

New centre to test jab technologies

The Australian, Australia, General News, Jamie Walker

29 Apr 2021

Page 5 • 586 words • ASR AUD 6,123 • Photo: No • Type: News Item • Size: 238.00 cm² • National • Australia • UQ - Press • ID: 1434607335

ASSOCIATE EDITOR Scientists involved in developing an Australian vaccine for COVID-19 have set up a new proving centre for breakthrough RNA and DNA technologies that were turbocharged by the pandemic.

The pilot facility at the University of Queensland will produce the building blocks for mRNA vaccines and cancer therapies, bridging the "missing link" between the lab and manufacturing to allow the promising medicines to be made in Australia.

The project, co-funded by the federal government, involves some of the researchers who got UQ's molecular clamp COVID vaccine into human trials before a glitch unrelated to performance forced it to be scrapped last December.

It will link in with a program in Victoria kickstarted by a \$50m capital injection from the state government last week to make at scale the new-generation RNA vaccines which have excelled against the virus.

The need for onshore production has been underlined by the difficulties the federal government has had sourcing extra imports of the mRNA-based Pfizer jab, a setback that slowed the national vaccine rollout.

Trent Munro, project leader of the molecular clamp team and a group leader at UQ's Australian Institute for Bioengineering and Nanotechnology which will host the new centre, said it would be a stepping stone for research to advance beyond the lab.

"What we are interested in is trying to fill that gap for researchers who are trying to build value for their ideas and look at what those next steps are to creating translational outcomes," Professor Munro said.

"We have got a critical mass here in our ability to do that with proteins, what we are able to do with this investment is support people to do the same thing with . these DNA and RNA products, with a focus on potential mRNA-based vaccines.

"They are one of the key elements that might be part of the future therapeutics and vaccine landscape." The chief executive of partner agency Therapeutic Innovation Australia, Stuart Newman, said the UQ facility would make the high-quality and highly pure nucleic acids in RNA and DNA to support the work of molecular scientists.

He said of the \$2.2m seed money: "This investment complements recent investments in later stage, large-scale mRNA manufacturing as well as TIA's own ongoing investment in biologics production to support R&D." The big advantage of mRNA vaccines is they are simpler to make and, in the case of the COVID jab, more effective than existing processes including the protein-based molecular clamp developed at UQ.

This was to have been a pillar of Australia's rollout until the candidate vaccine delivered false-positive readings for HIV in the phase-1 clinical trial in Brisbane, leading it to be pulled.

"The use of proteins as drugs has been the biggest revolution in biotech for the last 20 or 30 years," Professor Munro told The Australian.

"That's really been the huge step forward. But the issue with those is they are incredibly complicated to make and very time consuming.

"And if you make even the smallest change in the sequence of that protein it becomes a completely different molecule, it will behave in different ways. Just very complex chemistry.

"But big benefit of RNA, DNA processes is that you have got a lot more flexibility in the underlying sequence and the molecules should behave in a fairly predictable manner. You are seeing that in COVID with companies like Pfizer and Moderna." Proteins as drugs has been the biggest revolution in biotech for . 20 or 30 years PROFESSOR TRENT MUNRO AUSTRALIAN INSTITUTE FOR BIOENGINEERING

[View original](#)

Audience

94,448 CIRCULATION



Covid-19 vaccine: New Queensland centre to test RNA technologies

The Australian by Jamie Walker

29 Apr 2021 5:00 AM

586 words • ASR AUD 12,459 • UQ Internet • ID: 1434800999

Group leader at the University of Queensland's Australian Institute for Bioengineering and Nanotechnology Trent Munro. Picture: Glenn Hunt

Scientists involved in developing an Australian vaccine for COVID-19 have set up a new proving centre for...

[Read on source site](#)

Audience

115,616 UNIQUE DAILY VISITORS, 3,799 AVERAGE STORY AUDIENCE



Federal funding injection gets UQ mRNA vaccine facility moving

Blogs by Stuart Layt

29 Apr 2021 5:00 AM

550 words • ASR AUD 20,561 • UQ Social • ID: DA0068547431

Advertisement

A new facility to rapidly develop mRNA vaccines is being rushed into operation at the University of Queensland thanks to a federal government funding injection.

The university's Australian Institute for Bioengineering and Nanotechnology will...

[Read on source site](#)

Audience

N/A UNIQUE DAILY VISITORS, N/A AVERAGE STORY AUDIENCE



Report by Michael Rennie, ABC reporter in Brisbane. Qld could soon be producing jabs using t...

ABC News, Sydney, News Breakfast, Ben Knight and Madeleine Morris

29 Apr 2021 6:16 AM

Duration: 1 min 34 secs • ASR AUD 5,054 • National • Australia • UQ Radio and TV • ID: X00087255781

Report by Michael Rennie, ABC reporter in Brisbane. Qld could soon be producing jabs using the same technology as Pfizer of Moderna. The University of Qld can now potentially produce an mRNA vaccine. The facility will be established by the funding from the Australian Government worth \$2.2m.

