## Dr Elizabeth Finkel Q&A

### You have a research science background, why did you choose to become a researcher?

I've been wired with a thirst for knowledge. 'Scientist' was stamped in my DNA.

### What led you pursue a career in science journalism?

I couldn't see how to combine parenting with the stresses of a 'publish or perish' research career.

### What do you think about the quality of science journalism in Australia?

Good and bad. High marks to ABC Science unit for its suite of science radio programs and online coverage, but I sorely miss the old Catalyst and its peerless science journalists like Jonica Newby and Graham Phillips. Also lots of impressive online short form from Science Alert and Cosmos. Long form is suffering from a lack of resources spent on editing. Everyone needs an editor!

### How do you think this reflects the quality of science in Australia?

On one had science has become sexy, which is a good thing. On the other hand, you get some flaky stories. Scientists feel pressured to 'popularize' their findings because they need to show impact. But if they're too fast and free they do a disservice to science. Eg <a href="https://www.theage.com.au/national/university-of-sydney-pulls-claims-elderberries-can-fight-flu-20190515-p51nij.html">https://www.theage.com.au/national/university-of-sydney-pulls-claims-elderberries-can-fight-flu-20190515-p51nij.html</a>)

## How do you think your background in biological research has shaped you as a science journalist?

As researcher who changed fields several times, I knew how to jump into a new topic, research it exhaustively and critically weigh different lines of evidence – the core skill of an investigative journalist.

#### Do you think a background in research should be a prerequisite for reporting on science?

It's certainly given me a huge edge, because I have the mindset, the language and understanding of the culture. In the same way that if you were sending a foreign correspondent to Rome, it would be a great advantage to send an Italian speaker. That said, I've had to learn the culture of journalism. Many successful science journalists aren't science trained. They start with their gritty ethos of reporting without fear or favour- and a determination to get to the facts. They learn the science along the way and do a great job.

### What are your thoughts on the anti-science movement? How do you think we could combat this?

For starters, science is not a big stick to hit people over the head with. I think it's important to communicate that science is a method for advancing knowledge through hypothesis testing, and knowing the limits of certainty. For organizations that distort the facts, I think we need to call them out. Especially when organizations that enjoy huge community trust like Greenpeace ignore the scientific evidence on the safety, environmental and humanitarian benefits of GM crops. Consider how GM has Saved the papaya industry in Hawaii (ringspot virus resistance), can save the banana crops of subsistence farmers in Uganda (banana wilt resistance), and spare children from blindness (golden rice, golden banana).

### What challenges have you faced in reporting science?

When scientists disagree, that's a tough challenge. That's what I faced with the story on statins.

# How important is integrity in journalism and objectively reporting fact as a primary responsibility?

That's a fundamental tenet shared by journalism and science.

The gene therapy revolution has suddenly thrown up a number of ethical questions - in your opinion, who should be picking up the tab for these expensive therapies; big pharma, or Government, or should this be a compromise?

We managed to find a way with exorbitantly priced Hep C drugs. According to Greg Dore at UNSW our system will work for these drugs too. We'll see.



Dr Elizabeth Finkel is an award winning Australian science journalist with a background in laboratory research. Dr Finkel is not a stranger to the ASMR. In 1982 she was the Campion Playoust Ma Award winner, an award for the best presentation of original research at the National Conference by an early career scientist. Now, in 2019, ASMR recognises Dr Finkel's impressive contributions to science communication as the ASMR Medallist.

After being awarded her PhD in Biochemistry from the University of Melbourne, Dr Finkel subsequently pursued a research career at the University of California, San Francisco. During this time, her investigation of the genes that sculpt a fruit fly egg into an embryo were published in *Nature*.

Upon returning to Melbourne she turned to freelance journalism, and since then has written for *Science*, *Lancet*, *Nature Medicine*, *New Scientist*, *The Age* and *The Monthly* among others, and has also broadcast for ABC Radio National. In 2005 Dr Finkel co-founded the popular science magazine, *Cosmos*, and from 2013 to 2018, served as Editor in Chief.

Dr Finkel also edited the 2012 edition of the Best Australian Science Writing. And she has written two books: 'Stem Cells: Controversy at the Frontiers of Science' which not only provides a clear lay explanation of just what stem cells are, but why they are important for medical research and how Australia found itself in the forefront of stem cell research. Her last book 'The Genome Generation' which covers genetic developments in diverse areas such as medicine, agriculture, and evolution, clearly contextualises their relevant applications to our society.

Elizabeth has received numerous awards for her journalism, including a <u>Michael Daley Award</u> for Best Radio Feature Broadcast, the Queensland Premier's Literary Award, four Publishers Australia Excellence Awards and the National Press Club's Higher Education Journalist of the Year Award. Her story "Fields of Plenty" for Cosmos Magazine won the Crawford Prize for agricultural journalism and more recently, she won the Department of Industry and Science Eureka Prize for Science Journalism for her Cosmos article

"A Statin a day" – the first print article to win the award in 11 years. Notably she also received a Member of the Order (AM) for her work in science communication and support of a range of not-for-profit organisations.

Dr Finkel is not afraid to tackle complex and controversial issues. She has interrogated the promise of the stem cell revolution, the human genome project and gene therapy, delved into the conflict around GM crops and organic agriculture, and not shied from fierce debates around the use of statins to prevent heart disease or cannabis as a modern-day panacea.

Speaking of the Team at *Cosmos*, Dr Finkel has said "We are a troupe of like-minded souls, passionate about journalism and sharing the wonders of science with the world." And in her final Editor's note for Cosmos, "Rational, evidence-based discourse is under threat everywhere. Our mission as science journalists has never been more poignant." Science communication is increasingly recognized as the most important bridge between scientists, the community and policy makers.

Dr Finkel's work and recognition highlights her position as a pioneer and leader of this field.

Read Dr Finkle's latest work here:

https://www.themonthly.com.au/issue/2019/march/1551445200/elizabeth-finkel/chasing-miracle-gene-therapy