



siriris

Open Science to Increase
Reproducibility in Science

**Making research transparent and
reproducible – Creating a paradigm
shift in Open Science!**

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www.osiris4r.eu



Funded by
the European Union

Short introduction



Biogas.czu.cz





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[BRT Team](#)

[Group leader](#)

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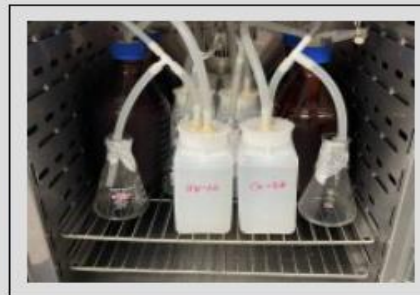
[Publications](#)

[Bioeconomy](#)

[Resources](#)

We aim to reveal current state, bottlenecks and perspectives of biogas plants.

Biogas Research Team





**OPEN SCIENCE
&
REPRODUCIBILITY**

Some simple examples at BRT (I.)

Making research papers accessible to everyone

One of the simple approaches is to make our research papers accessible to everyone

This includes (when relevant) data availability.

Making resources accessible to everyone

Other simple approach is to have various **resources** available to everyone

- photobank
- white papers
- popularisation
- commentaries
- methodologies**
- technical blueprints



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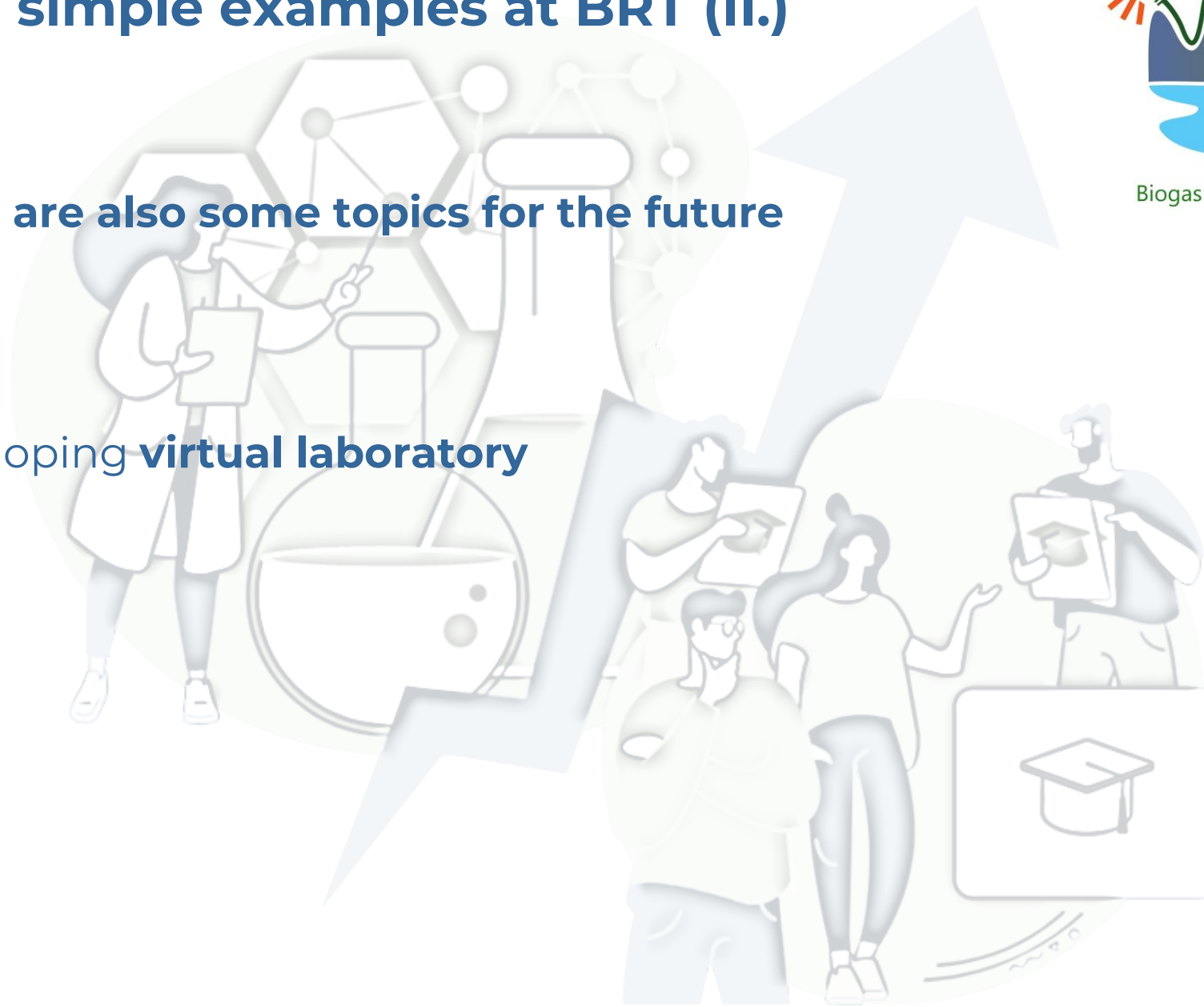
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Some simple examples at BRT (II.)



