

Spinning out your research – the journey of an academic entrepreneur



Hosted by Cambridge Innovation Capital
in partnership with Cambridge Enterprise





Dr Robert Tansley

Partner, Cambridge Innovation Capital



Spinning out your research – the journey of an academic entrepreneur



Agenda

Spinning out your research – the journey of an academic entrepreneur

15.15 – Welcome

Professor Andy Neely

15.25 – Founder talk – NoBACZ Healthcare

Dr Jonathan Powell and Dr Laura Donnelly

15.45 – Founder talk – Nu Quantum

Dr Carmen Palacios-Berraquero and Desmond Cheung

16.05 – Founder talk – StemBond Technologies

Dr Andrew Hodgson and Dr Jason Mellad

16.25 – Founder talk – Mosaic Therapeutics

Dr Adrian Ibrahim and Dr Anne Horgan

16.45 – Q&A panel – Founders

Facilitated by Dr Phil Elstob

17.05 – Q&A panel – Accelerators, investors and advisors

Facilitated by Dr Robert Tansley

17.25 – Closing comments

Dr Christine Martin

17.30 – Networking drinks

Welcome

Professor Andy Neely, OBE

Senior Pro-Vice-Chancellor, and Professor of Manufacturing
University of Cambridge



Spinning out your research – the journey of an academic entrepreneur

Dr Jonathan Powell

Founder and CEO of NoBACZ
Healthcare



Dr Laura Donnelly

Commercialisation Manager at
Cambridge Enterprise



N O B A C Z



HEALTHCARE

Sustainable Wound Care Solutions



Jonathan Powell
CEO

INTRODUCING NoBACZ



Sustainable Healthcare Solutions

The NoBACZ Technology Platform



Clean, Green Liquid Bandages & Barriers



A University Spin out (Vet Med)

- Founded by Dr Nuno Faria (CSO) and Dr Jonathan Powell (CEO)
- R&D continues in and with the Department of Veterinary Medicine



Tackling unmet needs in veterinary wound care:

- Replace bandages & dressings
- No need to remove bandages (self degrades)
- Can be applied on difficult-to-bandage areas
- Mud, slurry, detritus and bacterial resistant barriers: reduce topical antibiotics
- Food-grade constituents: safe, biodegradable, and good for the environment
- Finely tuneable technology: species/condition-specific solutions



How it all came about....




Sustainable Wound Care Solutions

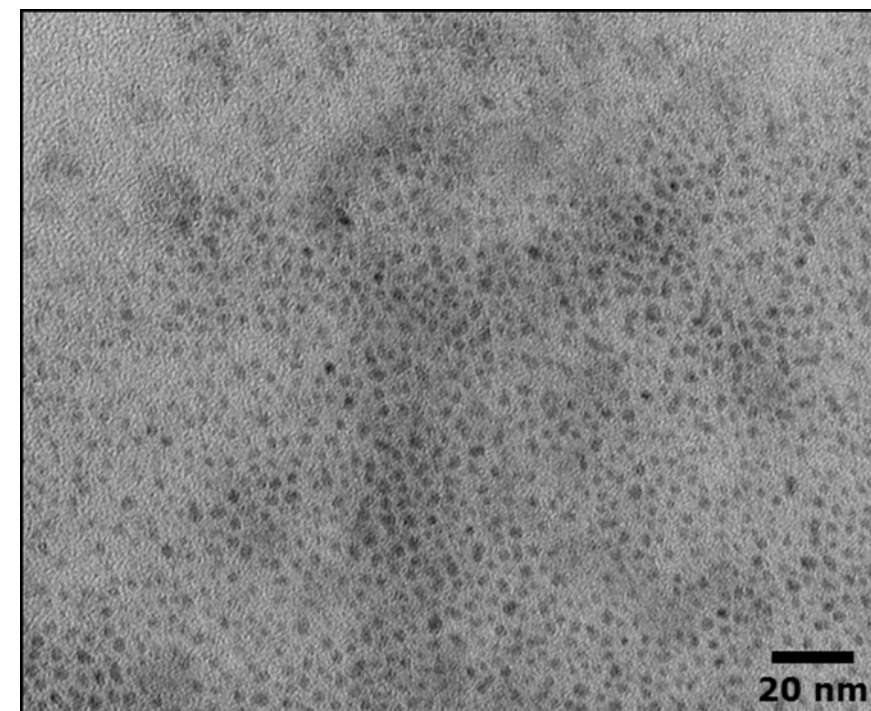
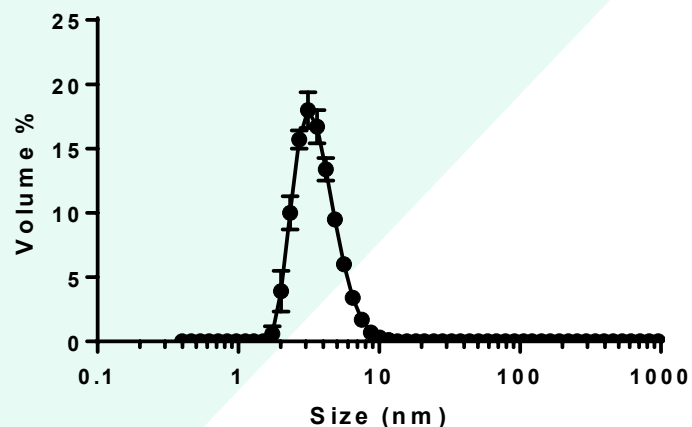
NANO EXPRESS

