

2021 TE PUIAKI WHAKAPĀ PŪTAIAO SCIENCE COMMUNICATION PRIZE

Harnessing the power of illustration to convey complex messages about COVID-19

Cartoonist and illustrator Toby Morris has won the Prime Minister's Te Puiaki Whakapā Pūtaiao Science Communication prize for his illustrations that have conveyed complex information about the COVID-19 pandemic and have reached a global audience.

From the start of the pandemic, Toby collaborated with Dr Siouxsie Wiles MNZM to create illustrations to explain key scientific concepts about COVID-19, many of which have gone 'viral' online.

The cartoon and animated graphics that came out of his collaboration with Siouxsie were not only published on the *Spinoff* website, but also shared globally on social media, and were used by the Prime Minister to explain several key concepts during the New Zealand response. The graphics have been widely used by schools to share with parents, and businesses to communicate with staff and customers. In addition to that, he has worked with community health providers, working with harder to reach groups, creating translations of the graphics into Te Reo Māori, Samoan, Tongan, Mandarin, Punjabi and many other languages, to be shared with those communities.

In awarding this prize, the selection panel felt Toby was fully deserving for "bringing his immense talent and creativity to light on an ever-changing complex topic at a time of crisis".

Toby is a big believer in the power of illustration to convey complex messages.

"For a long time, I've been making comics about mostly social and political issues. I'm interested in how the world works and how we all get along together. So back in March 2020, what was becoming increasingly obvious was the pandemic was something to take seriously and something that we all needed to find out about."

Toby was introduced to Siouxsie as she'd had work published on the *Spinoff*. "I was really happy to be in a position where the skills and experience that I had could be put to use to help her reach a broader audience with what was at the time, and still is, so important – for everybody to know as much about the science as possible."

"My approach in general across a lot of the work that I do is to try and take a complicated thing and make it as clear as possible.

"With illustration, you have all sorts of subconscious communication that goes on – tone and mood – and I try to be really conscious of that. But clarity is the number one goal - it's always the most important thing. All the decisions you're making are about is this clear? Could this be taken the wrong way or be misinterpreted?

"It's about stripping things back. I often think of it in terms of cooking a reduction where you're boiling things down to the absolute cleanest and clearest vision of the message possible, trimming back anything that doesn't have to be there and could be taken the wrong way or confuse."

Toby says he can see similarities with his process for creating illustrations and the challenge of science communication more generally.

“I think this is right at the heart of the collaboration between Siouxsie and me. For scientists, it’s a challenge to simplify things so that people can understand while being really careful in not simplifying so much that you’re overlooking something really important or making the message inaccurate.”

One of the biggest challenges they faced was the information about COVID-19 was changing so quickly. “Everybody’s understanding of the science was evolving as we were trying to explain it.”

One example was their original illustration of symptoms didn’t include a loss of smell but they then had to add that based on emails they were receiving from people at the frontline of infections in the US.

With Siouxsie’s insistence, all of their illustrations from the beginning were released under a Creative Commons license, which allows people to reuse and repurpose their work rather than protecting intellectual property (IP).

“For me, coming from a creative field, that was really counterintuitive. Normally illustrators, artists and writers are very protective of their IP and they don’t want people sharing it. But it was clear it was a good decision to make. Protecting my IP was much less important than people understanding what’s happening in the situation.”

Toby says seeing where their illustrations ended up and how they are adapted was one of the most interesting aspects of the work.

“They were used by governments in Australia, Argentina, Scotland, Canada, Germany and all over the place. It was fascinating for me as a designer to see how people would take the same concepts and translate them into the language of their own communications campaigns. Not to stereotype different countries, but there was a German one with very straight lines and an Argentinian one with lots of flourishes on it!

“The vast majority of them were done in really good faith – good translations for different audiences. And people took those concepts and built on them sometimes, which was great. It was really quite inspiring and a fascinating part of the whole experience for me.”

The global reach of the illustrations continues to grow, as he and his team are now producing work for the World Health Organization.

Working for a truly international audience has brought its challenges in drawing things that everyone can relate to, Toby says.

“When I sit down to draw a shop, I draw what a shop looks like in New Zealand, but that might not look the same in Asia and Africa and the Middle East, so that was an interesting challenge to try and present things as universally as possible without being without being completely general. Included in that too, was to make sure it feels representative. It feels like wherever you are in the world looking at it, you’re going to feel like they’re there talking to you.”

Toby says that winning the award is a great honour as well as a surprise to him. “I would never in a million years have predicted that I would be doing science communication, let alone being recognised for it. It’s a real honour to have people see what we’ve done and recognise the value.”

He is pleased that interest in using illustrations to convey complex science is really picking up and notes the great potential of collaborations between artists and scientists. “There is a huge opportunity to apply the methods we have already been using and applying these to many other

topics such as explaining the science of climate change and producing communications for other government departments.” The \$75,000 prize will assist him and his creative studio Daylight Creative to continue their illustration work in this space.

Mō Te Puiaki About the Prize

TE PUIAKI WHAKAPĀ PŪTAIAO SCIENCE COMMUNICATION PRIZE

Awarded to a practising scientist who can demonstrate an interest, passion and aptitude for science communication and public engagement, or to a person who has developed expertise in public engagement and communication of complex scientific or technological information to the public.

This is one of five prizes awarded each year.

The Government of New Zealand introduced The Prime Minister’s Science Prizes in 2009 as a way of raising the profile and prestige of science among New Zealanders, in Aotearoa and internationally.

www.pmscienceprizes.org.nz/