



MY PANDEMIC: FROM FLYING PLANES TO COVID TESTING

FIONA BONKE FOUNDER AND DIRECTOR V1MEDICAL;



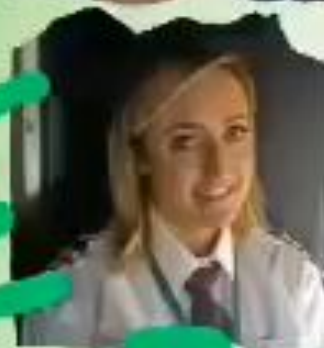
v1medical

ELT
Ireland

#ELTi2022

PLENARY SPEAKERS


1/4



Michelle Hunter
Debbie West
Fiona Bonke

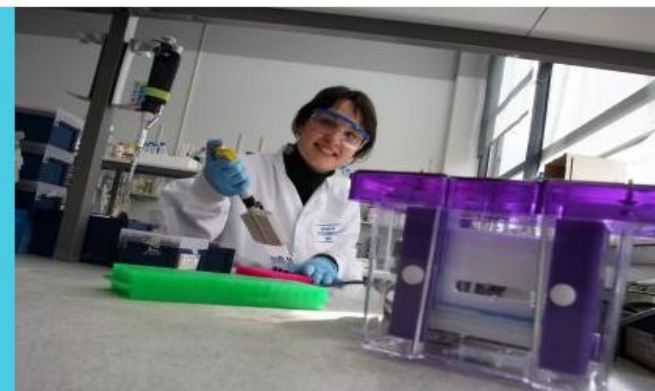
ME

8th Annual Conference
19 & 20 February 2022

 **Griffith College, Dublin**

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Biotechnology



INTRODUCTION

[✓ MORE](#)

By analysing the components of living cells, biotechnologists are learning how to control, fix and modify them to the benefit of global society.

As a budding biotechnologist, you'll focus on how the fundamental biochemistry underlying biological systems works with innovations in genetics, immunology and bioinformatics. To appreciate how solutions translate to commercial industrial scale, you'll also need a good understanding of how the core physical and chemical engineering principles pertain to living cells.

DCU's Biotechnology degrees will furnish you with the science and engineering fundamentals to succeed in the emerging technology-driven biotech industry. The technologies in this industry have made a real impact on humanity, and include the creation and manufacture of products that help in the diagnosis and treatment of disease (e.g. the production of antibiotics, insulin, and safer recombinant vaccines), and the provision of services to areas like healthcare, food, agriculture, energy and the environment.



日本航空客室乗務員97年度LON-I組訓練終了記念 1997.6.27



Subjects we needed to study for our pilots licence

Operational Procedures

Number of Questions: 42

Exam Duration: 1 hour 15 mins

Whilst some operational procedures can vary by aircraft type and airline, this subject will go into detail about the number of regulations and procedures you as a pilot (and your crew) will need to know before a flight.

Human Performance and Limitations

Number of Questions: 48

Exam Duration: 1 hour 30 mins

This topic goes into the factors that can affect the human body whilst being a pilot. This includes physiological, sleep and health problems that can arise when flying at high altitudes for long durations.

Principles of Flight (Aeroplane)

Number of Questions: 46

Exam Duration: 1 hour 30 mins

In principles of flight, you'll be taught to understand the forces acting on an aircraft during flight, these include lift, drag, thrust and weight. You will also look into stability, limitations and aerodynamics. A good understanding of mathematics is required for this subject.

Mass and Balance

Number of Questions: 25

Exam Duration: 1 hour 15 mins

When studying mass and balance, you will learn how to calculate the center of gravity of an aircraft to ensure it is within limits during flight. This subject is one of the shorter ATPL exams and involves maths and graph interpretation.

Instrumentation

Number of Questions: 60

Exam Duration: 1 hour 30mins

In Instrumentation, you will learn about the various systems and instruments onboard an aircraft that are essential for a pilot to understand. This includes speed, navigation and system monitoring.

