**EDI Conference 2013**

**Stream 13: Generational Change and Gender in Science Research**

**New career models for science research**

**Abstract**

This paper explores significant change in science research as those currently in leadership roles approach retirement. The literature on gender and science careers indicates that: mobility can accelerate career progression; women’s careers can be railroaded in their early 30s during the “rush hour” when career and family collide (Caprile, 2012); and that being an independent researcher depends on networks, mentoring and research productivity (40 papers by the age of 40). In Australia most science funding comes from the National Health and Medical Research Council. Its funding decisions are often random (Graves et al., 2011), with even senior researchers rely on funding from short term competitive grants, and there is no effective assessment of output relative to opportunity or separate funding for career interruptions. Recent research in the US suggests huge generational change in how women and men wish to “do” science (AWIS, 2012).

This paper reports on a research project at a large Australian science research Institute. It analysed the representation of women by occupational category, and then 40 female and male research scientists were interviewed about the challenges of science research careers, particularly for women in science.

The research found that women were severely underrepresented as research fellows and senior research fellows. It also found that the model of a successful scientist was of a male who was passionate and single minded, with no other responsibility than “doing science” (the monastic male); which had an impact on career progression for women scientists..

The most significant finding was that the construct of masculinity on which science excellence is based is out-dated, and more fluid roles for women and men were emerging. Moreover, both younger women and men rejected overt gender discrimination.

Younger women challenged gendered the organisational culture and the funding model in order to balance work, family and career progression; and some delayed having children. Others chose to return to work part-time after maternity leave and insisted that managers and colleagues respect their decision and not ‘side-line’ them. However, younger men were also challenging the organisational culture; they rejected the current competitive funding model; a number were juggling work, dual careers and children and others stated that they wished to work less when they had children

The research indicated that new career models were emerging, partly driven by the political imperative to keep young women and men in science research to increase Australian competitiveness and innovation. However, in order for these new models to succeed urgent reform of the funding model was required. There was evidence of support from the management of the Institute for women and men to adopt more flexible work models. Importantly, leadership from supervisors was critical in developing new models of “doing science”.

It can therefore be concluded that the normative male model of a successful scientist is outdated, and younger women and men require more flexible work models of doing science research.