Mr Chancellor,

The dedicated research of Professor Vicki Hanson will be of benefit to all of us who have ever forgotten our PIN number or dreaded those electronic words 'unexpected item in bagging area'. For 30 years, Vicki has shown outstanding leadership in the design of technologies that address the challenges of social inclusion. If like me you are a digital migrant rather than a digital native, or if indeed you have no idea what those terms mean, then you will have cause to thank her for helping to forge a pathway to a technological future that is accessible to all of us.

Vicki's academic career started with a BA in Psychology and Speech Pathology and Audiology from the University of Colorado, and an MA and PhD in Cognitive Psychology from the University of Oregon. She held a postdoctoral fellowship at the Salk Institute for Biological Studies, La Jolla, California, and went on to become a Research Associate at the Haskins Laboratories, New Haven, Connecticut. She held a variety of positions at the IBM Thomas J Watson Research Center, Yorktown Heights, New York, where she joined the IBM Research Division in 1986. At IBM, she founded and managed the Accessibility Research group that advised on product innovation inclusivity, and rose to the very top tier of industry, influencing product design in one of the world's largest technology companies. In 2009 she was appointed Professor and Chair of Inclusive Technologies at the University of Dundee, and in 2013 she was made a Distinguished Professor in the Department of Information Sciences and Technologies at Rochester Institute of Technology.

Vicki has received many accolades, including the Wolfson Research Merit Award (2009). She is a Fellow of the Royal Society of Edinburgh, the British Society of Gerontology and British Computer Society. She has served on numerous research advisory boards and agenda-setting committees on both side of the Atlantic, such as the UK Computing Research Committee. She is now President of the Association for Computing Machinery (or ACM), the world's leading educational and scientific computing society, which has 100,000 members. She is only the sixth female president in the 69 year history of the ACM, and has used her position to increase the participation of women in computing at all levels of the profession. She has been honoured with numerous industry and academic awards, including the prestigious Anita Borg Woman of Vision Award for Social Impact. In 2013, she was named one of the '25 Most Powerful Women Engineers in Tech', by *Business Insider*magazine.

One of the women she has inspired is her own daughter, Dr Bran Knowles, now a Lecturer in Data Science at Lancaster University. Bran pays tribute: 'My mom and I have both somehow ended up in the same field. I didn't think I was following in her footsteps - I guess those genes are a powerful force after all! I think more likely she exposed me to things over the years that made me interested in the questions that drive research in this field'. Bran and her Mum have published together an article on 'The Wisdom of Older Technology (Non-)Users.' Bran says 'for this paper…we wrote about what underlies older adults' distrust of digital technologies. What makes it especially adorable is that it was a 20-year retrospective of sorts - she and I represented two generations of researchers. The mother-daughter thing made that perspective much more meaningful. Of all the publications I've done, the one I am most proud of is the first one my mom and I wrote together'. She adds, 'With me

living in the UK, and her now living back in New York, it's nice to know we will always have our family reunions at computing conferences'.

From 2009 to 2015, Vicki Hanson led the Dundee arm of a £12 million project 'Social Inclusion Through the Digital Economy Hub' that was directed by Newcastle University. She made significant contributions to the original research proposal, and to ensuring that the project was successful. Paul Watson, Director of the Newcastle Digital Institute and Professor of Computer Science, who nominated Vicki for this award, says that this was one of the UK's largest research projects of its kind, focussing on how to use computing to help tackle the societal challenges of older people and those with disabilities. Paul says 'It was a real pleasure to work with Vicki for those six years. One of the benefits of its success was that the project led to Newcastle University being awarded the National Innovation Centre for Ageing and the National Innovation Centre for Data, which ultimately brought £70 million of investment to Newcastle'. As well as producing the highest quality research publications, Vicki developed a close working relationship with colleagues in Computing Science here, which resulted in another, ongoing, joint EPSRC-funded project which she leads, focussed on improving the lives of residents in care homes.

Paul Watson goes on to say, on a personal note: 'Vicki is excellent to work with, and good fun to be with outside work. I've enjoyed drinking beer with her and John (her husband) in bars all around the world. Vicki always enjoys coming to Newcastle - she ended her excited e-mail telling me that she'd just learnt that she'd just been elected President of the ACM by saying that she wished we could all go to The Hotspur to celebrate, and you can't get much more Newcastle-centric than that.'

To give the other side of the story, Vicki's husband John adds: 'Vicki has thoroughly enjoyed her long collaboration with Newcastle's Paul Watson and Barry Hodgson. As some may know, one of the requirements of working with their team is that every Friday includes, let's call it *debriefing and research planning*, at the Hotspur Pub on Percy Street. Vicki has faithfully fulfilled this obligation every time she's been in town. The Hotspur was also the scene of an unanticipated celebration when she received a call on her mobile there from the Head of Computing at IBM Research telling her she was receiving a Corporate Award for her contributions to accessibility. That was a good day. But, I have it on good authority, this day, and this honour, is even better. And yes, it will be celebrated later today at the Hotspur.'

I'd like to close with a quotation from Vicki's daughter, which I found especially inspiring. A feature of Vicki's leadership as a role model for women in her field is that she has a strong public presence, and so it will be a comfort to many people to know that this awesome pioneer in her field doesn't naturally like speaking in public herself. 'My mom and I are not naturally comfortable with public speaking', says Bran, 'but she has not let that fear stop her from going for her goals. I was never more proud of my mom than when I saw her at a conference opening ceremony, speaking with such poise. I took that as huge inspiration for never letting my fears get in the way of my ambitions.'

Mr Chancellor, for her outstanding career in industry, her outstanding research achievements in her specialist field, and also her inspirational leadership in increasing the participation of women in computing, I present to you Professor Vicki Hanson for the award of Doctorate of Science, *honoris causa.*

Citation by Professor Helen Berry, Public Orator

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