Performance (Aeroplane)

Number of Questions: 45

Exam Duration: 2 hours

Performance is one of the more complex ATPL subjects as you'll be learning about how an aircraft performs in different stages of flight. You will be expected to carry out take-off and landing calculations as well as interpreting graphs for all stages of flight.

Air Law

Number of Questions: 44

Exam Duration: 1 hour

Whilst working as a commercial airline pilot you'll be flying to destinations across the world, so you'll need a good understanding of the different rules, regulations and governing bodies that regulate civil aviation. In Air Law, you'll be expected to learn the laws and regulations that govern global air travel as well as airport signs, licensing and safety.

Communications

Number of Questions: 34

Exam Duration: 1 hour

Communications covers all the essential information you'll need to know when communicating with air traffic control including general operating procedures, distress and urgency procedures and relevant weather information.

Radio Navigation

Number of Questions: 66

Exam Duration: 1 hour 30 mins

In radio navigation, you'll learn about the different radio navigation aids that are used during day-to-day operations. These include instrument landing systems (ILS), performance-based navigation (PBN), Satellite navigation and distance measuring equipment (DME) to name a few.

Flight Planning and Flight Monitoring

Number of Questions: 42

Exam Duration: 2 hours

For this subject, you'll learn about the various rules and factors required when planning and flying a route. This includes knowing all the calculations needed for flight such as the cruising level, speed, fuel and ground clearance.

Aircraft General Knowledge

Number of Questions: 80

Exam Duration: 2 hours

Aircraft general knowledge takes you through the construction and components of an aircraft including their purpose and how they work. You'll need good knowledge and understanding of an aircraft's systems in order to pass this exam, so a basic understanding of how an aircraft functions will give you a head start in this subject.

Meteorology

Number of Questions: 84

Exam Duration: 2 hours

Meteorology is the study of the air environment and how different weather, cloud and atmospheric conditions, can affect flight operations. This topic is essential for every pilot to understand as you will encounter different weather systems and patterns across the world. A good understanding of Geography will help when learning this topic.







Every screen in the baggage hall



We thought that was bad....then this happened





The background is a deep blue gradient with a subtle pattern of white stars and faint, glowing circular lines. In the upper right, there is a large, detailed circular scale with numerical markings from 0 to 210 and a small arrow pointing upwards. In the lower right, there is a smaller circular scale with a dashed line and an arrow pointing downwards. In the lower left, there is another circular scale with a dashed line and an arrow pointing upwards.

It didn't quite turn out to be 30 days.
It actually ended up being more than 570 days!

30 Hour round trip PPE runs to China





A little light persuasion to get the PPE



Still gives me nightmares !



**Joe Wicks The
Body Coach**

Trained and assessed skills

- Application of Procedures and Compliance with Regulations
- Communication
- Situation Awareness and Management of Information
- Workload management
- Application of Knowledge
- Leadership and Teamwork
- Problem Solving and Decision Making
- Aeroplane flight path management – Manual Control
- Aeroplane flight path management – Automation

BUSINESS

Pivoting in a pandemic

Lockdown has forced businesses and workers to get creative



VImedical founder Fiona O'Flaherty

Antigen testing start-up takes off

The evolving rules on Covid-19 tests required for international travel inspired pilots **Fiona O'Flaherty**, Niamh Power and Mikkel Bonke to set up the rapid antigen testing business VImedical.



New 30-minute antigen tests near Dublin Airport could facilitate Christmas travel

V1medical was founded by pilots with medical backgrounds in Ireland, and is providing drive-through tests