There are also some topics for the future

Developing **virtual laboratory**



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Some simple examples at BRT (III.)



Phosphogypsum

Example of Open Science principles in slightly an unexpected practice





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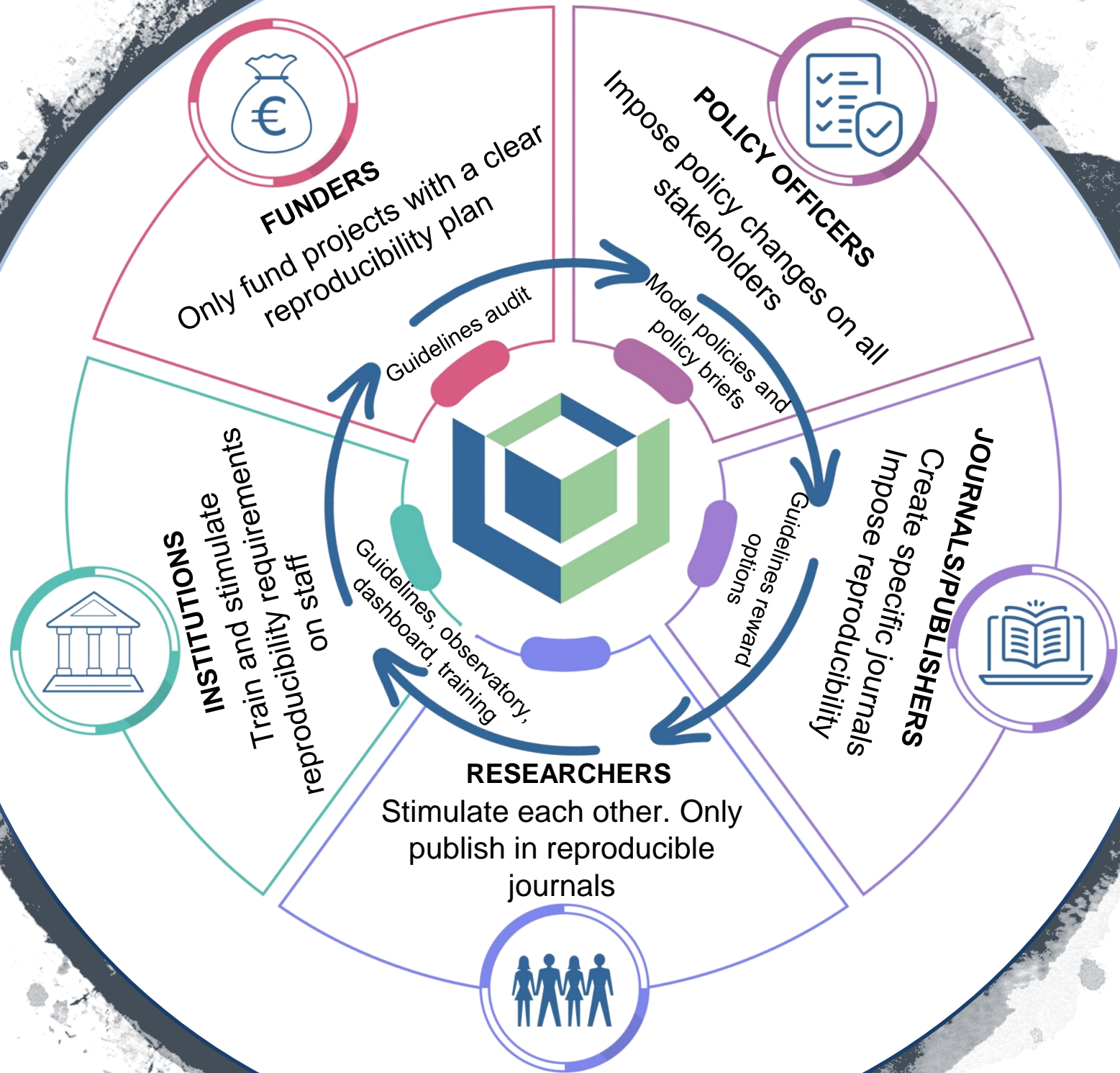


