Bond University has become the first in Australia to introduce emotional intelligence testing of potential medical students ...

**Bond University** has become the first in Australia to introduce emotional intelligence (EI) testing as part of the selection process for its medical program, with the aim of enrolling a cohort with the strong social skills needed to succeed at university and in the workplace. The first intake of students selected through the new process, which places importance on both IQ and EI, started their degrees in the May trimester. Unlike other Australian universities, all places in Bond’s medical program are offered to full fee-paying domestic students, with more than 1000 applications received annually for 120 places. Dean of Medicine Professor Kirsty Forrest said that in the past Bond University had selected the top 240 students, based on their ATAR, from all applicants to take part in an interview process – an internationally accepted practice known as multi-mini interviews – from which the top 120 were offered a spot. This year, it invited the top 540 students – each with an ATAR of 96 or above – to take the EI test, with the top 240 performers then participating in the interview process, and the top 120 offered places. The emotional intelligence of candidates was assessed using a well-known and accepted ability-based test. The testing was conducted by an external Australian-owned organisation who specialise in the development and delivery of psychometric assessments. “Our message is that students need to work on developing their emotional intelligence in the same way they work on their academic performance, emphasising the fact that both IQ and EI are important to be a successful doctor.”


The Centre for Mental Health Research at the ANU Research School of Population Health has developed a new PhD Pathway that tailors to senior executives in the mental health sector. “PhDs are well-suited to young people,” said the Centre’s Dr Sebastian Rosenberg. “So, we needed to think about a way we could rearrange the PhD experience to better suit mature-age people, who might not have stepped foot on campus for 20 years, except perhaps to give a lecture.” Dr Rosenberg said that attracting experienced candidates back to university will benefit the mental health sector at a national level. “Mental health has had many strategies, plans, policies and inquiries over a number of years—all of which conclude there’s a mental health crisis in Australia—but the findings from them have failed to be implemented. We have very experienced people working in mental health who disappear when they move on from being the head of a commission or an inquiry, for example, and take all that knowledge with them. Their learnings are lost unless we can provide a platform to take their workplace experience and apply it in an academic context. Through this Executive Career Pathway we can build a solid foundation for better decision-making and policy-making in mental health in Australia.” The pathway program includes the student’s employer as a “partner organisation” in the research process, which allows them to easily implement the student’s findings as policy. In this way, the student translates their expertise into rigorous academic qualifications, and their employer also benefits by being able to position themselves as best practice early adopters. The Australian Museum 2018 Eureka Prize finalists have been announced, with a number of medical researchers getting spots. The UNSW Eureka Prize for Excellence in Interdisciplinary Scientific Research finalists include the Biopen Team – the Centre of Excellence for Electromaterials Science, University of Wollongong; University of Melbourne; Peter MacCallum Cancer Centre; and St Vincent’s Hospital Melbourne – a multidisciplinary team of scientists, engineers and clinicians has produced the Biopen, a handheld 3D printer that can be used in surgery to repair damaged cartilage – the technology was developed with a view to preventing osteoarthritis; Optical Physics in Neuroscience, University of Queensland team has devised cutting-edge methods for studying how our brains work to detect gravity and motion – using optical trapping and novel microscopes, they successfully imaged the functioning brain circuits that process gravity and motion, and combine this information with other senses. The Australian Infectious Diseases Research Centre Eureka Prize for Infectious Diseases Research finalists include the ACT Now for Tuberculosis Control team from UNSW and University of Sydney – tuberculosis is the leading infectious disease killer in the world, yet one third of cases are not diagnosed – using innovative screening techniques in robustly designed clinical trials, the Act Now for Tuberculosis Control Team has made major breakthroughs that promise to transform global efforts to eliminate the disease; CF Air team from Metro North Hospital and Health Service, The Prince Charles Hospital, QIMR Berghofer Medical Research Institute, Children’s Health Queensland, University of Queensland, Griffith University, Gold Coast Health, and Queensland University of Technology – has uncovered the process by which the deadly pathogens causing airway infections are transmitted between cystic fibrosis (CF) patients – their research has attracted considerable attention from the CF community, impacting clinical practice and policy and ultimately reducing infection rates among CF patient groups. The Johnson and Johnson Eureka Prize for Innovation in Medical Research finalists include NEXGEVA, from University of Queensland Diamantina Institute – flexible cancer vaccines are a long-sought treatment strategy in cancer immunotherapy -- NEXGEVA has developed a vaccine delivery technology that enables treatment to be tailored precisely for different cancers – the versatility and efficacy of their platform provides important building blocks for tailoring vaccines to individual patients, improving...
personalised cancer immunotherapy; the TID Research Team from the University of Queensland has uncovered a genetic pattern that indicates type-1 diabetes risk among infants, bringing a simple screening test one step closer – their discovery could help clinicians to focus monitoring of children with the highest risk, transforming management of the condition.