Audience

43,000 All, 24,000 MALE 16+, 16,000 FEMALE 16+

Also broadcast from the following 22 stations

ABC (Hobart), ABC (Darwin), ABC (Sydney), ABC (Brisbane), ABC (Adelaide), ABC (Melbourne), ABC (Perth), ABC (Canberra), ABC (Regional Queensland), ABC (Regional Victoria), ABC (Regional NSW), ABC (Albany), ABC News (Melbourne), ABC News (Regional NSW), ABC News (Brisbane), ABC News (Adelaide), ABC News (Perth), ABC News (Regional Queensland), ABC News (Hobart), ABC News (Canberra), ABC News (Regional Victoria), ABC News (Regional West Australia)



University of queensland mentioned on Breakfast at 07:02

ABC News, Melbourne, Breakfast, Sandy Aloisi

29 Apr 2021 7:02 AM

Duration: 0 min 44 secs • ASR AUD 3,004 • National • Australia • UQ Radio and TV • ID: R00087256428

MENTIONS University of queensland(1)

Automated Transcript

and thirty three hundred deaths. Turns out an ABC News Delhi, the University of Queensland will open a new Term that could produce the building blocks of covid, vaccines similar to Pfizer and modern has scientists will produce complex acids like DNA and RNA, which set off the body's immune response and produce antibodies. The acids will then be shared with researchers around the country to use in the production of vaccines and cancer therapies. Associate professor Tim Mercer says mRNA vaccines of prove invaluable in the fight against covid. I think the covid pandemic has really demonstrated have the safety and effectiveness of mRNA vaccine and the potential of this technology and there's a really wide range of different applications.

Audience

63,000 All, 36,000 MALE 16+, 25,000 FEMALE 16+

Also broadcast from the following 7 stations

ABC News (Sydney), ABC News (Brisbane), ABC News (Adelaide), ABC News (Perth), ABC News (Canberra), ABC News (Newcastle), ABC News (Gold Coast)



University of queensland mentioned on Breakfast at 06:33

ABC North West Qld, Mt Isa, Breakfast, KEMII MAGUIRE

29 Apr 2021 6:33 AM

Duration: 0 min 47 secs • ASR AUD 96 • QLD • Australia • UQ Radio and TV • ID: R00087255587

MENTIONS University of queensland(1)

Automated Transcript

The University of Queensland is set to open a new facility that could produce the building blocks of coronavirus vaccines. Similar to Pfizer And moderna scientists will be producing complex acids, like, DNA and RNA, which cause the body to elicit, an immune response and produce antibodies. The acids will then be shared with researchers around Australia to use in the production of vaccines and cancer therapies. Associate professor Tim Mercer says mRNA vaccines have proved invaluable in the fight against COVID-19 I think the covid pandemic has really demonstrated the safety. And the effectiveness of mRNA vaccine and the potential of this technology and there's a really wide range of different applications Australia's jobless rate will need to fall,

Audience

N/A All, N/A MALE 16+, N/A FEMALE 16+



The University of Queensland is set to open a new facility that could produce the building block...

ABC Radio Brisbane, Brisbane, 06:00 News, Newsreader

29 Apr 2021 6:02 AM

Duration: 0 min 43 secs • ASR AUD 2,229 • QLD • Australia • UQ Radio and TV • ID: X00087254977

The University of Queensland is set to open a new facility that could produce the building blocks of coronavirus vaccines similar to Pfizer and Moderna. Scientists will be producing complex acids which cause the body to elicit an immune response and produce antibodies. The acids will then be shared with research around Australia to use in the production of vaccines and cancer therapies. Assoc Prof Tim Mercer says the mRNA vaccines have proven valuable in the fight against COVID-19.

Audience

64,200 All, 36,200 MALE 16+, 28,000 FEMALE 16+

Interviewees

Assoc Prof Tim Mercer, UQ

Also broadcast from the following 11 stations

ABC Capricornia (Rockhampton), ABC Far North (Cairns), ABC Gold Coast (Gold Coast), ABC North Queensland (Townsville), ABC North West Qld (Mt Isa), ABC Southern Queensland (Toowoomba), ABC Sunshine Coast (Sunshine Coast), ABC Tropical North (Mackay), ABC Western Queensland (Longreach), ABC Wide Bay (Bundaberg), Radio National (Brisbane)



The University of Qld is on track to produce a key element used in the production of COVID-19 ...

ABC Radio Brisbane, Brisbane, 07:00 News, Newsreader

29 Apr 2021 7:02 AM

Duration: 0 min 44 secs • ASR AUD 2,551 • QLD • Australia • UQ Radio and TV • ID: X00087256548

The University of Qld is on track to produce a key element used in the production of COVID-19 vaccines. Associate Professor Tim Mercer says the mRNA technology is emerging but effective. The facility will work with other universities, including UNSW.

