Drug discovery

UNIVERSITY OF CAMBRIDGE
enterprise

Founded by Dr Freya Jephcott from the Department of Veterinary Medicine, Universa seeks to solve the problem that outbreaks are easiest to control when they are in their earliest stages, but many low and middle-income countries lack adequate infrastructure to diagnose, detect, and respond to them early on.

Univursa is building a lightweight application that helps outbreak responders process data, predict an outbreak's cause, and collect more informative data. When tested on historic data, their algorithms can already predict outbreak causes more reliably than anything on the market, including the system currently used by the World Health Organization (WHO).

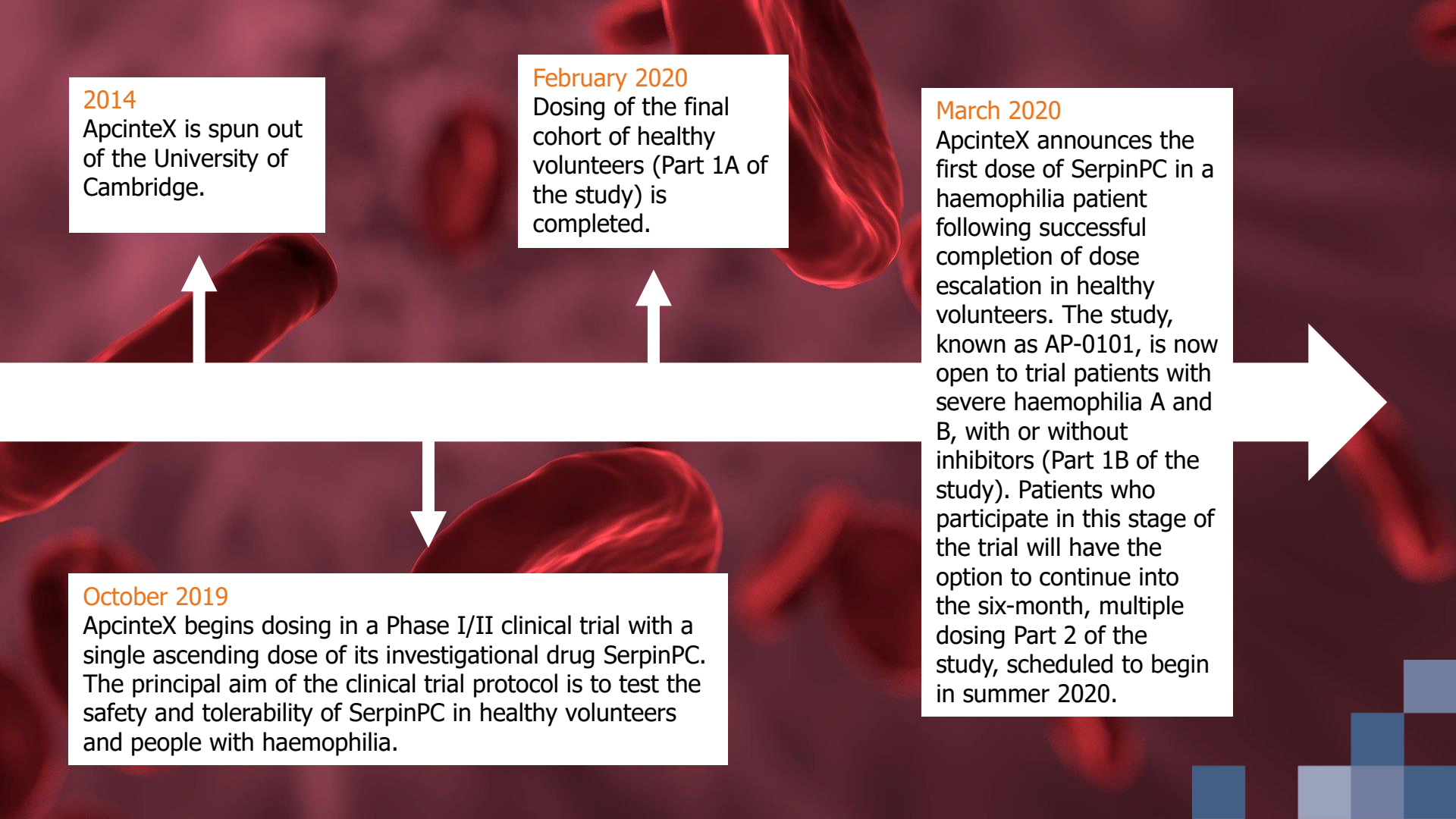
They are working with public health partners to start field testing shortly.