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OPEN SCIENCE TO INCREASE REPRODUCIBILITY IN SCIENCE

„Reproducibility is crucial to progress and impact of Research and Innovation (R&I) as it confirms or corrects the outcomes of single studies, resulting in higher quality research, more reliable and implementable outcomes, and reduction of research costs.“





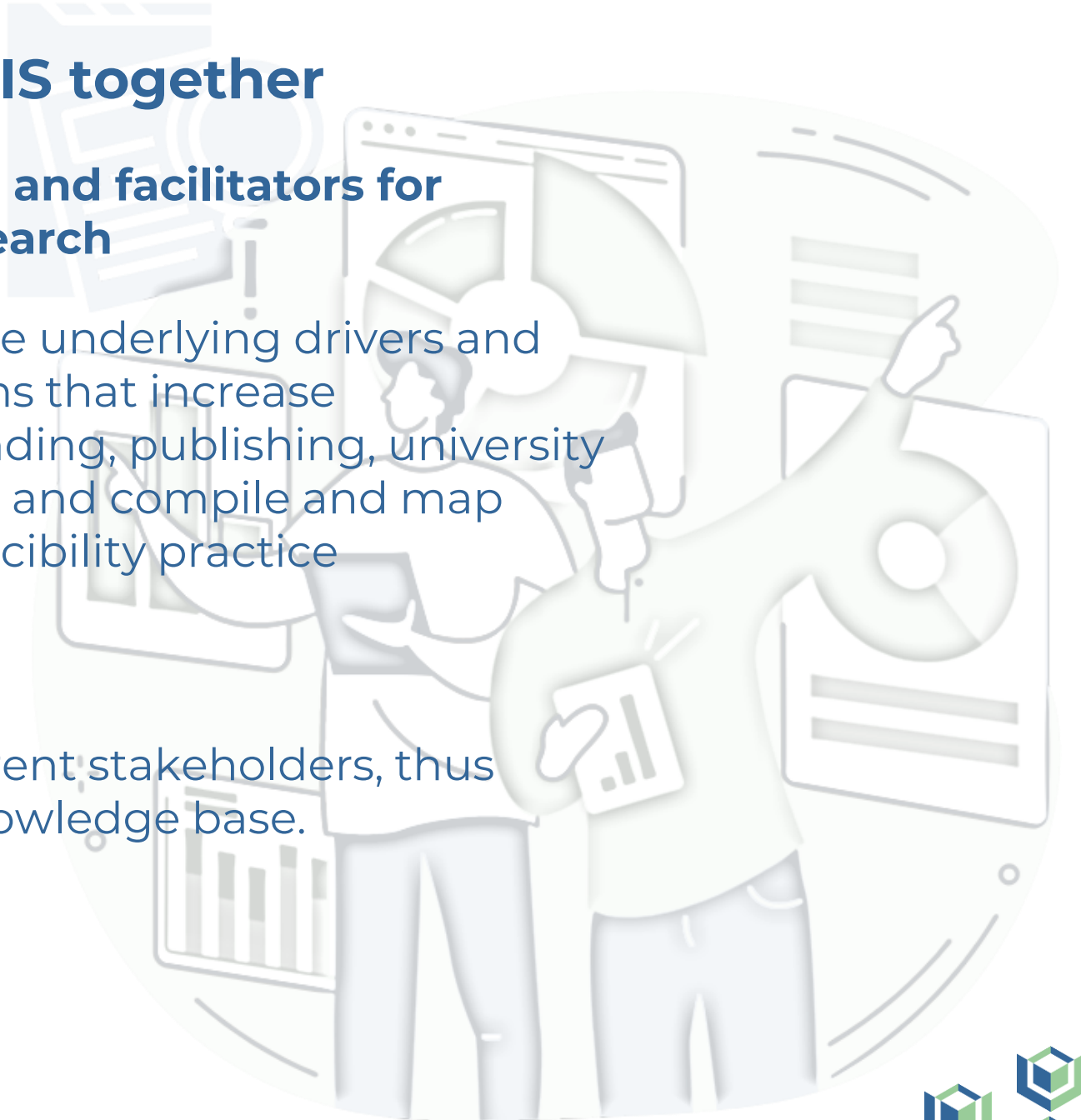
Let´s check OSIRIS together

WP2: Drivers, barriers and facilitators for reproducibility of research

Here we investigate the underlying drivers and effective interventions that increase reproducibility at funding, publishing, university and researcher-level; and compile and map evidence on reproducibility practice

and

what it means to different stakeholders, thus creating a strong knowledge base.



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WP3: Interventions to improve reproducibility for researchers and institutions