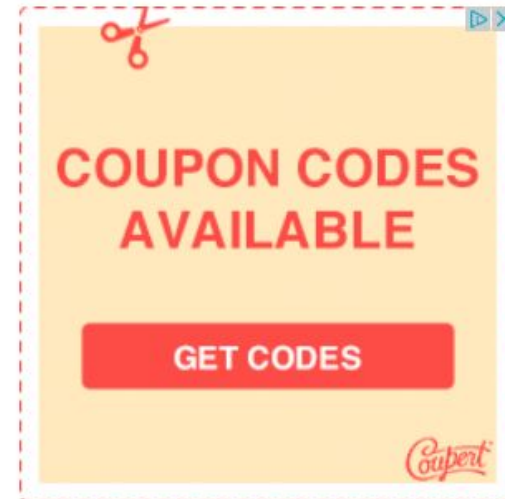


Jennifer Byrne is tested by Queraït Jodar at the new V1medical drive-through testing facility near Dublin Airport. Picture: PIP Pictures



Pól Ó Conghaile  

December 03 2020 07:22 AM



Two Irish pilots launch COVID test drive results in 30 minutes



By **REBECCA DORE** on **4TH DECEMBER 2020** in **INSPIRE**

Two Irish pilots with medical backgrounds have launched a rapid antigen test centre near Dublin Airport which offers screening for COVID-19 and results in 30 minutes.

PPE pilots launch drive-thru testing at Dublin airport

written by Gazette Reporter | 09/12/2020



Two Dublin pilots have launched a drive-thru Covid-19 testing centre at Dublin Airport which claims to detect infection within 30 minutes.

Gardaí stop cars going to and from Dublin Airport in new travel crackdown

Public warned of on the spot fines for anyone taking non-essential flights or ferries

© Sun, Jan 24, 2021, 19:23

Conor Lally Security and Crime Editor



The checkpoints were switching between different sides of the road, meaning people travelling to or from the airport were being checked at different times. Photograph: Conor Lally



O Morris
1 review



★★★★★ 2 weeks ago **NEW**

I rarely write reviews but had to share that these guys are excellent in every way. The pricing is similar to the other providers, but the service is far superior. Before booking the test they answered all my questions really quickly, they ... [More](#)

↩ Reply 👍 1



Siobhan McCaffrey
3 reviews



★★★★★ a month ago

The best customer service i've ever had! I called up to arrange a covid test for traveling back to the US from Dublin, I had a few questions and was helped far beyond my expectations. I, like the rest of Ireland, got Covid over Christmas ... [More](#)

↩ Reply 👍 2



Patricia Hanson
18 reviews



★★★★★ 2 months ago

The BEST CHRISTMAS PRESENT EVER!! Since the US changed their flight criteria to 24 hour negative test, I've been trying for 4 days to find a test centre that would test within 24 hours of a St Stephens Day flight in Dublin. I totally get ... [More](#)



Mark Hamill
Local Guide · 19 reviews · 5 photos



★★★★★ a month ago

Absolute life savers. Arrived to board a flight to Sydney today. I had my PCR done but was told that a 72 hour wouldn't fly when transiting via Singapore. Had to grab a taxi and head out to get a rapid antigen. I arrived in the taxi, rolled ... [More](#)

↩ Reply 👍 Like



Louise Hall
5 reviews



★★★★★ a month ago

Fantastic service from this company. I called the mobile number on their website at 6:30am and a friendly staff member answered straight away. They were able to accommodate my daughter with a rapid antigen test after she was let down by ... [More](#)

↩ Reply 👍 Like



Julian Ritchie
2 reviews



★★★★★ a month ago

I can't speak highly enough of these guys. They saved our Christmas for us this year and the team on site and over the phone were so human and friendly that it was such a pleasure to meet with them. I will be giving them every bit of my business going forward!

↩ Reply 👍 1

Our Charity Partner

HELPING

Families with children
Fighting Cancer in Ireland
Travel overseas
for Treatment



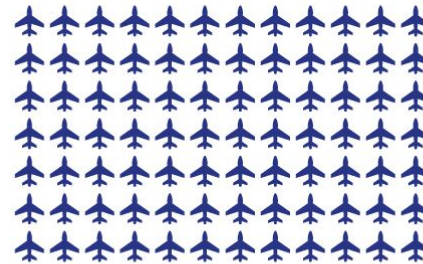
We have helped
165 families so far...