Univursa aims to become a platform for translating academic epidemiological innovations into tools for health impact.

In this current pandemic these tools are more important than ever.

Based on the work of Professor Jim Huntington (Cambridge Institute for Medical Research) and Dr Trevor Baglin (Cambridge University Hospitals), ApcinteX is developing a new therapy for haemophilia.

ApcinteX's drug, SerpinPC, helps blood to clot by inhibiting an anticoagulant enzyme, activated protein C, instead of replacing the missing coagulation factor. This unique mode of action results in a reduction of blood loss.



2014
ApcinteX is spun out of the University of Cambridge.

October 2019
ApcinteX begins dosing in a Phase I/II clinical trial with a single ascending dose of its investigational drug SerpinPC. The principal aim of the clinical trial protocol is to test the safety and tolerability of SerpinPC in healthy volunteers and people with haemophilia.

February 2020
Dosing of the final cohort of healthy volunteers (Part 1A of the study) is completed.

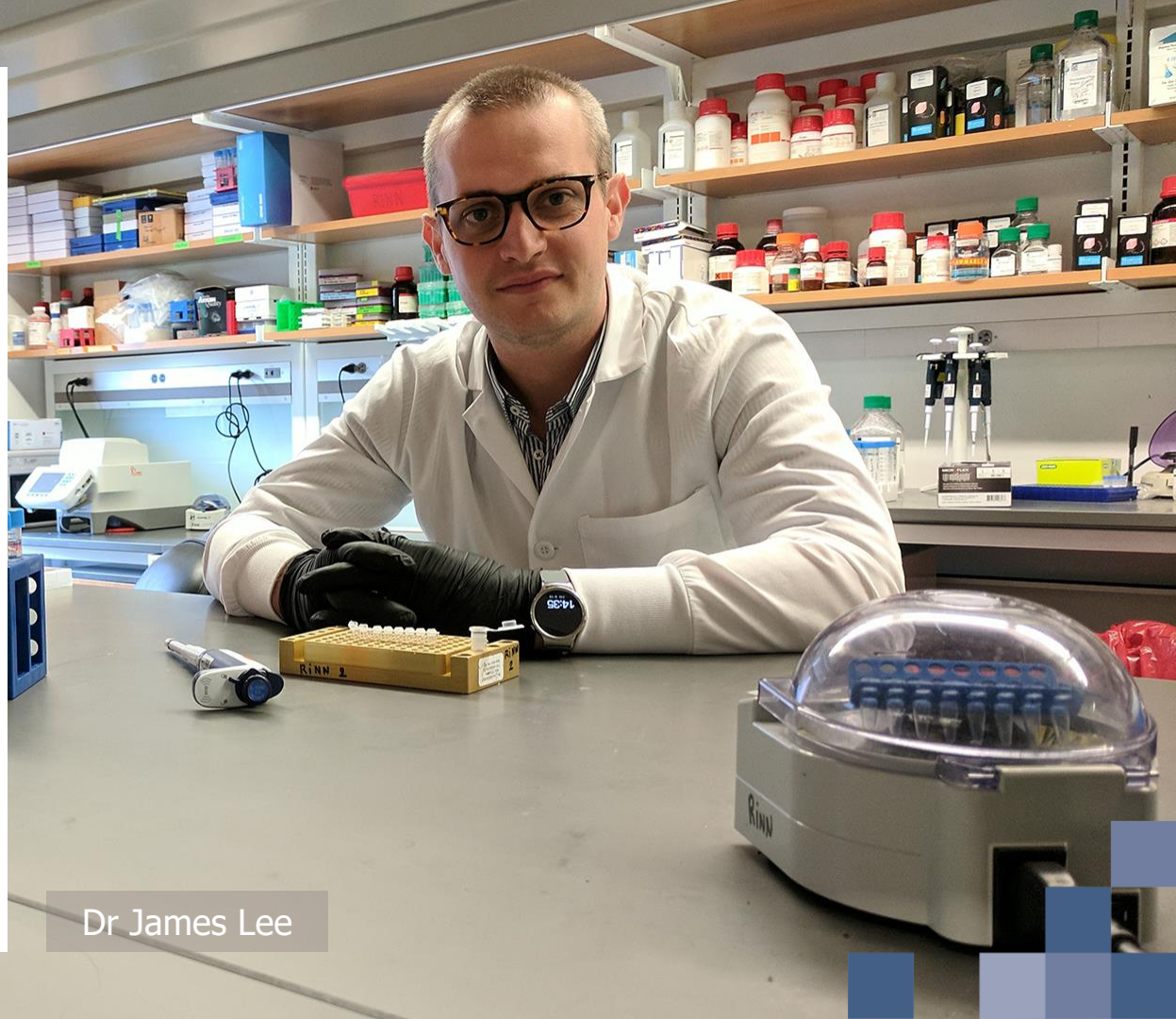
March 2020
ApcinteX announces the first dose of SerpinPC in a haemophilia patient following successful completion of dose escalation in healthy volunteers. The study, known as AP-0101, is now open to trial patients with severe haemophilia A and B, with or without inhibitors (Part 1B of the study). Patients who participate in this stage of the trial will have the option to continue into the six-month, multiple dosing Part 2 of the study, scheduled to begin in summer 2020.