Open Access

Ligand-Doped Copper Oxo-hydroxide Nanoparticles are Effective Antimicrobials



Carlos A. P. Bastos^{1,2*} , Nuno Faria^{1,2*}, Angela Ivask^{3*}, Olesja M. Bondarenko³, Anne Kahru^{3,4} and Jonathan Powell^{1,2}



Talk by one of our PhD students at a Departmental seminar discussing our work on copper chemistry and tailoring bio-activity.



Copper widely used on Farms- is it optimum? Is it sustainable?



A senior farm vet notes the above

WO 2018141989 (**Advanced licensing discussions**)
WO 2017167970 (**Licensed**)
WO 2017167969 (**Licensed**)
WO 2017167963 (**Licensed**)
WO 2016170152 (**Licensed**)
WO 2016170152 (**Licensing discussions**)
WO 2015121666 (**Licensed**)
WO 2015121667 (**Licensed**)
WO 2015067939 (**under development**)
WO 2010015827 (**Licensed**)
WO 2008096130 (**Licensed**)

As an academic group that embraces technology development this seemed an interesting challenge

Tip 1: immerse yourself in the problem



What one thinks the challenge may be and what it actually is can be two different things.....

Tip 1: immerse yourself in the problem

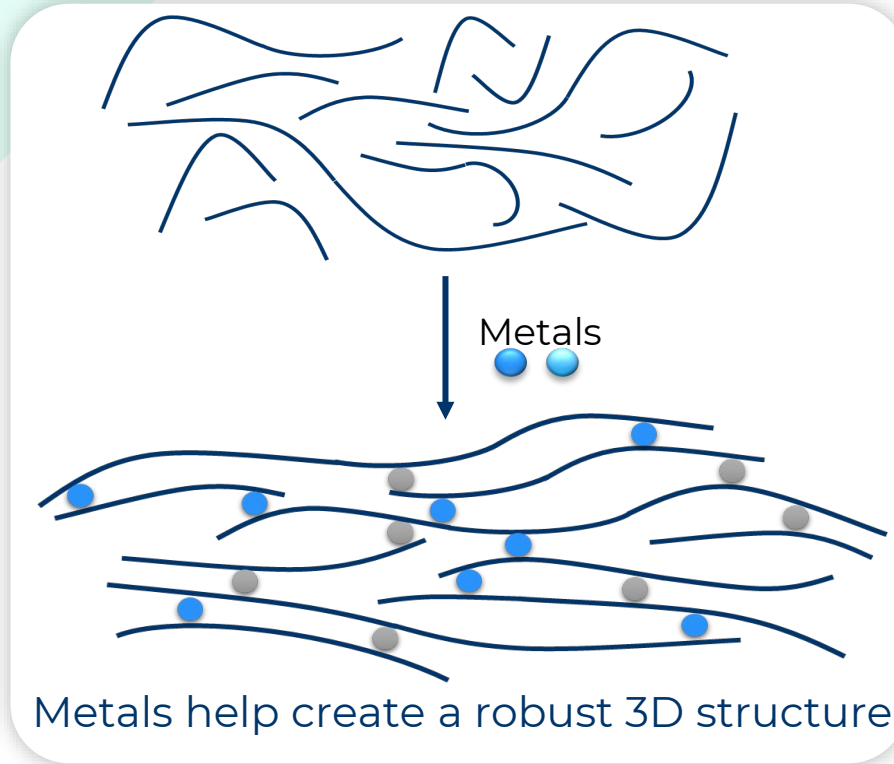


QED!

