Hello I’m Matthew Holley, I’m a Professor in Hearing Research at the University of Sheffield and I will be cycling across Britain as part of a University of Sheffield Challenge to raise money for hearing research.

Hearing loss is a huge global problem – in the UK alone it affects 10 million people and that number will go to 14 million within the next 15 years. This brings a massive financial cost in terms of a burden to the Health Service, it brings a cost in terms of employability as well, and there’s also a huge social cost in terms of isolation of people who are unable to communicate properly.

The ear is one of the most remarkable pieces of biology that we have. If you ask yourself how we can sit in a noisy bar with music in the background, chatting to someone, whilst you’re listening to a much more interesting conversation six feet away... how do we do that? How do we sense that incredibly complex sensory input? And how do we work on the result and process the information? So the brain does a lot of that but actually it requires very high quality information from the ear and you can detect noises from as quiet as a pin dropping to the intense sound of a jet engine. So thousands of sensory cells have to be looked after, because once they are dead they are gone and you’ve lost them.

Understanding how these cells work and convert sound into chemical signals and electrical signals, helps us understand how to repair them and even informs us ways, new approaches to develop the software required to improve hearing aids and things like cochlear implants.

The investment in hearing research is very very small so we spend about one to two pounds per affected person in the UK and that is about a tenth of what we spend in blindness, it’s about a twentieth of what we spend in terms of diabetes and it’s around about approaching one hundredth of what we spend in heart disease... so actually the scale of the problem is largely underestimated.

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So we have a huge capability here. We want to raise funds to support the future of hearing research. We want to train new people (post-graduates, younger people) to strengthen a field that is seriously weak in addressing a problem which is massive across the world. And we also want to engage our students at the University in outreach – it’s very important to try and encourage our young people to understand the value of their hearing whilst they are young because that’s actually when they do the most damage in terms of noise exposure.

So we are going to cycle across Britain and we are going cycle to a sound future and we’d appreciate any support you can give; and in advance of that support I’d like to thank you very much indeed.

[Image with music: “Cycling towards a sound future” – Professor Matthew Holley, BSc, DPhil]

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