

## Editorial

In the UK at the moment, the academic world is in the throes of our latest research assessment activity, this time called the <u>REF (Research Excellence Framework)</u>. Rather like the beginning of the football season, this is a time of high profile transfers, with sought-after researchers being courted with lucrative transfer offers by other universities and pressure mounting in all disciplines to publish papers in time for the census date when output will be judged. Being included in the REF has become a signifier of research credibility and there is a lot of research funding at stake. There are several ways in which this is problematic from a gender perspective. Our first paper in this issue by Elba Mauleón and María Bordons explores this in the context of one particular disciplinary area. In "Authors and Editors in Mathematics Journals: a gender perspective" Mauleón and Bordons conclude that women are underrepresented not only in the numbers of papers they publish but also in their participation in editorial boards. This could in turn have long term impact on their career prospects in particular academic disciplines.

It is interesting to reflect on this in the light of <u>Schintler and McNeely's</u> paper earlier this year, where they argued for a broader and more nuanced interpretation of productivity which better reflects the range of tasks and activities that women engage in their academic lives In the UK context, if women tend to do more teaching in universities rather than research, this means they are less likely to get selected for REF inclusion. While universities are required to take into account periods of maternity leave and part time working in their calculations of eligibility, but the resumption of research activity after a career break can be one of the most difficult things to achieve in this highly competitive field.

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One of the interesting and perhaps more useful aspects of the REF is the requirement for research impact to be part of the measurement exercise. While some have argued vociferously against this, from the perspective of GST we feel it aligns closely with our mission which is to ensure that research in the field of gender, science and technology reaches places where we can make a difference, where practitioners and policy makers will take notice of what we have learnt, and incorporate new thinking and approaches. And indeed we welcome engagement in both directions – we want to be able to bring the voice of industry, professionals and users back to researchers to inform where to put energy and focus for future work. This partnership is tricky, we inhabit different worlds and spaces, but in order to bring about change we must listen to each other and work collectively across boundaries.

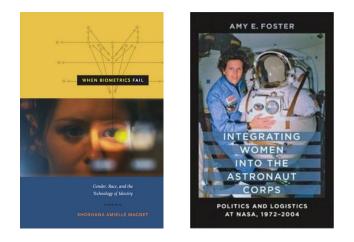
Finding ways to engage girls in STEM subjects at the time they would otherwise move away from studying these at school, has been the point at which numerous initiatives have attempted to intervene. While there is discussion about role models as a way to engage girls, little is known about the people who are engaged in the engaging, what motivates them and what the effect on them is of working in this area. Melissa Koch and Torie Gorges in their paper <u>Inspiring Girls and their Female After School Educators to Pursue Computer Science and other STEM Careers</u>, explore the impact of being involved in such initiatives on the women who have been actively involved in raising awareness of girls through after school activities. What is interesting is the unintended consequences of their involvement, i.e. that the delivery of programmes to support girls can also have an effect on the those who are delivering as well as participating.

Once again we have an interesting and dynamic mix of papers in this issue. In an unusual theme for GST the next paper turns to the representation of women in crime fiction. Women have long featured in this genre both in books as well as in TV and film, most often as victims of crime, and more frequently these days as detectives (for example Sara Lund, in the currently very popular Danish crime thriller season 'The Killing'). However, it is less common to encounter women as scientists in this genre. Kerstin Bergman's exploration of a range of media representations of women scientists in crime fiction in <u>Girls Just Wanna Be Smart?</u> The Function of Women Scientists who feature in film, TV and text crime thrillers.

In our Perspectives section, Dorothy Smith returns to the issue of single-sex schooling, one of the regularly debated and often most hotly contentious issue in the gender and STEM community, with her paper <u>Gender, Science and</u> <u>Essentialism: the use of science to support single-sex schooling</u>. She demonstrates how essentialist notions of gender are being presented as scientific fact and therefore being used to back up claims for single sex schooling. This is particularly interesting in the light of the findings described by Liz Whitelegg in her report on the <u>It's Different for Girls' Workshop</u>, at the Institute of Physics where she notes that " *girls attending single-sex schools were almost two and a half times more*  *likely to do A-level physics than girls attending co-ed schools. This positive effect is not replicated in the other sciences, so it appears that single-sex education is particularly beneficial for girls doing physics" p 342.* 

This review, together with two further conference reviews, aim to enable a snapshot of some interesting gatherings that have been happening recently and connect GST readers with events they have been unable to attend themselves. Dobrila Lopez and Diane McCarthy's review of the <u>NZ OZWIT conference</u>, with a keynote video presentation from Wendy Hall, sounds like it was inspirational for all who attended. Likewise, Gill Kirkup who attended the <u>Girls and Digital Cultures</u> conference at King's College London, reports on some cutting edge research that crosses boundaries in many diverse respects. We hope the conference reviews are inspiring and informative. We'd like to hear from others in different countries about conferences that have happened so please if you are going somewhere interesting think about writing a short review for us!

Finally, our two book reviews in this issue take us to two very different but fascinating topics. Subrata Satapathy reviews <u>'When Biometrics Fail'</u> by Shoshana Amielle Magnet, a study that reveals some disturbing assumptions that underlie Biometrics technologies, and illustrates how race, gender and class are made invisible, leading to potential failures.



Kate Salmon's review of Amy Foster's book <u>Integrating Women into the Astronaut</u> <u>Corps</u>, describes a fascinating historical study which illuminates the barriers women have had to face not only in regular science and technology jobs but also in the most cutting edge areas of discovery. She includes a very amusing section about the difficulties that NASA scientists had to deal with in designing space suits which could accommodate women's anatomical requirements.

## *Clem Herman, on behalf of the editorial executive: Helen Donelan, Barbara Hodgson, Gill Kirkup, Elizabeth Whitelegg*

## We welcome the following new members to the Editorial Board

**Johanna Blakley**, Managing Director and Director of Research at the Norman Lear Center, at the University of Southern California's Annenberg School for Communication and Journalism.

**Neelam Kumar,** Senior Scientist at the National Institute of Science, Technology and Development Studies (NISTADS), New Delhi, India

**Jacquelynne Eccles**, Professor of Psychology and research scientist at the University of Michigan.

**Petra Peuchner,** Managing Director of the Steinbeis-Europa-Zentrum in Stuttgart Germany

## Thanks to all our reviewers in 2012

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