

## **NCBI Research – Summer 2022**

### **Science 4 Sight Loss - Children & Young Persons Team**

Science 4 Sight Loss is a unique partnership between the INFANT Research Centre, University College Cork and NCBI. INFANT is a research centre focused entirely on pregnancy, birth and early childhood. The project was conceived as a solution focused response to the known high levels of educational disadvantage experienced by children with sight loss and the extremely low uptake of STEM subjects at secondary and tertiary level. This project will allow us to collect vital information regarding how blind and visually impaired students interact with science both within the education system as well as outside of it and present recommendations to students, teachers and others to increase their participation in STEM.

### **NCBI Transitions Programme**

In collaboration with Cruinn Advisory, the Transitions Programme research looks at elements of education, employment, and careers to examine the barriers to higher education attainment for young people with a vision impairment. It is expected that there will be a focus on promoting self-advocacy and independence skills. There is a qualitative focus on experiences of those living with sight loss, with data being gathered through focus groups. The project is expected to conclude by September 2022.

### **Employment Experiences – Employment, Training and Academia Team**

NCBI's Employment, Training and Academia Team are undertaking a qualitative research project which examines the lived experiences of those with a vision impairment in the area of employment. The project has been undertaken to better understand individuals' first-hand experiences and to use this information appropriately for approaching employers and potential workplace partners. This piece of work will enhance NCBI's service offering to those of working age.

### **Physical Activity in Blind & Visually Impaired Children, Young People & Adults**

NCBI and Vision Sports Ireland in partnership with DCU's School of Human Health and Performance and Insight SFI Research Centre for Data Analytics are investigating the levels of physical activity, sports participation, and wellbeing of blind and vision impaired children and adolescents. By identifying sport and leisure options, issues, and barriers across the lifecycle, the team involved believe the level of sports participation can be greatly increased among this cohort of young people and by those who may be vulnerable to economic, social and educational disadvantage. Findings are to be published by end of 2022.

**NCBI Navilens Pilot** – NCBI's Possibility Labs is piloting Navilens across a selected number of NCBI sites nationally including Head Office, National Training Centre, Tallaght, Penrose Wharf and NCBI Retail Camden Street. Navilens is a new barcode-based system that aims to improve accessibility of traditional signage, and support people who are blind or vision impaired to navigate unfamiliar environments

and increasing access to information. Data and feedback are being gathered over a 12-month period from service users and staff at these sites.

**Cobh Public Realm Development – Innovative Tactile Paving Research Project**

NCBI's Possibility Labs is testing a range of innovative tactile paving with service users to determine its efficacy when installed in the urban realm.

**TU Dublin** – Outdoor Navigation & Technology for People with a vision impairment – Questionnaire. NCBI's Possibility Lab actively collaborated on the design and promotion of this questionnaire. The research defined challenges faced by 50 individuals when navigating and identified apps and devices which are currently used.

**TU Dublin Captioning Research Survey** - This survey is part of a research project conducted in T.U. Dublin on automatically generated image descriptions. The purpose is to better understand the preferences of individuals from the blind and low-vision community. NCBI's Possibility Lab actively collaborated on the design and promotion of this survey.

**Prevalence of undiagnosed sight loss among nursing home residents**

NCBI is working with the Nutrition Research Centre Ireland (NRCI), School of Health Science, at South East Technological University (SETU) Waterford on a study to detect the scale of undiagnosed ocular pathologies among nursing home residents. This pioneering research in Ireland will help develop preventative and management strategies to improve care and quality of life. It also aims to influence public policy in the delivery community eye care services.