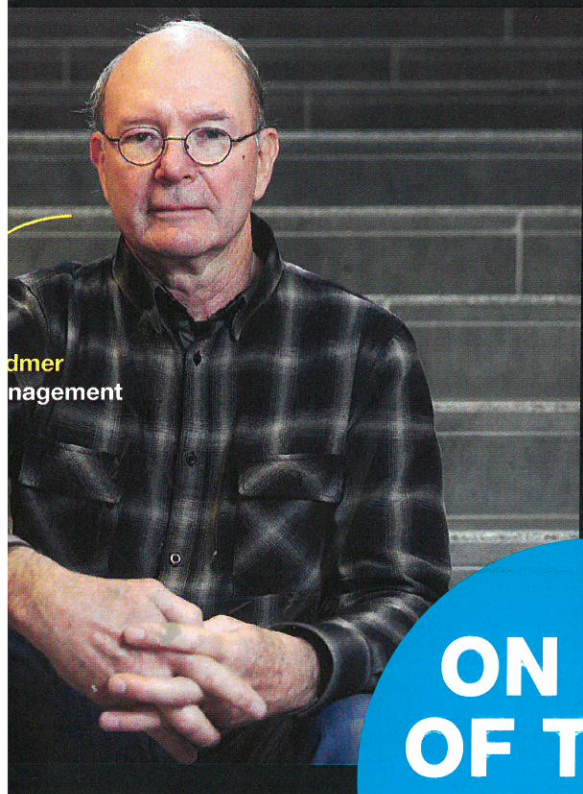


# RESEARCH

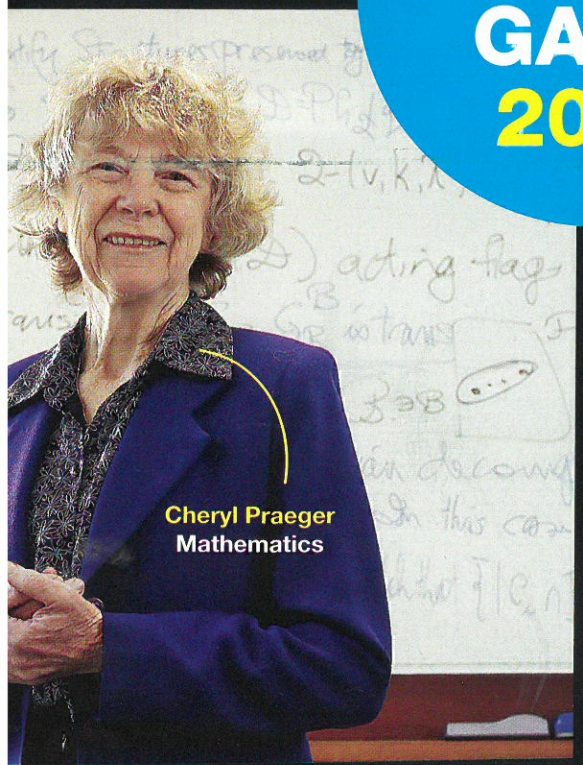


Management



Cheryl Dissanayake  
Autism

**ON TOP  
OF THEIR  
GAME  
2019**



Cheryl Praeger  
Mathematics



Huu Hao Ngo  
Waste water





Engineering & Computer Science  
Australia's research field leaders

**Johanna Westbrook**  
Health data researcher, Macquarie University  
Research leader in the field of medical informatics

When Johanna Westbrook developed an interest in what is now called medical informatics as a school leaver in the late 1980s, paper records and early computer systems were the norm in hospitals.

By the time she became quality manager at Sydney's St Vincent's Hospital, in her mid-20s, she determined there must be ways to collect and crunch data that would yield information to improve patient care and safety, as well as to devise evidence-based methods

to lift efficiency and professionalism in the health workforce.

Westbrook now leads a team of 40 as director of the Centre for Health Systems and Safety Research at Macquarie University's Australian Institute of Health Innovation.

Her most cited paper investigates "whether there was an association between nurses being interrupted while they undertake medication administration and the errors they made".

"A number of studies had

measured the frequency of interruptions but never linked interruptions to an outcome, because methodologically it's quite challenging to do that," Westbrook says.

In 2009 she and her team published their Work Observation Method by Activity Timing, a means of measuring clinicians' patterns of work and communication. The "wombat" method has since been used by more than 30 teams in 12 countries to improve work patterns, safety and outcomes.



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Westbrook's research is diverse and prolific (34 papers so far this year) but her work on aged care is special to her. She told the Royal Commission into Aged Care Quality and Safety in June that the aged care sector was "data rich but information poor". A number of her papers have studied medication patterns in residential aged care facilities and quality of life for people receiving community care services.

"That's probably been one of the most rewarding areas of research because of the feedback that we have received from clients and caseworkers who are using tools to ask people about their quality of life," she says.

"People are saying 'no one's ever asked these questions before'."

She values citation indices as helpful in tracking others in her field. "The world is a big place and it's very easy to send these research papers out there but you don't know who's reading them or what they are doing with them," Professor Westbrook says. "For example, the wombat methodology is being used in a whole range of different areas, such as hand hygiene in Zanzibar."

**JILL ROWBOTHAM**