



RELEASED: 5 February 2018

Coming up on Catalyst in February

A great line up of Catalyst programing airs throughout February. Interview opportunities with Catalyst hosts are available.

Catalyst, Farmer Needs a Robot

Tuesday 6 February, 8.30pm on ABC & ABC iview

A group of pioneering scientists take their robots into the world of agriculture to see if they can help keep Australian farmers on the land by tackling some of their biggest challenges.



There's a tech revolution unfolding in Australia - but it's not happening where you might expect. A team of by internationally scientists led renowned roboticist, Professor Salah Sukkarieh, are opening up a new world of farming science; one that could give Australian farmers more control over their future than ever before. The need for greater productivity to feed a growing population, and changing climate conditions are making it hard for farmers to continue supplying the

food on everyone's plates. Added to this the loss of young blood from the industry – and one of the harshest natural environments on Earth – means Australian farmers are up against it. But help is at hand. **Catalyst** joins engineers from the Australian Centre for Field Robotics as they explore the world of agriculture to develop robots and create smarter ways of farming. But are these prototype robots up to the many tasks of a farmer? Will they change the way we've been farming for generations? Can the robots lead the farmers (and their cattle) to greener pastures?

BIOGRAPHY: PROFESSOR SALAH SUKKARIEH is an international expert in research, development, and commercialisation of field robotic systems. Salah is Associate Dean (Industry and Innovation) and Professor of Robotics and Intelligent Systems at the University of Sydney, and the Director of Research and Innovation at the Australian Centre for Field Robotics. He has over 500 academic and industry publications in robotics and intelligent systems, and was awarded the 2017 CSIRO Eureka Prize for Leadership in Innovation and Science.

Farmer Needs a Robot is available to view on request.





Catalyst, Back to the Moon

Tuesday 13 February, 8.30pm on ABC & ABC iview

The race to the moon is back on. After a quiet half a century since the last Apollo mission landed on the moon, Associate Professor Alan Duffy takes us inside the new space race, where innovators and big dreamers are rewriting the rule book on space exploration.

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the moon, Associate Professor Alan Duffy takes us inside the new space race, where innovators and big dreamers are rewriting the rule book on space exploration. He witnesses the launch of a new-generation of rocket at Cape Canaveral in Florida. Created by Space X, this rocket is partly reusable, and the innovations behind it may help us get back to the moon. Alan meets the pioneers at US's first licenced spaceport in Mojave in California who are building new types of lunar landers and rockets. And he finds out that the

discovery of water on the moon may transform our chances of living there and using the moon to explore planets far from home.

BIOGRAPHY: ASSOCIATE PROFESSOR ALAN DUFFY is an astrophysicist at Swinburne University and popular science communicator. Using local universe simulations, he tests galaxy formation and dark matter theories He is attempting to find this dark matter as part of SABRE, the world's first dark matter detector in the Southern Hemisphere at the bottom of a gold mine in Stawell, Victoria. He is also an Associate Investigator in two ARC Centres of Excellence, investigating the origin of matter (CAASTRO-3D) and seeing the Universe with gravitational waves (OzGrav). Alan is also regular on ABC Radio – most notably the host of podcast, *Cosmic Vertigo*.

<u>Back to the Moon</u> is available to view on request. Interviews with Assoc. Professor Alan <u>Duffy available.</u>





Catalyst, Gut Revolution: Victoria's Story

Tuesday 20 February, 8.30pm on ABC & ABC iview

Nutrition Scientist Dr Joanna McMillan takes on her most challenging case, as she battles to help 48-year-old Victoria recover from debilitating anxiety and gut pains, using emerging science about the links between gut bacteria and the brain.



48-year-old Victoria has chronic anxiety disorder. She's battled this her whole life. But in the past few years she's begun suffering from excruciating gut problems. No one has been able to provide answers. So, are her gut bacteria the missing link in causing her symptoms? Nutrition Scientist Dr Joanna McMillan takes on her most challenging case, exploring emerging science about the links between gut bacteria and the brain to design an intervention to help Victoria where all else has

failed. Victoria's struggle is revealing, at times confronting, but above all, inspiring. And the results - astonishing and life changing.

BIOGRAPHY: DR JOANNA McMILLAN, originally hails from Scotland, and came to Australia in 1999, where she won a scholarship to complete her PhD in Nutritional Science at The University of Sydney. As a dietitian and former fitness instructor, she is driven by a passion to promote the influence that diet and lifestyle have on our health and wellbeing. As a published author and international presenter, Joanna advocates for nutrition and health on our TV screens and tablets.

Interviews with Dr Joanna McMillan are available

Catalyst screens Tuesday's at 8.30pm on ABC & ABC iview. #ABCCatalyst

Please feel free to contact me if you'd like to watch any of the above episodes or to set up an interview with the hosts.