Professor Tony Weiss, AM, from the University of Sydney, has developed an adhesive surgical glue that quickly seals wounds without the need for common staples – the technology, made from natural elastic protein, has the potential to revolutionise treatment at emergency sites and was recently sold to an international pharmaceutical company. The ANSTO Eureka Prize for Innovative Use of Technology finalists include Professor Wendy Erber, Dr Kathryn Fuller and Henry Hui from the University of Western Australia, who have invented a method of detecting abnormal chromosomes inside leukaemia cells – this fast, accurate and sensitive automated method can detect just one leukaemia cell in 10,000 normal cells, a major advance that will lead to personalised treatments and better patient care; Professor Justin Gooding, Dr Parisa Khiani and Dr Alexander Soeriyadi, from UNSW, who have created a simple and affordable, paper-based sensor that indicates to the wearer when to seek shade or apply more sunscreen – created with existing materials and manufacturing technologies, the sensor has the potential to deliver long-term benefits to public health. The UNSW Eureka Prize for Scientific Research finalists include Professor Sally Dunwoodie, from the Victor Chang Cardiac Research Institute, and her multidisciplinary team who have discovered the potential of vitamin B3 to treat a molecular deficiency causing miscarriages and multiple types of birth defects – their finding could prevent developmental defects through a common dietary supplement, which may transform the way pregnant women are cared for around the world. The CSIRO Eureka Prize for Leadership in Innovation and Science finalists include Professor Michelle Haber, AM, from the Children’s Cancer Institute and UNSW, who is a global authority in childhood cancer research, setting the agenda for this field in Australia – she is the driving force behind Zero Childhood Cancer, a world-leading initiative that unites researchers and clinicians from every child cancer research and clinical care facility nationwide. The Department of Industry, Innovation and Science Eureka Prize for Innovation in Citizen Science finalists include Zika Moszie Seeker, developed at Metro South Health, one of Australia’s first health-based citizen science projects – using collection kits, members of the public set up backyard mosquito egg traps, collect the eggs and submit them for DNA analysis – the project has efficiently expanded Zika mosquito monitoring in urban areas in South East Queensland. The Celestino Eureka Prize for Promoting Understanding of Science finalists include Associate Professor Darren Saunders, from UNSW, who is a gifted and intuitive communicator, giving medical research a clear, authoritative voice across a diverse range of media – he makes evidence-based science accessible to the general public, with particular emphasis on platforms through which vulnerable audiences are seeking health advice.

The Alfred Hospital and Monash University have established a dedicated centre for Blood Cancer Therapeutics Research, thanks to a $1.2 million grant from the Australian Cancer Research Foundation (ACRF). The grant was awarded to a team of haematologists led by Associate Professor Andrew Wei, and Professors Andrew Spencer, David Curtis and Stephen Jane, and the centre was officially launched on 24 July 2018. The ACRF Blood Therapeutics Centre, based at The Alfred, is home to the latest technology to assist blood cancer researchers develop improved outcomes for patients with blood cancer. Associate Professor Wei said that the new centre is allowing researchers to monitor the molecular profiles of blood cancers before, during and after therapy. These insights are helping researchers improve targeting strategies and design more effective clinical trials. The Centre is also developing new techniques to monitor patient outcomes with greater precision.

Three University of Melbourne PhD students have won 2018 Picchi Awards for Excellence in Cancer Research, winning $10,000 each. In the Basic Science category, Ms Simone Park, from the University of Melbourne and the Doherty Institute won for her thesis – The role of tissue-resident memory T cells in melanoma immune surveillance. In the Population Health category Dr Shuai Li, from the University of Melbourne won for his thesis -- DNA methylation and breast cancer risk factors: insights from twin and family studies. In the Clinical Science category, Dr Jonathan Hiller, from the Peter MacCallum Cancer Centre, won for his thesis -- Exploring perioperative adjunctive therapies that can be utilised during cancer surgery to improve cancer outcomes. This year’s winners have identified learning and collaboration opportunities in Italy, Malaysia, England and the US.


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