



Actuaries Institute appoints Nicolette Rubinsztein President for 2019

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The incoming President of the Actuaries Institute Nicolette Rubinsztein has warned significant cultural factors drive Australian girls away from higher level science, technology, engineering and maths (STEM) subjects, fuelling inequalities that result in a lack of labour market diversity.

Ms Rubinsztein, appointed 2019 President, chose to focus her presidential address on gender diversity in actuaries in a paper titled "The Good, the Ugly, the Good and The Bad".

Only 25% of Fellows of the Actuaries Institute are female. Her analysis shows that, pleasingly, this increases to about a third by looking at those qualifying in the last 15 years. This one third figure perpetuates back through the pipeline, with one third of actuarial university graduates being female and one third of school children studying advanced maths in the last 10 years being female.

Hence, the key to improving gender diversity in actuaries lies in increasing the take-up of advanced maths by girls at school.

Ms Rubinsztein says, "the low take-up of advanced maths by girls at school can be attributed to cultural gender stereotyping and lower confidence in maths, not biological differences in maths ability".

A meta-analysis of 240 studies from 1990 to 2007 showed girls are as good at maths as boys. An international report, Trends in Mathematics and Science Study, found there was no significant differences in the maths scores of Australian boys and girls in Year 4 or Year 8.

"But gender stereotypes about intellectual ability emerge early," Ms Rubinsztein said. "Five-year old girls are just as likely to say that girls can be really, really smart, but from six years up they think brilliance is much more likely in boys.

"By the time girls reach Year 5, they are at least 25 percent less confident in their mathematical ability than boys. This is a key reason why Australian girls have performed worse than boys in every single maths NAPLAN test."

Ms Rubinsztein said there is increasing evidence that cultural factors drive participation in STEM subjects: Australia lags near neighbour Singapore, but also countries that have high levels of gender inequality such as Algeria, Turkey and the United Arab Emirates.

A survey of Australian girls, aged 12 to 14, found that more than half resisted STEM studies because they believed they were dominated by men, and 70 percent believe parents are the most influential factor when it comes to the subjects girls study.

"It is most concerning that there is deep seated gender stereotyping still happening in Australia," Ms Rubinsztein said. "This is a cultural issue. It is even more concerning because 75% of future careers will require STEM skills."



She said stereotyping and a lack of confidence in girls “should be a huge wake-up call to all Australian parents of daughters”. “There is a significant role for parents and teachers,” she said.

“If girls are not encouraged to study STEM at school it will both limit their opportunities and ultimately cap the growth prospects of our nation,” Ms Rubinsztein said.

“The good news is that the actuarial profession has been more successful than some other STEM careers at attracting women. Some research suggests that “social belongingness” is key to attracting female candidates. I’m hopeful we can demonstrate this as we now have a large number of senior female actuaries.”

In the year ahead, Ms Rubinsztein said she will also showcase the roles of actuaries across the economy, including Institute members who were CEOs, regulators, people who have built large businesses, Fintech entrepreneurs, company directors and partners of big accounting firms.

She said a raft of significant issues face the Institute in the year ahead, including the Financial Services Royal Commission, the opportunities in data analytics and Australia’s place within the global profession.

“It is a great honour to be able to serve the actuarial profession as President of the Institute,” said Ms Rubinsztein. “And in looking to the future of the profession, I would say we are failing to tap the full potential of young Australians, particularly girls.”

Ms Rubinsztein is a non-executive director of UniSuper, Onepath Insurance, Class Limited, CBHS Health Fund and SuperEd. She was previously a general manager at Colonial First State/CBA for 14 years, and on the board of ASFA for eight years. She is a graduate of the AICD and has an executive MBA from the AGSM.

At the Actuaries Institute, she is joined by CEO, Elayne Grace, Senior Vice President, Hoa Bui, and Vice President, Jefferson Gibbs.

The 2019 Presidential Address can be downloaded [here](#).

For media inquiries please contact:

Michelle Innis P&L Corporate Communications

m +61(0) 414 999 693

p +61(0) 2 9231 5411

About the Actuaries Institute

As the sole professional body for Members in Australia and overseas, the Actuaries Institute represents the interests of the profession to government, business and the community. Actuaries assess risks through long-term analyses, modelling and scenario planning across a wide range of business problems. This unrivalled expertise enables the profession to comment on a range of business-related issues including enterprise risk management and prudential regulation, retirement income policy, finance and investment, general insurance, life insurance and health financing.