## Graduation U of SA

Since August 30<sup>th</sup>, 1975 the Science Show has consisted of about 2040 programs involving 14280 stories and 7140 professors. It has involved 110160 minutes or 1836 hours (76.5 days) of continuous broadcasting. These figures are, of course, inaccurate, but who's to tell? What I CAN confirm is that, when I began the program at that date, in Vancouver, where I was at a huge conference, your esteemed VC was not quite one and a half years old.

Forty years is an absurdly long time to present a program every week and I need to give you some reasons why it's been a good thing to do. First, science is magnificent. CURIOSITY, the explorer, lands on Mars after those seven minutes of terror and months of travel; Rosetta loops around the planets and sends its own little vehicle to land on the comet and now has sent signals back of organic molecules found there. New Horizons tales NINE years to fly to Pluto, five Billion kms and works superbly sending back pictures galore from the edge of the solar system.

Science kicks goals. Yes, Tom Cruise in Mission Impossible can save 12 lives; but Howard Florey from Adelaide saved 500 MILLION lives on a salary that wouldn't pay Tom's lunch bill.

Science also combines with everything else. If you're graduating in business or law you MUST know about science. Innovation, forensics...if you are preparing the lunch for all these families gathered here today and you know NOTHING about public health or hygiene, then we have a problem. But, of course you do. Every job in Australia needs some science and maths to be done well.

Scientists are also congenial. Anyone who's watch Q&A and seen a panel of scientists as in 10 days ago will marvel at the lack of rhetoric or conflict and wonder at their congenial charm. Here in Adelaide we have the Australian Science Media Centre AND the RiAus. Both chaired by the superb leadership of Peter Yates, a business man who is also a top member of the Liberal Party. Yet, from the beginning, starting over ten years ago he and two SA Labour premiers, Mike Rann and Jay Weatherill, have collaborated in the public interest without a hitch. If only that could be an example for the rest of Australia where politics is more like a brawl in the kids' playground than a collaboration.

To create wealth business needs to collaborate with scientists and engineers, they have different skills and, combined, they are unbeatable. Tanya Munro at the University does this, with wine makers, aviation engineers and even paediatricians to help babies burp. Wealth creation: WiFi, vaccines (Gardasil), ulcer cures, crystallography used to create new drugs. Wealth, in money and in public good.

Just two months ago, in Greece, a read a book about the classics: INTRODUCING THE ANCIENT GREEKS by Prof Edith Hall from Univ of London. Yes, we read EVERYTHING for science communication. She was asking WHY GREECE, why had that small country nurtured the foundations of Natural science and philosophy. Her answer was part topographical, part social. The many islands of Greece and high mountains separating cities meant that lots of small but vibrant communities could flourish independently and yet interact as people sailed to each other to trade and to learn new ideas. They were also egalitarian, mostly, (unless you were a slave, of course).

Open societies, the willingness to exchange thoughts, the celebration of difference, the enjoyment of culture. Three thousand years ago. Yet still plenty to teach us.

I'm at the twilight of my career, you who are graduating are at the beginning. The one big thing I have learned after 44 years of non stop broadcasting was actually summed up by Alice Bowman three weeks ago. You probably saw her on TV (if you guys still watch old-fashioned things like television) ...but you may not have registered who she was...and is.

Alice Bowman was mission's operation manager for the New Horizons fly by of the planet Pluto (call it what you will). She had waited NINE years for this moment.

She said: "I can't express how I'm feeling to have achieved a childhood dream of space exploration. I'm pretty overwhelmed at this moment and I just want to say thanks you to everyone, and please tell your children and anybody out there DO WHAT YOU'RE PASSIONATE ABOUT. Don't do something because it's easy, do something because you want to do it. Give yourself that challenge and you will not be sorry for it."

And finally, after nine years and five BILLION kms of that intrepid spacecraft travelling to the very edge, she said "So here we go, out of the solar system." Like Lawrence Bragg, Robin Warren, Howard Florey, Mark Oliphant, Tanya Munro and Elizabeth Blackburn, you may have to be a little patient, but follow the passion and the results can be astounding.