



# Centro 3R: Organ and Tissue Sharing Project

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Reducing the number of animals used for scientific purposes: one of the 3Rs that might be effectively pursued:

- careful planning of experiments
- careful analysis of the procedures
- only one or two organs are needed while the rest of the animal body is discarded
- a great number of animals is used to collect tissues or organs for cell culture or for the development of in vitro methods



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“....Member States shall facilitate, where appropriate, the establishment of programmes for the sharing of organs and tissues of animals killed“

Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the protection of animals used for scientific purposes



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Sistema Informativo Sperimentazione Animale of the Ministry of Health, a platform - Biobanca IZSLER Condizione Organi e Tessuti - is available enabling scientists to connect and share organs and tissue of killed animals

- platform built on a national basis
- researchers/facilities having access to the platform (registered therefore authorized to submit projects for animal use to the Ministry) can ask and obtain the organs/tissues from the donor researcher/facility
- organs/tissues in most cases stored frozen



To optimize sharing of organs/tissues from animals humanely sacrificed for (scientific or research) projects approved by the Ministry of Health by considering that functional - but not only functional - experiments often require using fresh tissues

the 3R Centre is establishing a pilot project to share organs/tissues obtained from the animal body that otherwise would be discarded

- sharing fresh organs/tissues
- platforms on territorial basis
- platform networks



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Pilot project:

University of Pisa - University of Genova

To establish the protocols for organs/tissues sharing focus on the issues:



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- **Regulation of the request**

Request for permission to share organs/tissues should be presented by researchers, together with a CV and a brief description of the project to use the organ/tissue

*(referring to a project approved by the Ministry of Health?)*

to the person responsible for the animal facility

to the designed veterinary of the institution

to the OPBA



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- **Approval**
- approval of the project by the OPBA
- contact between the donor facility/researcher and the recipient
- agreement on modes to share and establishment of the calendar





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- **After approval**
- OPBA register for all the projects approved (sharing project register)
- OPBA register for all the effective sharing activities (donor register)



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- **Mode for organ/tissue removal**

Who is removing organs/tissues?

- The personnel/researcher of the donor animal facility?
- The researcher who will use the removed organ/tissue?



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- **Regulation of the access to the animal facility of the researcher to remove organ/tissue**

Permission to the researcher: authorization to access the facility

- sanitary surveillance

Logistics, feasibility and safety of activities in the animal facility



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- **Possible storage of organ/tissues/pieces removed**  
agreement with the researcher who will use it



- **Costs**

provide a long-lasting service we should in the future consider

- personnel to prepare/manage the platform
- to coordinate/collaborate in organ/tissue removal and preparation
- contribution to costs for facility maintainment/animal care/waste delivery?



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- **Conclusion**

*implementation of the pilot project would allow*

- protocols for organ/tissue sharing including fresh preparations
- meeting more requests than the frozen/fixed tissues
- strict collaboration and exchange between researchers
- use at best valuable biological resource

- **Perspectives**

- platforms on territorial basis might be connected in platform networks
- complement the Ministry of Health platform for tissue sharing and contribution to step forward on the effective reduction of animal use for experimental purpose