



BRINGING BIOBANKING & PATHOLOGY CLOSER TO CHILDREN AND ADULTS

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BIOBANKING AND PATHOLOGY UNIVERSITY WORKSHOPS FOR CHILDREN

BACKGROUND & AIM
The matter of biobanking is increasingly appreciated for gaining more insight into disease. However, the public knowledge in Europe is still insufficient. BBMRI.at supports in public events. Particular aim is to address children and adolescents. Therefore, the biobanking and pathology, under the terms 'children' and 'adults' were introduced at Graz University.

METHOD
BBMRI.at, Medical University of Graz developed a content for children, teenagers and parents, workshops and hands-on activities for the biobanking and pathology, under the terms 'children' and 'adults'.

RESULTS
Concept for Biobanking and Pathology University Workshops for Children under the Title "You are the Microorganism - also you can be a research partner!"

CONCLUSION
The workshops are:
• Excellent for introducing biobanking and pathology to children and adults.
• Suitable for different age groups and different event settings and locations.
• Highly versatile with PR.
• A pleasure for children, teachers, parents and involved staff.

EBW 2018, Antwerp

PUBLIC ACTIVITIES

**BIOBANKING & PATHOLOGY
UNIVERSITY HANDS-ON WORKSHOPS
FOR CHILDREN (AND ADULTS)**

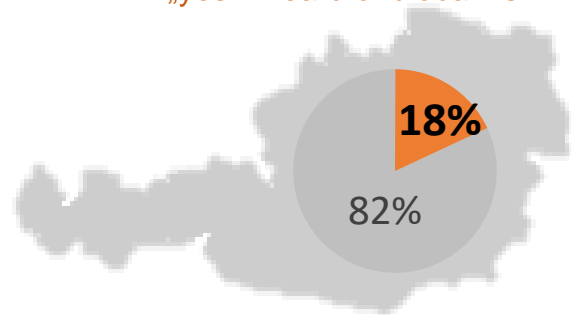
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PUBLIC AWARENESS OF BIOBANKS



- Austria #30 / 32 EU countries (2010)
- 80% - Iceland (#1)
- <20% - Portugal > Austria > Turkey

„yes – heard of biobanks“



Source: Europeans and Biotechnology in 2010,
<https://data.europa.eu/doi/10.2777/23393>

Icon: Thenounproject

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BBMRI.AT – PUBLIC ACTIVITIES FOR KIDS & ADULTS



How it started

Lota B. Raphael S.

2015/2016



Med Uni Graz
 Kindergarten

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BIOBANKING UNIVERSITY COURSES FOR CHILDREN



Concept – modular, flexible hands-on courses

- ✓ Learning objectives
- ✓ Description of stations
- ✓ Procedures
- ✓ Material needed
- ✓ Setup details



Aim:

Let children „experience“ biobanking, pathology and research work

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BIOBANKING UNIVERSITY COURSES FOR CHILDREN



Concept – modular, flexible hands-on courses

- ✓ Learning objectives
- ✓ Description of stations
- ✓ Procedures
- ✓ Material needed
- ✓ Setup details
- ✓ Educational material
- ✓ PowerPoint
- ✓ Quizzes
- ✓ Teachers/parents information
- ✓ Consent form
- ✓ Feedback forms



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Hands-on stations - to "become" biobanker & pathologist

<p>Interactive Introduction</p> <p>1 In hospital Vom Patienten zum Medikament</p> <p>2 Organs & functions</p>	<p>Blood</p> <p>3 Pipetting & freezing</p> <p>4 Components & functions</p>
<p>Tissue</p> <p>5 Cutting & freezing</p> <p>6 Paraffin embedding</p>	<p>Microscopy</p> <p>7 H&E staining</p> <p>8 Microscopy</p>

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BIOBANKING UNIVERSITY COURSES FOR CHILDREN

Knowledge checks (print, digital)



Quiz: Was ist bzw. was macht eine Biobank? Kreuzte die richtige Antwort an!