Co-founded by Professor Ken Smith and University of Cambridge researchers, PredictImmune develops pioneering prognostic tools for guiding treatment options and improving patient outcomes in immune-mediated diseases.
In July 2019 PredictImmune announced the completion of a £10m Series B funding round.

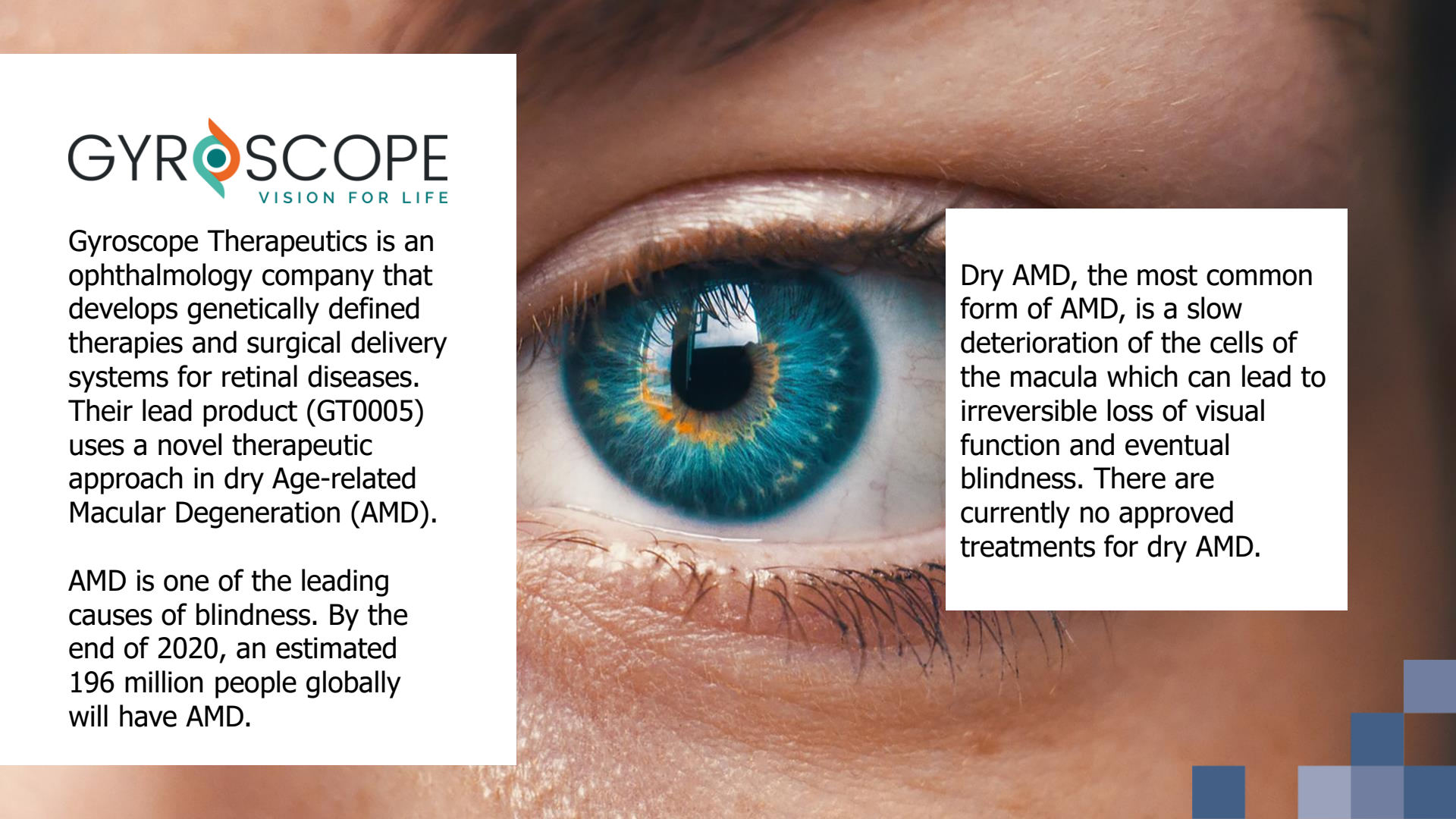
PredictImmune's first prognostic product, PredictSURE IBD™, is the world's first, truly validated and CE-marked prognostic test for guiding treatment options in Inflammatory Bowel Disease (IBD).

