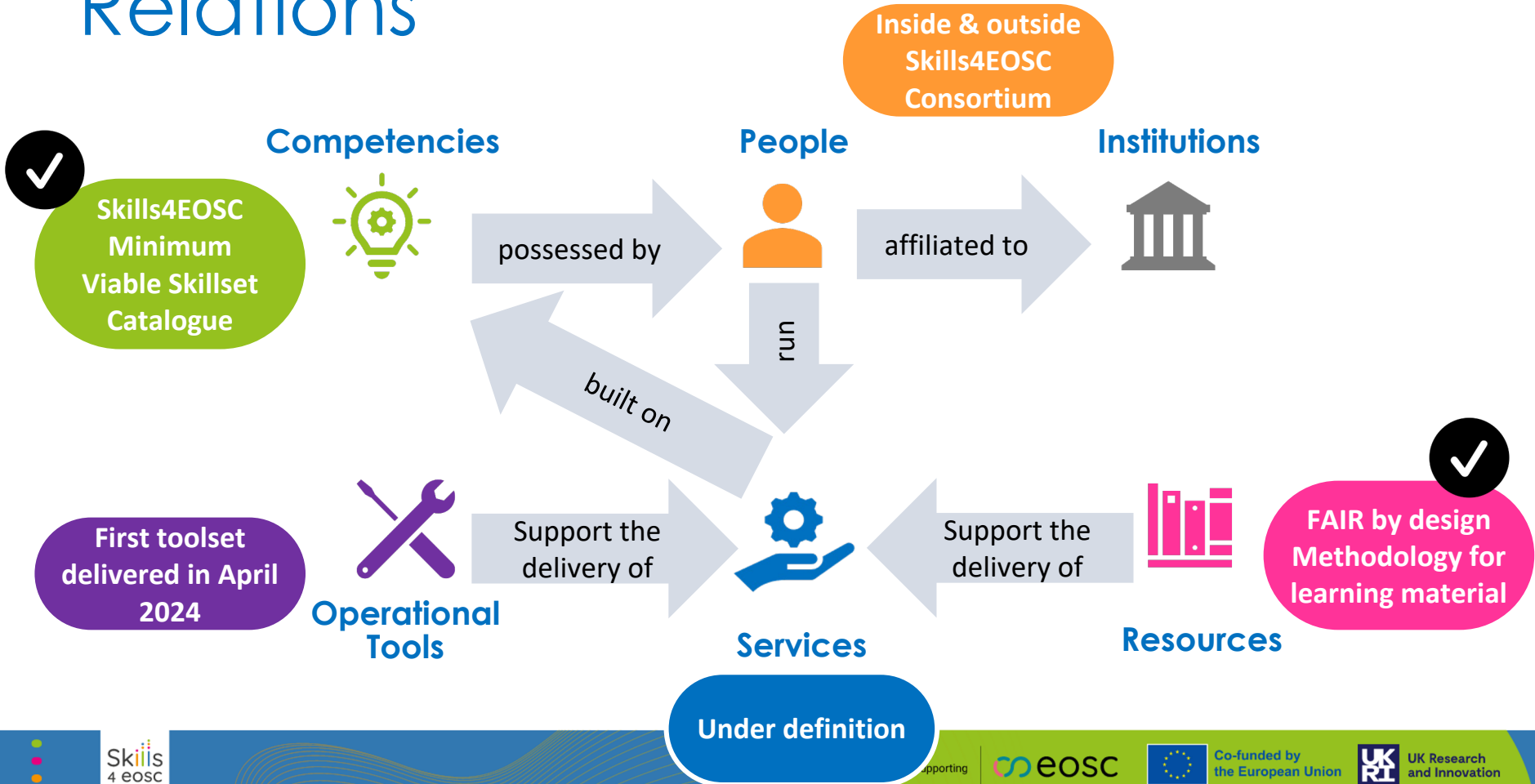
## Resources



## Operational Tools



# Relations



- Skills for the European
- Open Science
- Commons



Supporting



Skills4EOSC has received funding from the European Union's Horizon Europe Research and Innovation Programme under Grant Agreement No. 101058527 and from UK Research and Innovation (UKRI) under the UK Government's Horizon Europe funding guarantee, Grant No. 10040140

# Thank you!

~~emma.lazzeri@garr.it~~  
**Questions!**

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# Data Stewardship Curricula and Career Paths

## EOSC Symposium 2023

### European alignment on skills and training: Charting the path forward

22 | 09 | 2023 by Ilire Hasani-Mavriqi (Graz University of Technology) and Celia van Gelder (Health-RI)

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# Data Stewardship Curricula and Career Paths

EOSC Symposium 2023

**European alignment on skills and training: Charting  
the path forward**

22 | 09 | 2023 by Ilire Hasani-Mavriqi (Graz University of Technology),  
Celia van Gelder (Health-RI) and Iryna Kuchma (EIFL, OpenAIRE)