- Sammelt und lagert Bio-Lebensmittel
- Sammelt und lagert Gewebe- und Blutproben von PatientInnen, damit daran geforscht werden kann
- Ist eine Sitzbank aus biologischem Material

Quiz: The journey of tissue in a hospital Bring the pictures into the correct order and label them with 1 to 6.

Biobank & Pathologie Kids Universitäts-Workshop - Quiz #1 (VS+AHS)

7 Spiele - 25 Spieler

Start Zuweisen Übung

Quiz #1 zum Biobank & Pathologie Kids Universitäts-Workshop 'Ban an die Mikroskope, das gibt es alles in meine... wenn aussagen

Ein privates Kalkool

BBMRI.at Aktualisiert vor 6 Monaten

Fragen (10) **Antworten anzeigen**

- 1 - Quiz Was ist bzw. was macht eine Biobank?
- 2 - Quiz Was macht eine Pathologie im Krankenhaus?
- 3 - Quiz Welche Zelle ist KEINE Blutzelle?
- 4 - Quiz Welche Aufgabe haben rote Blutkörperchen (Erythrozyten)?
- 5 - Quiz Wie macht man Organstücke (Gewebe) für die Forschung haltbar?
- 6 - Quiz Wie viel Grad Celsius hat flüssiger Stickstoff?
- 7 - Quiz In welchem Material wird fixiertes Gewebe eingegossen, um es haltbar zu...

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Different public events & target groups



Same concept for events of different lengths & age groups



Kindergarten
(age: 4-6.5)



Primary school
(age: 7-10)



Secondary school
(age: 11-14)



Public
(age: 4-99)

- Slightly adapted content for different ages
- Setup in stations gives flexibility in length

..... 1.5h to 3h courses continuous loop
 typically 20 – 30 kids several 100

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Different public events & target groups



Organization & Partners

Children

- ‚Junior‘ courses (4-14)
- ‚Kids University Workshops‘ (9-14)
- Summer school courses (7-14)



Diagnostik & Forschungszentrum für
Molekulare BioMedizin

Nursery schools
Elementary schools



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Different public events & target groups



Organization & Partners

Children

- ‚Junior‘ courses (4-14)
- ‚Kids University Workshops‘ (9-14)
- Summer school courses (7-14)

Public (4-99)

- Long Night of Research
- Open house / opening events
- Guided biobank tours



Biobank

24 May 2024 (17:00 – 23:00)



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BIOBANKING UNIVERSITY COURSES FOR CHILDREN



Communication – publication, media articles, award



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PUBLIC OUTREACH

- **Videos** from/about events
- **Podcasts** for children
- **TV/radio** reports
- **Newspaper** & magazine articles
- **Animated videos** for patients (adults, minors) ... presented at EBW by **Monika VALJAN**
- **Citizen-Expert-Discussions**
- **EU Project „SCIBIOEU“** ... presented at EBW + poster P4 by **Vasileios ZOGOPOULOS**

Examples

[Biobanking at the Long Night of Research>](#)



[Biobanking podcast>](#)

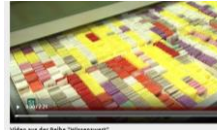


[EuroNews TV>](#)

European researchers tackle cancer with Biobanks



[ORF \(about Biobank Graz\)>](#)



[Cinema documentary movie>](#)



[Animated video \(adults\)>](#)



[Animated video \(kids\)>](#)



[Citizen discussions>](#)



[Erasmus project>](#)



<https://bbmri.at/>

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CONCLUSION - PUBLIC EVENTS FOR KIDS & ADULTS

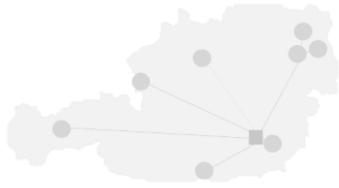


Courses:

- Excellent for introducing biobanking, pathology & research to children and adults
- Suitable for different age groups
- Suitable for different event settings and durations
- Nicely combinable with PR
- Possible: awards & publications
- **A pleasure for kids, adults & involved staff**

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THANK YOU!

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Martin Zacharias
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Partners



ZWT



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