The new investment will enable commercial expansion across the UK, Europe, USA and rest of the world. It also allows the organisation to expand its product development and existing activities in IBD (Crohn's disease and ulcerative colitis) and a range of additional autoimmune areas including Systemic Lupus Erythematosus (SLE).

The objective is to build a portfolio of new products to complement and enrich PredictImmune's prognostic test pipeline in the coming years.



Dr James Lee



GYROSCOPE
VISION FOR LIFE

Gyroscope Therapeutics is an ophthalmology company that develops genetically defined therapies and surgical delivery systems for retinal diseases. Their lead product (GT0005) uses a novel therapeutic approach in dry Age-related Macular Degeneration (AMD).

AMD is one of the leading causes of blindness. By the end of 2020, an estimated 196 million people globally will have AMD.

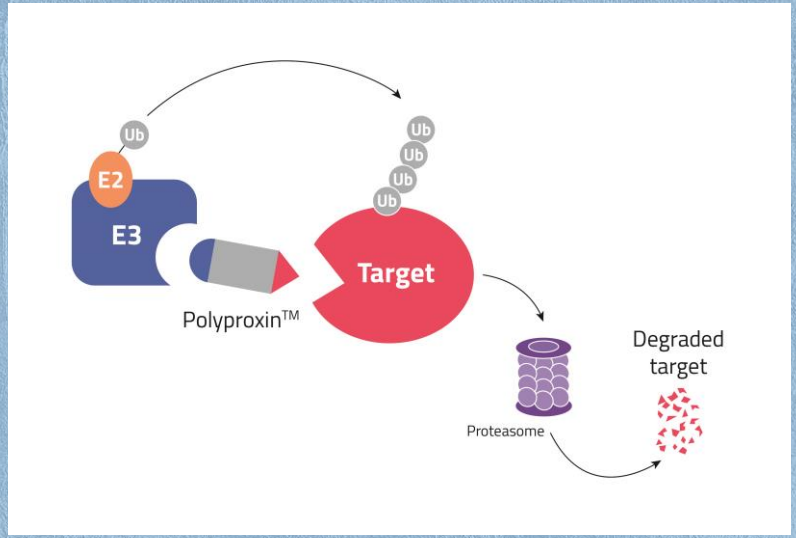
Dry AMD, the most common form of AMD, is a slow deterioration of the cells of the macula which can lead to irreversible loss of visual function and eventual blindness. There are currently no approved treatments for dry AMD.


