

Guest Speaker Dr Elizabeth Broadbent

The future of artificial intelligence and robotics in Health Psychology

Advancements in technology offer opportunities for creating new kinds of psychological interventions and for widening the delivery of such interventions to a larger proportion of people in need. Three kinds of technology will be discussed in this presentation - artificial intelligence, big data analysis, and robotics. Artificial intelligence allows us to tailor and adapt interventions to the individual. Big data analysis offers the potential to find associations between behaviours and outcomes that offer new insights into psychology and health. Robotics and artificial agents offer the potential to provide physical support, social support, and chronic illness management. Research examples will be presented and the future adoption of these technologies discussed.



Dr Elizabeth Broadbent is an Associate Professor in Health Psychology in the Faculty of Medical and Health Sciences at the University of Auckland. Her research interests include how stress affects wound healing, illness perceptions, embodied cognition, and healthcare robots. Elizabeth is a Vice Chair of the multidisciplinary CARES robotics group at the University of Auckland, where she conducts research into how robots can help improve mental and physical health. Elizabeth spent 4 months as a visiting academic at the school of psychology at Harvard University and in the Program in Science, Technology, and Society at Massachusetts Institute of Technology in 2010. She obtained a Fulbright award to conduct further research on companion robots in Boston in 2017. She is an Associate Editor of the journal *ACM Transactions on Human-Robot Interaction*, and on the editorial boards of the *British Journal of Health Psychology* and of *Psychology & Health*."