Biobanking education: the project "SCIence outreach: The example of BIObanks in Europe" and its progression so far

Introduction

Public involvement is essential in biobanking for medical research. Biobanks depend on public trust and citizen participation, but limited awareness due to poor scientific communication highlights the need for better community engagement programs by biobanks and researchers or even students. The "SCIence outreach: The example of BIObanks in Europe" (SCIBIOEU) project, conducted by seven BBMRI-ERIC node partners in five European countries (Austria, Cyprus, Finland, Greece, Italy), aims to fill this gap.

Material & methods

To map existing educational resources, online courses and serious games for students, young researchers and citizens on biobanking were searched and summarized in an inventory. In addition, focus groups involving the public and selected stakeholders (including students, professors, researchers, developers and designers, biobanking professionals), were performed. An online course is engineered using Moodle, the serious game developed in Unity, with WebGL enabling online browser accessibility.

Results

The focus groups provided insights into target group's needs and important elements for the development of the course and serious game. An online multimedia course, incorporating texts, videos, and user self-evaluation mechanisms, is developed. Additionally, a 3-D online serious game that navigates users through a virtual biobank, is designed. This interactive experience is enhanced with the assistance of an AI service, providing multiple stages and customization options.

Discussion

SCIBIOEU, an ERASMUS+ funded initiative, seeks to bridge the communicative divide between scientists and the public about biobanking. It equips scientists with effective strategies for scientific outreach and boosts public knowledge of biobanking, through an online course and a serious game.