Dr Cécile Paris, FTSE: Science Impact:

I have pioneered several important research areas since my work in graduate school, showing vision and demonstrating impact, in terms of both science and its outcomes. My work has been influential in my field:

- My thesis research represented the first major work in user modelling and text generation. I helped create the User Modelling and the Intelligent User Interfaces research communities, both now thriving communities. User Modelling and tailoring to a user (personalisation) is now common in most information systems;
- My work on discourse planning for dialogue systems has been the basis for a number of other generation and multimodal presentation systems and research internationally;
- My work on discourse planning and the generation of multilingual texts is now influencing other multilingual research at the University of Tokyo (Japan);
- Work with my PhD student Einat Amitay (who received the best PhD in Computer Science award for that year) was seminal in text summarisation, in the early days of the web;
- My work has been published in high impact journals such as Association of Computing Machinery (ACM) Computing Surveys, which has the highest impact factor among all Computer Science journals (IF: 3.54 in 2012); Web Semantics (5 year IF: 3.049); and UMUAI (User Modelling and User Adapted Interaction: 3-yr ISI Impact Factor 2010: 3.074; Ranked #3 among 26 journals in Computer Human Interaction (CHI), # 20 amongst 445 Computer Science journals, and #7 among 772 journals in Education). It has also been regularly published at highly prestigious conferences where acceptance rates are below 20%.

My work has also had impact in terms of its outcomes:

- Our work on tailored delivery was applied in several Boeing projects in mid-2000, at DSTO, and, more recently, in a project within the Human Services Delivery Research Alliance (HSDRA), a 4-year research alliance between the Department of Human Services and CSIRO. In HSDRA, it demonstrated the feasibility to do tailored delivery in the government domain, and an evaluation showed that people would be happy to provide personal details if they received appropriate tailored information; the work provided the basis and thinking for Centrelink's implementation of "Payment Finder".
- We pioneered work on social media analysis to help improve government services. The resulting system is in daily use at the Department of Human Services (DHS) Communication team, and it has helped the NSW State Library be at the leading edge of social media collecting and curating. The tool is employed by a number of other organisations and is currently being commercialised;
- Our work on profiling web sites to understand users' experiences is also now used as part of DHS' communications toolbox;
- Our work on an Online Community to support Welfare Recipients was the first of its kind and provided a number of insights to DHS;
- Our "We Feel" prototype in collaboration with the Black Dog Institute and Amazon Web Services showed (1) the feasibility to go beyond conventional sentiment analysis and study in real time the "pulse of the country" and (2) the use of social media to study mental health. It was the subject of over 120 media articles upon its launch, reaching an audience of about 1.45 Million people; and

- I started the research on Natural Language Processing at CSIRO when I joined in 1997. This has developed into a fully-fledged research team, and other work in another research programme in the organisation.