Audience

73,900 All, 31,300 MALE 16+, 41,600 FEMALE 16+

Interviewees

Tim Mercer, Associate Professor, University of Qld

Also broadcast from the following 11 stations

ABC Capricornia (Rockhampton), ABC Far North (Cairns), ABC Gold Coast (Gold Coast), ABC North Queensland (Townsville), ABC North West Qld (Mt Isa), ABC Southern Queensland (Toowoomba), ABC Sunshine Coast (Sunshine Coast), ABC Tropical North (Mackay), ABC Western Queensland (Longreach), ABC Wide Bay (Bundaberg), Radio National (Brisbane)



The University of Qld will be setting up a new facility that could produce the building blocks of c...

ABC Radio Darwin , Darwin, 06:00 News, Newsreader

29 Apr 2021 6:03 AM

Duration: 0 min 46 secs • ASR AUD 188 • NT • Australia • UQ Radio and TV • ID: X00087255766

The University of Qld will be setting up a new facility that could produce the building blocks of coronavirus vaccines similar to Pfizer and Moderna. Associate Professor Tim Mercer says mRNA vaccines have been proven important in the fight against COVID-19.

Audience

N/A All, N/A MALE 16+, N/A FEMALE 16+

Interviewees

Associate Professor Tim Mercer, University of Qld

Also broadcast from the following 1 station

ABC Alice Springs (Alice Springs)





29 Apr 2021

The Australian, Australia

Author: Jamie Walker • Section: General News • Article type : News Item
Classification : National • Audience : 94,448 • Page: 5 • Printed Size: 238.00cm²
Region: National • Market: Australia • ASR: AUD 6,123 • Words: 586
Item ID: 1434607335

 isentia.mediaportal

© News Pty Limited. No redistribution is permitted. This content can only be copied and communicated with a copyright licence.



isentia

Page 1 of 1

 back

New centre to test jab technologies

JAMIE WALKER
ASSOCIATE EDITOR

Scientists involved in developing an Australian vaccine for COVID-19 have set up a new proving centre for breakthrough RNA and DNA technologies that were turbocharged by the pandemic.

The pilot facility at the University of Queensland will produce the building blocks for mRNA vaccines and cancer therapies, bridging the “missing link” between the lab and manufacturing to allow the promising medicines to be made in Australia.

The project, co-funded by the federal government, involves some of the researchers who got UQ’s molecular clamp COVID vaccine into human trials before a glitch unrelated to performance forced it to be scrapped last December.

It will link in with a program in Victoria kickstarted by a \$50m capital injection from the state government last week to make at scale the new-generation RNA vaccines which have excelled against the virus.

The need for onshore production has been underlined by the difficulties the federal government has had sourcing extra imports of the mRNA-based Pfizer jab, a setback that slowed the national vaccine rollout.

Trent Munro, project leader of the molecular clamp team and a group leader at UQ’s Australian Institute for Bioengineering and Nanotechnology which will host the new centre, said it would be a stepping stone for research to advance beyond the lab.

“What we are interested in is trying to fill that gap for researchers who are trying to build value for their ideas and look at what those next steps are to creating translational outcomes,” Professor Munro said.

“We have got a critical mass here in our ability to do that with proteins, what we are able to do with this investment is support people to do the same thing with ... these DNA and RNA products, with a focus on potential mRNA-based vaccines.

“They are one of the key elements that might be part of the

future therapeutics and vaccine landscape.” The chief executive of partner agency Therapeutic Innovation Australia, Stuart Newman, said the UQ facility would make the high-quality and highly pure nucleic acids in RNA and DNA to support the work of molecular scientists.

He said of the \$2.2m seed money: “This investment complements recent investments in later stage, large-scale mRNA manufacturing as well as TIA’s own ongoing investment in biologics production to support R&D.”

The big advantage of mRNA vaccines is they are simpler to make and, in the case of the COVID jab, more effective than

existing processes including the protein-based molecular clamp developed at UQ.

This was to have been a pillar of Australia’s rollout until the candidate vaccine delivered false-positive readings for HIV in the phase-I clinical trial in Brisbane, leading it to be pulled.

“The use of proteins as drugs has been the biggest revolution in biotech for the last 20 or 30 years,” Professor Munro told The Australian.

“That’s really been the huge step forward. But the issue with those is they are incredibly complicated to make and very time consuming.

“And if you make even the smallest change in the sequence of that protein it becomes a completely different molecule, it will behave in different ways. Just

very complex chemistry.

“But big benefit of RNA, DNA processes is that you have got a lot more flexibility in the underlying sequence and the molecules should behave in a fairly predictable manner. You are seeing that in COVID with companies like Pfizer and Moderna.”

Proteins as drugs has been the biggest revolution in biotech for ... 20 or 30 years

PROFESSOR TRENT MUNRO
AUSTRALIAN INSTITUTE FOR BIOENGINEERING