2016
Gyroscope Therapeutics spins out of the University of Cambridge. A significant portion of Gyroscope's founding intellectual property arises from the work of the laboratory of Professor Sir Peter Lachmann (Veterinary Medicine, Emeritus).
February 2019
Gyroscope announces that the first patient had been successfully dosed in a Phase I/II clinical trial to assess the safety and biological activity of GT0005.
September 2019
Cambridge Enterprise sister organisation Cambridge Innovation Capital (CIC) joins lead investor Syncona Ltd in Gyroscope's £50.4m Series B funding round.

POLYPROX
THERAPEUTICS

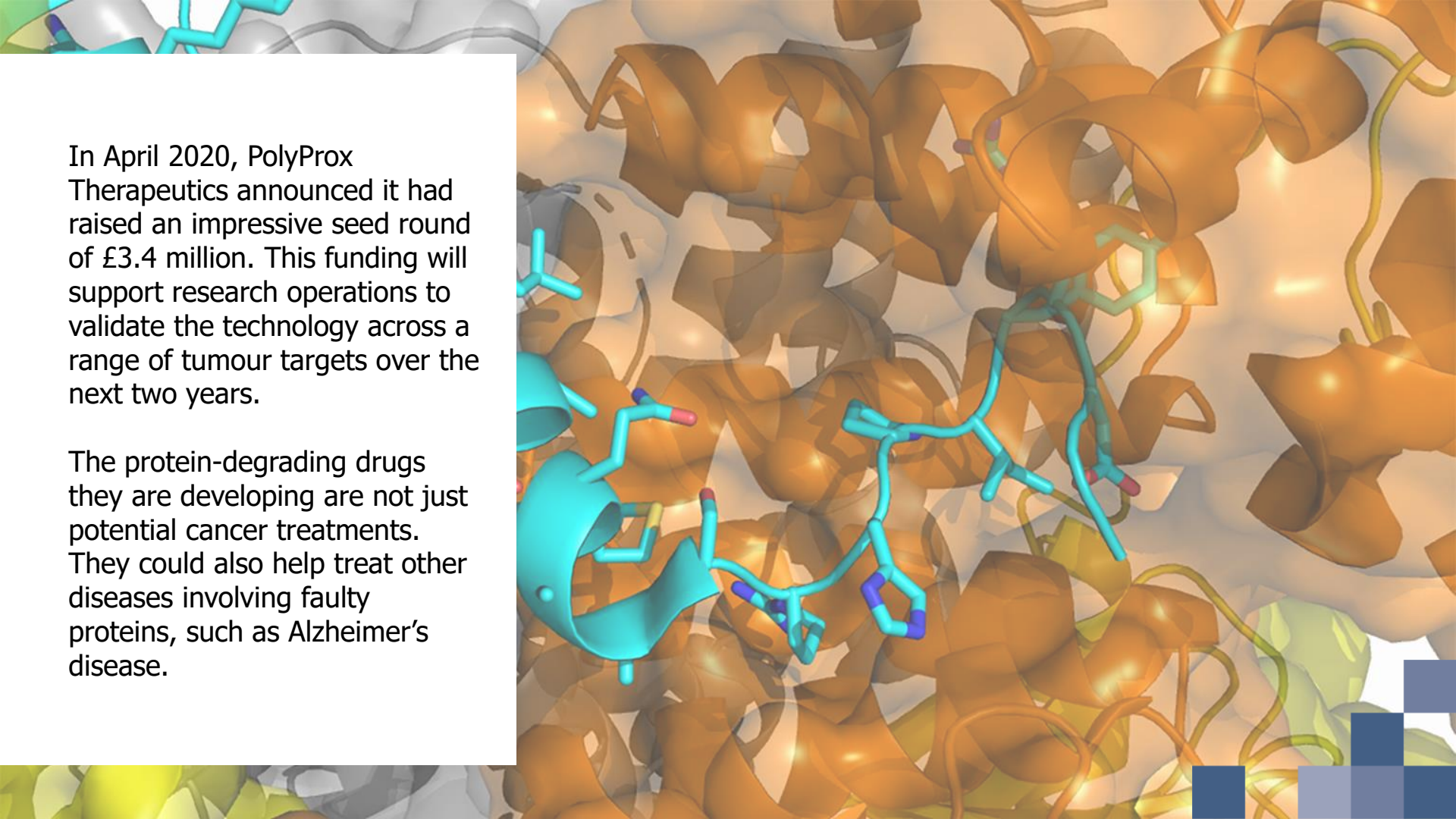
Founded in 2018, PolyProx Therapeutics is a spin-out of the Department of Pharmacology and is based on over a decade of research and IP from founder Professor Laura Itzhaki's lab.