150 FAMILIES HELPED



969 FLIGHTS TO LONDON /
MANCHESTER / HOUSTON /
DUSSELDORF / GRAND RAPIDS /
NEW YORK / ESSEN /
BIRMINGHAM / GENEVA / PARIS



COGS & MARVEL

814 HOTEL ROOM NIGHTS



996 TRANSFERS & CAR HIRE



98 LONG TERM ACCOMMODATION



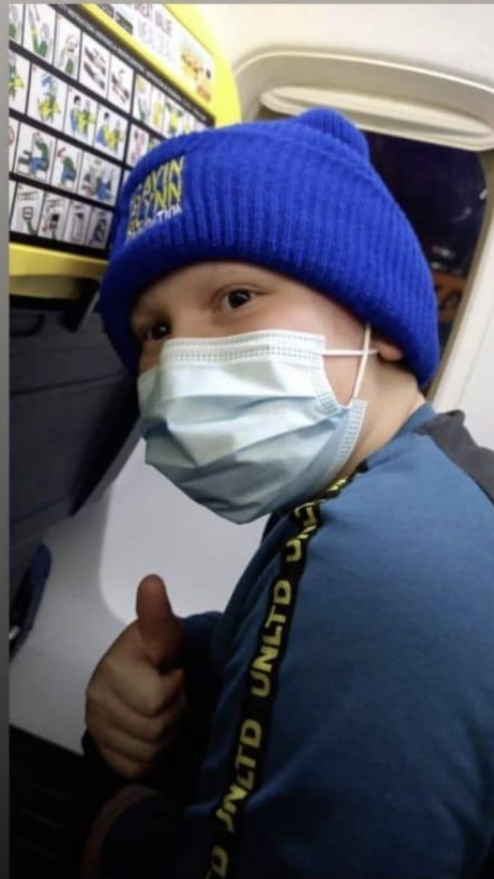
6 FERRIES BOOKED





thegavinglynnfoundation

THANKS TO @V1MEDICAL FOR
LOOKING AFTER THE COVID TESTS
FOR EDUARD AND HIS FAMILY TODAY
#CHARITYPARTNER



@V1MEDICAL





Professor Michael Mina

“If you’re at risk of transmitting the virus to somebody else, you’re going to have plenty of viral particles — those would certainly show up in antigen tests,” says Michael Mina, an infectious-disease immunologist at the Harvard T. H. Chan School of Public Health in Boston, Massachusetts, who has been a vocal proponent of antigen tests.

Members of the group as appointed by Minister Donnelly

Chair

Professor Mark Ferguson, Director General, Science Foundation Ireland and Chief Scientific Adviser to the Government of Ireland

Members

- Professor Paddy Mallon, Professor of Microbial Diseases UCD, Consultant in Infectious Diseases, St Vincent's University Hospital and Director of the UCD Centre for Experimental Pathogen Host Research
- Professor Mary Horgan, President of Royal College of Physicians in Ireland, Professor, School of Medicine, UCC. Consultant in Infectious Diseases, Cork University Hospital
- Professor Kingston Mills, Professor of Experimental Immunology, Trinity College Dublin and Director Trinity Biomedical Sciences Institute
- Dr Lorraine Doherty, National Clinical Director Health Protection, Health Service Executive*
- Dr Darina O'Flanagan, Former Director of the Health Protection Surveillance Centre; Special adviser to NPHET at Department of Health*

