

Bringing biobanking and pathology closer to children and adults

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Introduction

The number of biobanks is increasing, accompanied by growing awareness among researchers. However, public knowledge about biobanks, at least in Austria, is still low. Therefore, BBMRI.at partners actively engage in public events, such as the Austria-wide Long Night of Sciences, regional initiatives for students/pupils, open-house-events, and biobank tours.

Material & methods

BBMRI.at partner Medical University of Graz developed a concept for “biobanking and pathology workshops” for citizens - particularly for children. Aim is to familiarize them with the terms biobank and pathology and make them tangible in hands-on parts where they “become” biobankers and pathologists.

Results/findings

The concept consists of

- an interactive introduction about: i) the workflow in a university-hospital (patient anamnesis, surgery, pathology, biobank, research leading to the development of new therapies) and ii) the organs of our body and their functions.
- a practical, hands-on part where children and adults can perform classical work steps of a biobank and pathology laboratory in different stations. This includes pipetting blood (raspberry juice), freezing it in a ‘biobank’, snap-freezing tissue (sausage or chicken liver) in liquid nitrogen, embedding tissue in paraffin, staining paraffin (mouse) tissue sections from different organs and viewing them under microscope.

During public events this is accompanied by guided biobank tours offered by Biobank Graz.

Conclusion

The workshops are an excellent engagement model for citizens and for paediatric patients to introduce biobanking and pathology. They are a suitable for different age groups, event settings and durations, and are a pleasure for children, teachers, parents and involved staff.

Key words: public engagement, education & outreach, biobanking, children, paediatrics