They are developing a new class of drugs called Polyproxin® molecules, that selectively target disease causing proteins and use natural cellular pathways to destroy them.



In April 2020, PolyProx Therapeutics announced it had raised an impressive seed round of £3.4 million. This funding will support research operations to validate the technology across a range of tumour targets over the next two years.

The protein-degrading drugs they are developing are not just potential cancer treatments. They could also help treat other diseases involving faulty proteins, such as Alzheimer's disease.



"Without the intellectual input and strategic, business and IP know-how of Cambridge Enterprise, I would not have been able to realise the commercialisation of my research. It has been a great privilege to work with them. They are most definitely unsung heroes of the University."

Professor Laura Itzhaki
PolyProx Therapeutics

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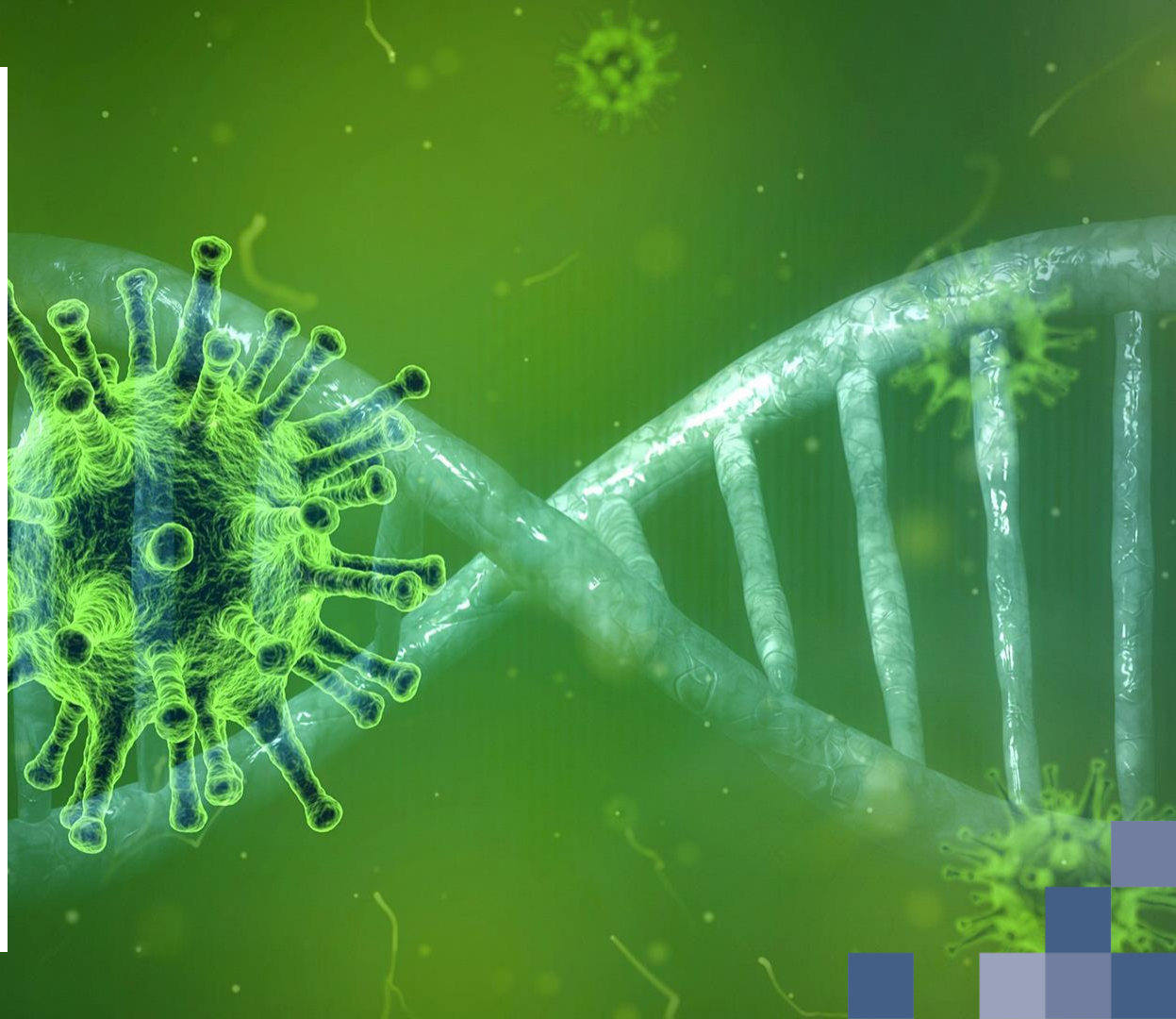
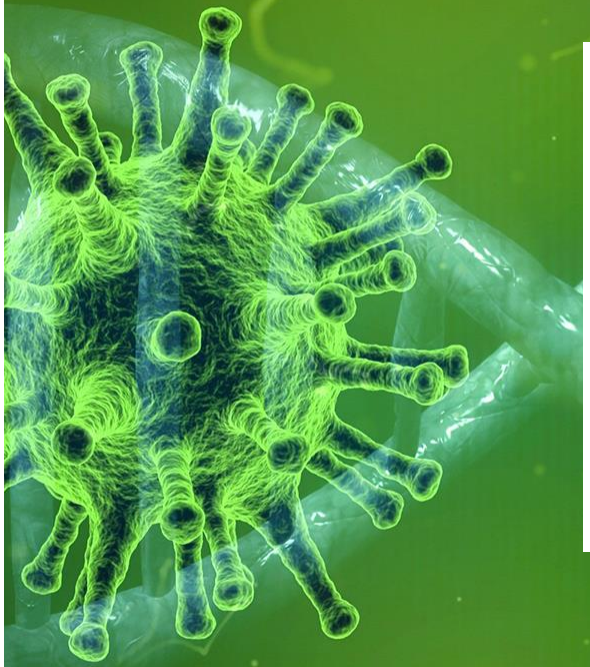
DIOS VAX

