



SUSTAINICUM COLLECTION

LEHRMATERIALIEN FÜR BILDUNG ZUR NACHHALTIGKEIT

Sustainable Research

(Resource ID: 547)

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This teaching resource is allocated to following University:

MUG - Medical University of Graz

<http://www.sustainicum.at/en/modules/view/547.Sustainable-Research>





Group work
Plenum



Independent of
the number of
students



Up to 3 lecture
units



English

The current national and international academic research landscape suffers major deficiencies with respect to sustainability. These deficiencies are a consequence of a lack of long term research strategies, mainly short-term funding, lack of appropriate career development programs, and major fragmentation of the scientific community. In this context there is the particular problem that no appropriate positions can be offered to highly qualified scientists, and even specific career development programs (e.g., programs funded by the FWF) can only in part improve this situation.

Research infrastructures of the ESFRI (European Strategy Forum for Research Infrastructures) roadmap could play an important role in improving this situation at the European level. ESFRI research infrastructures are established by European Member States and foresee operation of 20 years or longer. These infrastructures should guarantee sustainable access to resources, technologies and knowledge. Since there is only one type of ESFRI research infrastructure for a certain scientific field for Europe, the infrastructures generate an unique platform for international collaboration that at the same time efficiently reduces the fragmentation of the research landscape.

One of these ESFRI research infrastructures, namely the research infrastructure for biobanking and biomolecular resources (BBMRI) provides a good showcase for the role of research infrastructures in sustaining research. BBMRI will provide sustainable access to biological resources, such as human biological samples and associated data which are key resources for advancing biotechnology and medicine. Austria plays a central role in BBMRI since the planning of BBMRI has been coordinated by Austria, and Austria will host the European headquarters of BBMRI.

The topic will be presented in a seminar followed by discussion with participants (duration ca. 90 minutes). A presentation related to the seminar will be made freely available.

The seminar will be held in English since it should address international students (e.g., students of the PHD programs). In case needed also a German version of the seminar can be produced.

Teaching Tools & Methods



Written material Discussion / debate

Learning Outcomes

Raising awareness concerning problems of sustainability in research. To support the

planning of research careers.

Relevance for Sustainability

- How can sustainability of research projects be improved with respect to results generated and career development of employees?
- How to avoid loss of talent (mobility and brain drain)?
- What is the role of European research infrastructures to improve sustainability of research?
- The showcase BBMRI: a European research infrastructure that should provide sustainable access to biological resources.

Related Teaching Resources

No specific previous knowledge / related resources required

Sustainability criteria

- Related to global challenges / needs
- Holistic thinking
- Long-term thinking
- Related to acquiring knowledge
- Strengthens strategic competence

Preparation Efforts

Low

Access

Free

Funded by

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