Here we develop and test effective, evidence-based interventions that increase transparency and reproducibility.



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WP4: Interventions to improve reproducibility for funders and journals

Here we will develop and evaluate automatic systems for compliance to reproducibility that can be used by publishers and/or funders.

We will also identify guidance and policies that can be implemented by funders.



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WP5: Training and guidance to increase reproducibility

Here we will gather all the knowledge from the other work packages.

Through a process of facilitated co-creation, design and user-testing, we will develop effective and impactful resources that can be used to train researchers in how they can increase the reproducibility of their research.

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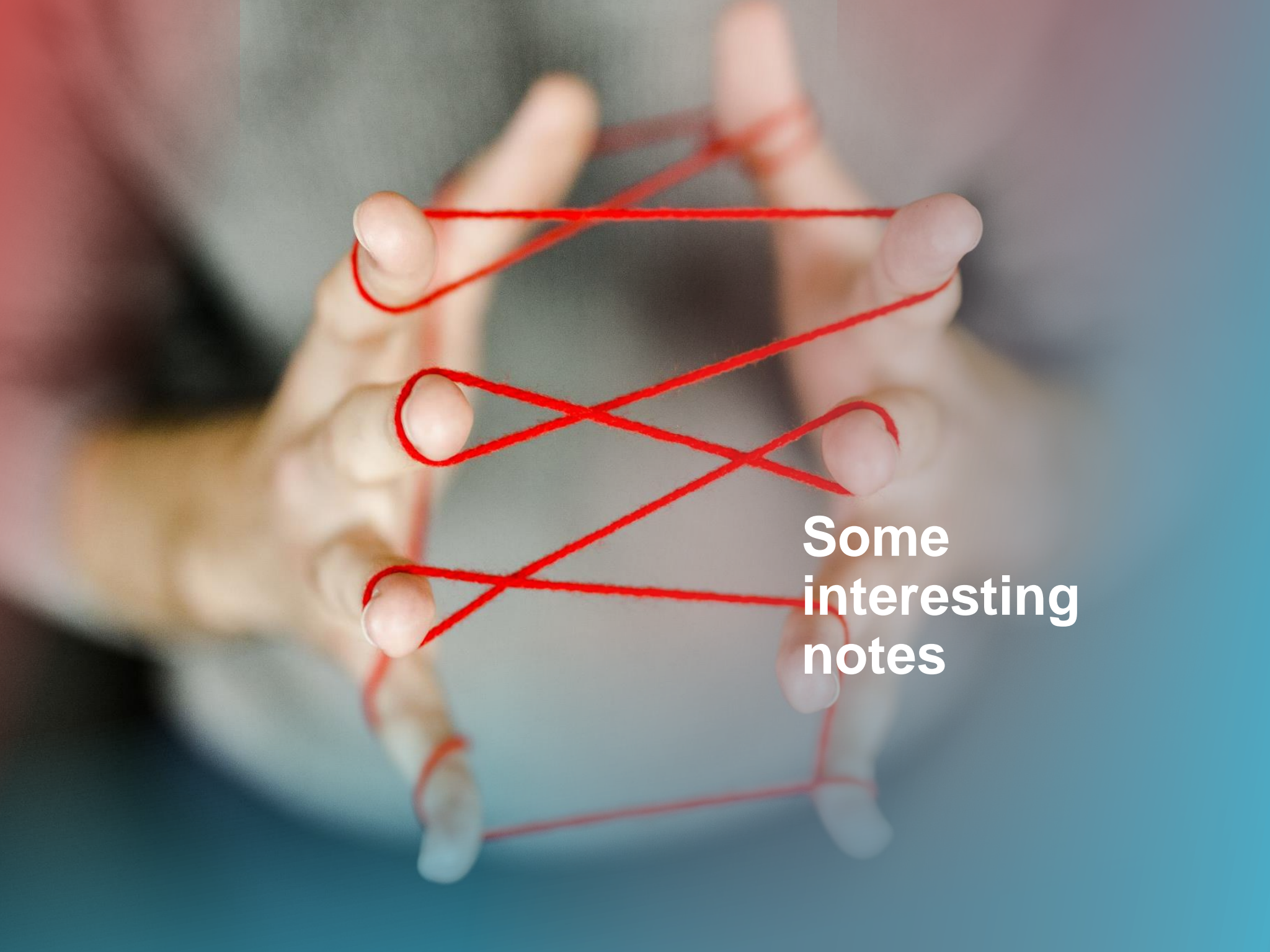