Founded by Professor Jonathan Heeney and his team in 2017, DIOSynVax sought to solve the problem that over the years, vaccine development has primarily focused on vaccine delivery. Research into the antigen, the key component of a vaccine that directs our immune system to protect us, has not been optimised to its full potential.



DIOSynVax has developed a novel, innovative technology platform to accelerate the production of more effective vaccines. The focus is to identify and target vulnerabilities within the genetic sequence of related viruses. Using sequence data from outbreaks with computational modelling and synthetic gene technology, optimised vaccine antigens are generated.



The end result is a vaccine that induces an increased breadth of protection for future outbreaks and has applications to many infectious diseases, from seasonal flu to Ebola and most recently SARS-CoV-2.

Useful Links:	
Univursa	Univursa website
ApcinteX	News: Apcintex begins dosing haemophilia patients in second part of clinical trial
	News: Apcintex starts clinical trials of novel haemophilia drug
	Apcintex website
PredictImmune	News: PredictImmune closes Series B funding round raising £10m
	PredictImmune website
Gyroscope Therapeutics	News: Cambridge Innovation Capital makes investment in Gyroscope Therapeutics
	News: Gyroscope Therapeutics raises £50.4m in Series B funding
	Gyroscope Therapeutics website
Polyprox Therapeutics	Case study: Polyprox Therapeutics - A new class of drugs to halt difficult to drug cancers
	PolyProx Therapeutics website
DIOSynVax	News: University spin-out works towards vaccine against COVID-19
	DIOSynVax website