*Indicates member does not support report

Summary Table of High-Level Advantages, Disadvantages and Overall Assessment

Detection	Viral RNA	Viral RNA	Viral RNA	Viral antigen	Viral antigen
Test Type	RT-PCR testing	RT-LAMP testing	CRISPR-based testing	ELISA testing	Lateral flow antigen testing (LFAT)
Advantages	Highly sensitive and highly specific.	<p>Rapid (<1 hr) simple, low-cost test, with limited reagent or equipment required, can be adapted for high throughput near patient testing.</p> <p>More sensitive than antigen testing.</p>	<p>Rapid (<1 hr), low-cost test, suitable for repeated near patient or self-testing.</p> <p>Low lab and reagent requirements allow decentralised testing setups.</p> <p>Can be adapted for high throughput labour-efficient automation.</p> <p>Same sensitivity as RT-PCR, higher than RT-LAMP or antigen testing.</p>	<p>High specificity, relatively low cost, high throughput testing approach, probably less affected by saliva sample pH or contamination that can interfere with RT-LAMP tests.</p> <p>Detects SARS-CoV-2 Antigen and therefore indicates that the individual is infectious.</p>	<p>Rapid, low cost, suitable for repeated near patient or self-testing.</p> <p>Detects SARS-CoV-2 Antigen and therefore indicates that the individual is infectious.</p>

Detection	Viral RNA	Viral RNA	Viral RNA	Viral antigen	Viral antigen
Test Type	RT-PCR testing	RT-LAMP testing	CRISPR-based testing	ELISA testing	Lateral flow antigen testing (LFAT)
Disadvantages	<p>Sample transportation needed.</p> <p>Laboratory needed.</p> <p>Unless automated, the RNA extraction steps are laborious and relatively slow to perform.</p> <p>Can be constrained by reagent availability when using single commercially available platforms.</p> <p>Reagents and equipment are costly.</p> <p>All steps are not amenable to automated high throughput testing, although sample pooling strategies can be used to develop higher throughput systems.</p>	<p>Not as sensitive as RT-PCR, require basic laboratory and basic equipment. Subject to false positives with colorimetric assay if used with saliva samples as up to 10% are naturally more acidic and will generate an instant colour change if not pre-treated, so positives need to be confirmed.¹⁵¹</p> <p>Does not discriminate between an active infection or resolved infection with persistent RNA.</p>	<p>Basic lab equipment required.</p> <p>The technology is relatively novel with clinical validation ongoing.</p>	<p>Not as sensitive as RT-PCR, RT-LAMP or CRISPR-based tests for detecting COVID cases but probably as sensitive for the detection of infectious individuals. Requires lab and basic equipment (ELISA plate reader).</p>	<p>Lower sensitivity than RT-PCR, or RT-LAMP for detecting COVID cases but probably as sensitive for the detection of infectious individuals.</p> <p>Commercially available tests require confirmatory clinical and in field validation.</p>

PROFESSOR FERGUSON

CHIEF SCIENTIFIC COMPARING PCR TO ANTIGEN



Coronavirus: Commission puts forward rules on rapid antigen tests and secures 20 million tests for Member States

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Print friendly pdf

Press contact

Following up on the Council [conclusions](#) of 11 December, the Commission has today adopted a [proposal](#) for a Council recommendation on a common framework for the use, validation and mutual recognition of rapid antigen tests. Since the outbreak of the COVID-19 pandemic, diagnostic testing has been rapidly evolving, demonstrating its central role in outbreak control. The recommendations put forward by the Commission will ensure the uniform use, validation and recognition of rapid antigen tests in the EU.

The Commission has also today signed a framework contract with Abbott and Roche allowing the purchase of over 20 million rapid antigen tests for up to €100 million, financed by the Emergency Support

17:58

42%

← Tweet



Professor Philip Nolan

@PhilipNolan_SFI

Can I get some snake oil with that? It makes for a great salad dressing with a pinch of salt and something acerbic. Stay safe when socialising outdoors over the next few weeks. Small numbers, distance, masks. These antigen tests will not keep you safe.



Michael Mina ✓ ... · 09 May 21 ·

Replying to [@PhilipNolan_SFI](#)

For an advisor to your government -
you don't appear to know what you
are talking about @President_MU
wrt rapid tests.

The comment adds nothing of
benefit and further sows
confusion.

You should be ashamed of your
demeanor here.

COUNTRIES USING RAPID ANTIGEN TESTING FOR TRAVEL ARE SHOWN IN GREEN

Source <https://www.iatatravelcentre.com/world.php>