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**Some
interesting
notes**

Introducing OSF

Open science is at the heart of the OSIRIS project.

We use the Open Science Framework (OSF), a free and open-source project management tool, to develop, collaborate on, document, share and disseminate all our protocols, study materials and methodology documents.



This makes the OSIRIS research transparent and contributes to the reproducibility of our research and the FAIRness of our data.



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Advancing Open Science Practices

What is reproducibility, and why is it crucial?

Tools and strategies for creating reproducible research workflows.



Open Access and Reproducibility Policy for [Research Group Name]



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Open Access and Reproducibility Policy for [Research Group Name]

1. Introduction

The [Research Group Name] is committed to conducting research that adheres to the principles of Open Access and Reproducibility. This policy outlines our commitment to transparency, accessibility, and the highest standards of research integrity.

2. Open Access

2.1 Publication

2.2 Preprints

2.3 Data Sharing

2.4 Author Rights

3. Reproducibility

3.1 Methodology and Code

3.2 Data Transparency

3.3 Replication

3.4 Peer Review

4. Implementation

4.1 Training & Capacity Building & Awareness

4.2 Data Management Plans

4.3 Quality Assurance

5. Compliance and Review

5.1 Compliance

5.2 Review

5.3 Working on **national level**

6. Conclusion

The [Research Group Name] is dedicated to advancing research practices that promote transparency, accessibility, and reproducibility. This policy reflects our commitment to these principles, ensuring that our research contributes to the broader scientific community and society as a whole.

Interested to receive the full Open Access and Reproducibility Policy for you?

No worries, drop me an email (roubik@ftz.czu.cz).

- the OARP will be included
- the presentation and
- the recommended links



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Foster collaborations with researchers from different disciplines, institutions, and backgrounds to encourage diverse perspectives and increase the reproducibility of research

Have research data and methodology openly accessible

Five ways towards Open Science

Be transparent about your conflicts of interest, funding sources, and any limitations or potential biases in your research

Pre-register your research plans, hypotheses, and methodology to ensure transparency and prevent bias

Replicate other researchers' work, and encourage others to replicate yours, to ensure

Time for some debates

Time for some debates

The **pros** and **cons** of preprints

The role of **copyright** in Open Science

The difference between the Global South and Global North

What are **your** experiences with Open Access and Reproducibility?

What are the **risks** of Open Science?

How about the **funding**?

THANK YOU FOR YOUR ATTENTION!

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Biogas Research Team



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