## Board Liaison



Wilhelm WIDMARK  
Stockholm University

**The Task Force Data stewardship, curriculum and career paths focuses on the data stewards role and their core activities**

## Coordinators



Ilire Hasani-Mavriq  
TU Graz



Celia van Gelder  
DTL

24 members: experts from 18 European countries and main stakeholder groups: universities, national organisations/initiatives/infrastructures, EOSC related projects, research infrastructures

## Members

**Basalti, Chiara**  
UNIBO

**Bianchini, Federico**  
University of Oslo

**Blümel, Ina**  
TIB

**Blumer, Eliane**  
EPFL

**Bracco, Laetitia**  
University of Lorraine

**Claes, Nathalie**  
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**Thorpe, Deborah**  
University College Cork

**Wałek, Anna**  
Gdańsk University of Technology

**Ward, Robyn**  
University of Nottingham

**Wildgaard, Lorna**  
Copenhagen University Library

<https://eosc.eu/advisory-groups/data-stewardship-curricula-and-career-paths>

# Focus & approach

- **Focus** on the **role of data stewards, their core activities**, and **curricula** to ensure that they are internationally recognized and aligned
- Actively engage with stakeholders and build on previous work: **build, connect & consolidate**
  - Examples: the EOSC Executive Board Skills and Training WG, the RDA Group on Professionalizing Data Stewardship, EUA, other EOSC-A Task forces, and relevant projects (Skills4EOSC, EOSC-Future, RI:TRAINplus )
- Identify (existing and new) **use cases implementing** data stewardship curricula and career paths
- Ensure a **co-creation** process between **theoretical** development and **implementation** examples
- Make current insights, experiences, implementation examples **available (in a usable form) for all stakeholders**

# TF Activities 2022-2023

## Workstream Minimal Curricula

## Workstream Career Paths

## Expert Input to EOSC-A Board

- **Recommendations for Data Stewardship Skills, Training and Curricula with Implementation Examples from European Countries and Universities (submitted)**
  - 17 Recommendations for European and national policymakers, funders and governments
  - 13 Recommendations for Research Performing Organizations
  - Complemented by national and institutional case studies (Austria, Denmark, France, Hungary, Ireland, Italy, Latvia, the Netherlands, Switzerland and the UK)
- **Data Stewardship Career Paths: State-of-the-Art Report and Recommendations (submitted)**
  - Overview and summary of relevant reports and papers, ongoing initiatives, projects and surveys related to career paths
  - List of recommendations, identifying activities that can be taken by the EOSC (partnership, association and projects)
- **Bring important topics related to data stewardship to the attention of the EOSC-A Board**
  - for Multi Annual Roadmap (MAR) 2023-2024 and 2025
  - for Strategic Research and Innovation Agenda (SRIA) 2.0

# Recommendations for Data Stewardship Skills, Training and Curricula with Implementation Examples from European Countries and Universities

## Main outcomes:

*Recommendations for European and national policymakers, funders and governments:*

- Harmonize core data stewardship competencies on the European and international level
- Support the implementation of aligned European curricula (including certification) for data stewards
- Recognise and invest in advanced education and the professionalisation of roles in data science and data stewardship, tailored to different RI domains
- Support the implementation of a core curriculum for data stewardship for researchers as a core element in research programmes

*Recommendations for Research Performing Organizations:*

- Include and commit to the education of data stewards in institutional and national open science and data strategies
- Develop and implement curricula that address the data steward's technical and soft skills

# Data Stewardship Career Paths: State-of-the-Art Report and Recommendations

## Main outcomes:

- Show the importance of creating more sustainable career pathways for data stewards
  - findings highlight a lack of documentation and evidence on this topic
- **Recommendations for EOSC Partnership**
  - establish a permanent data stewardship expert group (including representatives from the various existing initiatives and the TF) with the following responsibilities:
    - Develop and implement a monitoring framework supporting the career paths and development of personnel hired in data stewardship roles
    - Advise the EOSC-A and the relevant (ongoing and future) projects
    - Assess the need for a professional network for data stewards (at least on the European level)
    - Ensure collaboration with international initiatives, in particular, the RDA IG Professionalizing Data Stewardship – TF Career Tracks

# Contact

- EOSC TF Data Stewardship Curricula and Career Paths: [stewardship-tf@eosc.eu](mailto:stewardship-tf@eosc.eu)
- <https://eosc.eu/advisory-groups/data-stewardship-curricula-and-career-paths>





# EUROPEAN ALIGNMENT ON SKILLS AND TRAINING – 22 SEPTEMBER

#EOSCsymposium23

## EOSC SYMPOSIUM 2023



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Skills4EOSC Coordinator, GARR



**Ilire HASANI-MAVRIQI**  
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**Celia VAN GENDER**  
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**Monica FORNI**  
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University of Bologna



# Stay tuned

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