Welcome to the Access All Areas in Labs project.

Hi I am Dr Katherine Deane, project lead and Associate Professor of Health Research here at the University of East Anglia, in Norwich, on the eastern edge of England. I am also the university’s Access Ambassador.

Our project is looking at how we can improve access for disabled scientists working in labs. Now terminology can be complex in this area, so we have used the following short-hand terms throughout this project. "Disabled” refers to anyone who is disabled, deaf, or has a long term health condition (both physical and mental) that has a significant impact on their ability to carry out every day tasks. “Scientists" refers to scientists, technologists, engineers, mathematicians, and healthcare professionals and "Labs" refers to laboratories, manufacturing and production lines, engineering facilities, etc.

As a wheelchair-using disabled researcher I know that access barriers can prevent me from doing my job – often for no other reason than I get around using wheels rather than my legs. Disabled people are really under represented in the scientific workforce – just 3.8% of UK academics working in STEM – science, technology, engineering and mathematical fields are disabled -3.8%! – yet over 20% of working age people have a disability.

Our team strongly agrees with UK research and innovation (UKRI) who state they want “research by everybody, for everybody” – but we think that that “everybody” needs to include more disabled people. Improvements in workforce diversity have been shown to improve the quality and relevancy of research, create and expand markets for products, and improve profit margins. Lack of accessible lab working environments represents a huge opportunity cost – particularly when you know that most disabilities are acquired after birth. For example we are currently going through a mass disabling event in the form of Long Covid. Keeping scientists who acquire a disability working is likely to lend a substantial business advantage.

We believe many current access barriers can be easily removed from lab settings but that a lack of practical advice on how to do so means that change is progressing too slowly. Even modern buildings can still lack key accessibility features such as step free access to all areas, hearing loops, and good colour contrast. And once you get into technical areas such as laboratories the accessibility tends to reduce further. Accessible working also needs to include practices such as training, flexible hours, part time working, and adaptation of protocols to allow for assistance and ensure safety.

So this project aims to create a set of access guidelines relevant to lab working – some of the content will be from existing access guidelines, but some from the survey and interviews we will be conducting. We will look at 5 areas.

One. Structural access that is the physical design of laboratory and fixed equipment (e.g. hoods, sinks etc.)

Two. Equipment access, so the design and use of movable equipment (e.g. microscopes, centrifuges, PCR machines etc.)

Three. Protocol access, so adaptation of lab protocols to accommodate access needs, and evacuation protocols, lone working policies.

Four. Dissemination access. The work done in laboratories must be shared with the wider world. We will look at access for consultation events, conferences, and web pages.

Five. General working practices access. This is the adaptation of usual working practices (e.g. part time or flexible hours), training of managers, accessible parking etc.

So we are conducting a worldwide exploratory survey aiming to identify key barriers and solutions for disability access in labs. It is open to disabled scientists who work in laboratory settings (currently or in the past) and anyone with an interest in accessible lab design. This may include non-disabled scientists, architects, builders, equipment manufacturers, grant funders, human resources personnel etc. – anyone who has an interest in making working in a lab environment more accessible for disabled scientists.

The survey was created by a steering group of people with a range of disabilities and access expertise. It will be hosted on the Qualtrics platform which is GDPR compliant and compatible with most screen readers. If you need a hard copy of the survey, the team can post you one with either 12 or 16 point fonts. All responses will be anonymous. Please see the link to the survey on the web page.

We also want to conduct online interviews with anyone who has an access solution that they would be willing to share details of. These access solutions can be in any of the areas we mentioned – so structural, procedural, even attitudinal. We want to show that it is possible to solve many access solutions with current technology and designs. Again there is a link on the web page you can click if you wish our team to get in touch with you.

We hope this will be the first project in a program of access research so if you are willing to provide your email address we will be in touch about other access research opportunities. We promise not to spam you with any marketing.

Once the guidelines are created, they will be available on this website. We hope they will help shift the dial and help create the environment for a greater diversity of scientists to work in labs. We hope you are willing to join us on this journey.

Thank you for your time and attention.