

*This digitally colourised scanning electron micrograph depicts four magenta-coloured, spherical methicillin-resistant Staphylococcus aureus bacteria in the process of being phagocytised by a blue-coloured human white blood cell.*

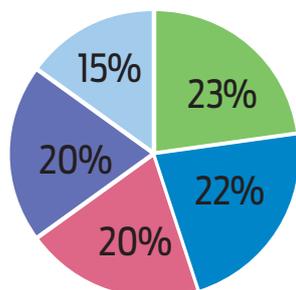
Picture: National Institute of Allergy and Infectious Diseases/Reuters/Picture Media

## MJA InSight Poll

Re-validation of doctors in Australia is needed

Total votes = 110

- Strongly disagree
- Neutral
- Agree
- Disagree
- Strongly agree



Take part in next week's poll on: [www.mja.com.au/insight](http://www.mja.com.au/insight)

## MJA Podcasts



**Dr David Scott** is a postdoctoral research fellow in the Bone and Muscle Health Research Group at Monash University's Department of Medicine. He discusses his coauthored Narrative Review on sarcopenia in older adults, published in this issue.

**Dr Georgia Paxton** is the head of the Immigrant Health Service at the Royal Children's Hospital in Melbourne. She discusses the "No Jab, No Pay" legislation and its consequences for migrant and refugee children, to accompany her coauthored Perspective in this issue.



**Dr Gregory Moore** is the Head of the Inflammatory Bowel Diseases, Gastroenterology and Hepatology Unit at Monash Health. He discusses his Perspective in this issue on biosimilars and the limited evidence on their interchangeability with originator drugs.

Podcasts are available at [www.mja.com.au/multimedia/podcasts](http://www.mja.com.au/multimedia/podcasts) and from iTunes. Also available as videos at [www.mja.com.au/multimedia](http://www.mja.com.au/multimedia)



## Snail venom key to better diabetes treatment

An international team of researchers led by scientists from the Walter and Eliza Hall Institute of Medical Research, Flinders University, the University of Melbourne and Monash University has found that venom from certain fish-hunting cone snails could hold the key to developing "ultra-fast-acting" insulins, leading to more efficient therapies for diabetes management. "One such insulin, *Conus geographus* G1 (Con-Ins G1), is the smallest known insulin found in nature and lacks the C-terminal segment of the B chain that, in human insulin, mediates engagement of the insulin receptor ... We found that Con-Ins G1 ... strongly binds the human insulin receptor and activates receptor signaling. Con-Ins G1 thus is a naturally occurring mimetic of human insulin ... These structural findings provide a platform for the design of a novel class of therapeutic human insulin analogs that are intrinsically monomeric and rapid acting." The study was published in *Nature Structural and Molecular Biology* on 13 September.

## Most read MJA articles online

- Research:** Pre-hospital thrombolysis in ST-segment elevation myocardial infarction: a regional Australian experience  
Khan et al; doi: 10.5694/mja15.01336
- Research:** Variation in coronary angiography rates in Australia: correlations with socio-demographic, health service and disease burden indices  
Chew et al; doi: 10.5694/mja15.01410
- Guideline summary:** National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Australian clinical guidelines for the management of acute coronary syndromes 2016  
Chew et al; doi: 10.5694/mja16.00368
- Research:** Contemporary type 1 diabetes pregnancy outcomes: impact of obesity and glycaemic control  
Abell et al; doi: 10.5694/mja16.00443
- Research:** Low HIV testing rates among people with a sexually transmissible infection diagnosis in remote Aboriginal communities  
Ward et al; doi: 10.5694/mja15.01392

## Most read MJA InSight articles

- Views:** Clarifying end-of-life law for doctors  
White, Willmott and Neller; <http://www.doctorportal.com.au/mjainsight/2016/33/clarifying-end-of-life-law-for-doctors/>
- Views:** Surgeons as an object of faith  
Dando; <http://www.doctorportal.com.au/mjainsight/2016/33/surgeons-as-an-object-of-faith/>
- Views:** Any diet will do if you can sustain it  
McCredie; <http://www.doctorportal.com.au/mjainsight/2016/34/any-diet-will-do-if-you-can-sustain-it/>
- News:** Bariatric surgery registry hampered by red tape  
Mitchell; <http://www.doctorportal.com.au/mjainsight/2016/34/bariatric-surgery-registry-hampered-by-red-tape/>
- News:** Encouraging healthy diet choices in hospitals  
Mitchell; <http://www.doctorportal.com.au/mjainsight/2016/33/encouraging-healthy-diet-choices-in-hospitals/>

## Sugar industry sponsored anti-fat research

A report published online by *JAMA Internal Medicine* examined the sugar industry's role in coronary heart disease research and suggested the industry sponsored research in the 1960s and 1970s designed to influence the scientific debate to cast doubt on the hazards of sugar and to promote dietary fat as the culprit in heart disease. Researchers from the University of California used archival documents from the Sugar Research Foundation (SRF), which later evolved into the Sugar Association, historical reports and other material to create a chronological case study. The SRF initiated coronary heart disease research in 1965 and its first project was a literature review published in the *New England Journal of Medicine* in 1967. The review focused on fat and cholesterol as the dietary causes of coronary heart disease and downplayed sugar consumption as also a risk factor. SRF set the review's objective, contributed articles to be included and received drafts, while the SRF's funding and role were not disclosed, according to the article. "This historical account of industry efforts demonstrates the importance of having reviews written by people without conflicts of interest and the need for financial disclosure," the authors wrote, who point out the *NEJM* has required authors to disclose all conflicts of interest since 1984. There also is no direct evidence that the sugar industry wrote or changed the *NEJM* review manuscript and evidence that that the industry shaped its conclusions is circumstantial, the authors acknowledged.

Cate Swannell doi: 10.5694/mja16.n0310