

# Independent Scientific Advocacy Group

A Better Way Forward: **Toward Elimination of Covid-19**

PRESS RELEASE - FOR IMMEDIATE RELEASE - 20 MARCH 2021

## The Role of Vaccines and Covid Immunity in a Pandemic Response

As we all continue to struggle, now a full year into the COVID-19 pandemic, highly efficacious new vaccines offer us hope. However, supply and delivery of these life-saving vaccines will take time, leaving uncertainty about how long it will take before we can safely reclaim our lives.

Prof Gerry Killeen from University College Cork chaired a public information session hosted by the Independent Scientific Advocacy Group (ISAG) last week, in which Irish experts discussed the roles that vaccines are likely to play in our pandemic response over the short, medium and long term.

Prof Killeen spoke about recent evidence from Brazil that emerging new variants of the virus can cause severe resurgence of disease, even in a population with high levels of natural immunity from a massive previous wave of COVID. He then introduced two of his colleagues to share their expert perspectives on how vaccines can nevertheless play an increasing role in our response efforts and how the risks of such resurgences by a rapidly-evolving pathogen can be mitigated.

Immunovirologist, Prof Liam Fanning, and Vaccine Immunologist, Dr Anne Moore, both from UCC, emphasised the impressive effectiveness of all the vaccines available and encouraged everyone to accept any vaccine offered to them. Prof Fanning outlined his hope that even some modest preliminary easing of restrictions for “vaccine pods” could help boost morale and address residual vaccine hesitancy. Vaccination of those 16-35 years of age, after the over 65s and medically vulnerable are vaccinated, was raised by Prof Fanning as an option for accelerating impact on transmission.

Both speakers explained how vaccine-induced immune responses are different to those arising from natural infections. Current “*known unknowns*” can only be addressed over time and with extensive investigations and continued research and monitoring. Prof Fanning explained that new “*variant-proof vaccines with broadly neutralizing antibodies*” are anticipated from late 2021 onwards. Indeed, Dr Moore reassured participants that “*licensing the next generation of vaccines will be even faster*”, emphasizing that we need to “*get ahead of [the virus] and make broadly protective vaccines*” so that

*“we’re not waiting for something to happen”* - in an ideal world, a vaccine will protect you against anything that may happen, such as the emergence of virus variants that could evade immunity induced by vaccination. These more advanced next generation vaccines are expected to be as, or more effective, and ideally reduce the necessary frequency of booster shots.

In the meantime, of course, we need to be careful, especially as we await full rollout of the vaccines we already have. Dr Andrew Kunzmann from Queens University of Belfast, presented data from Northern Ireland showing how the vulnerable fraction of the population is much larger than many imagine. Dr. Kunzmann explained that *“while over 75% of deaths due to COVID-19 have occurred in people over 80 years old, around half of ICU and hospital admissions due to COVID-19 occur in individuals aged under 65 and around a quarter of hospitalisations occurred in individuals aged under 45. If we allowed another surge in cases by opening up with the numbers still high, once the over 65s are vaccinated, then hospitals could face considerable challenges to capacity, which could see the fatality rate in younger adults increase and have knock on impacts on non-COVID care.”*

Dr Moore and Prof Fanning both emphasized that the new vaccine technologies are achievements of modern science that greatly improve our prospects of beating this disease, but also that patience and societal dialogue will be required as we roll them out. Over the short term, we will need to complement vaccine roll out with all the ventilation, hygiene and public health measures we are now familiar with, so that we can suppress SARS-CoV-2 and COVID-19 disease and mitigate against the evolution or importation of new variants.

**-ENDS-**

**AVAILABLE FOR COMMENT IMMEDIATELY:**

**(Please message by signal/whatsapp first to arrange a time)**

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Anthony Staines, spokesperson for ISAG **086 606 9713**

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**BACKGROUND DETAILS:**

**ISAG** (Independent Scientific Advocacy Group) is offering the group’s expertise and experience to work together with Governments and the people to aim for Zero Covid, meaning zero mystery cases in our shared islands. Founded by Anthony Staines, Gerry Killeen, and Tomás Ryan in June 2020, I.S.A.G. is independent of the government. All of our members are volunteers and they freely commit their time every week to discuss the COVID-19 science that underpins our governments’ response strategies. ISAG is a multidisciplinary group of scientists, academics, and researchers who have come together to advocate for a SARS-CoV-2 elimination strategy. I.S.A.G. has published several papers outlining its strategy and recommendations, and you can find them at [www.isagcovid19.org](http://www.isagcovid19.org)

**FURTHER INFORMATION**

The ISAG webinar *The Role of Vaccines and COVID Immunity in a Pandemic Response* held on Wednesday 10 March 2021 is available on twitter [here](#).

**So you have been vaccinated against COVID-19: So what? ..is next?**

**Professor Liam Fanning**, Director, Molecular Virology Diagnostics & Research Laboratory, Deputy Head, Department of Medicine, University College Cork & Cork University Hospital.

<http://publish.ucc.ie/researchprofiles/C012/lfanning>

**Developing deployable, broadly protective vaccines**

**Dr. Anne Moore**, Senior Lecturer, School of Biochemistry and Cell Biology, University College Cork

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**Webinar Host on behalf of ISAG**

**Professor Gerry Killeen** is Chair of Applied Pathogen Ecology, School of Biological, Earth & Environmental Sciences and Environmental Research Institute, University College Cork.