Tip 2: define your solution space

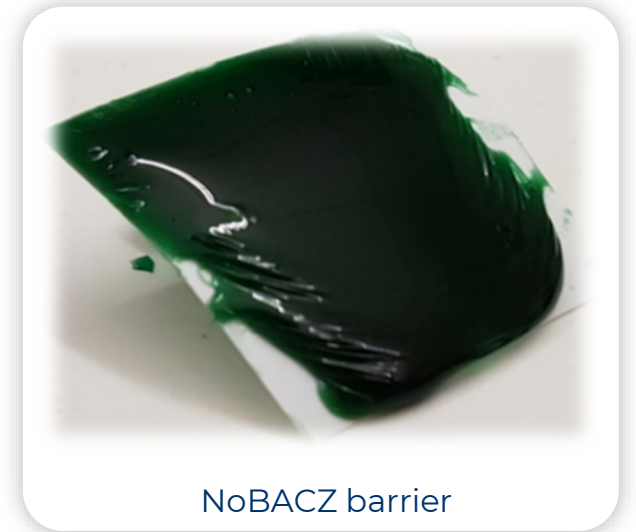


Vanilla safe. Food-use compatible

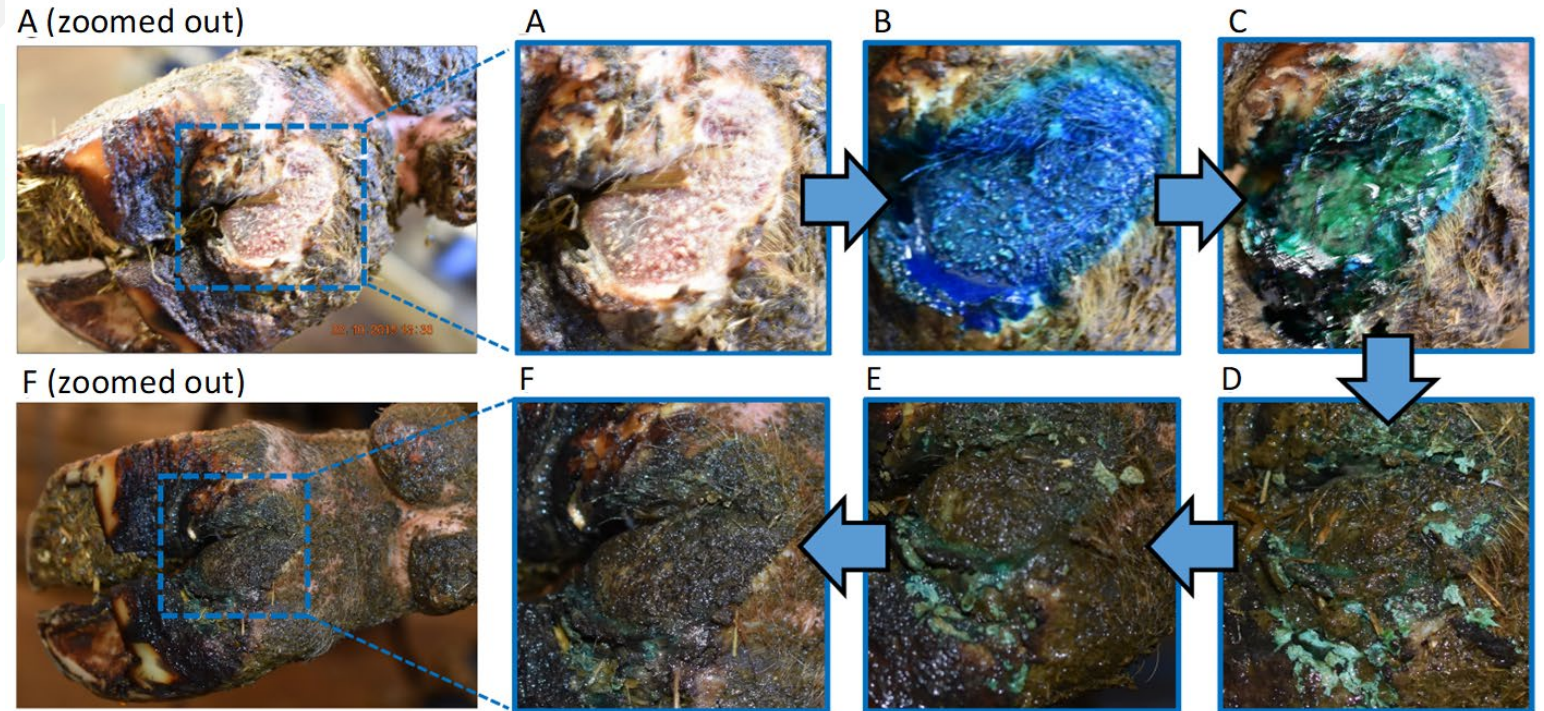
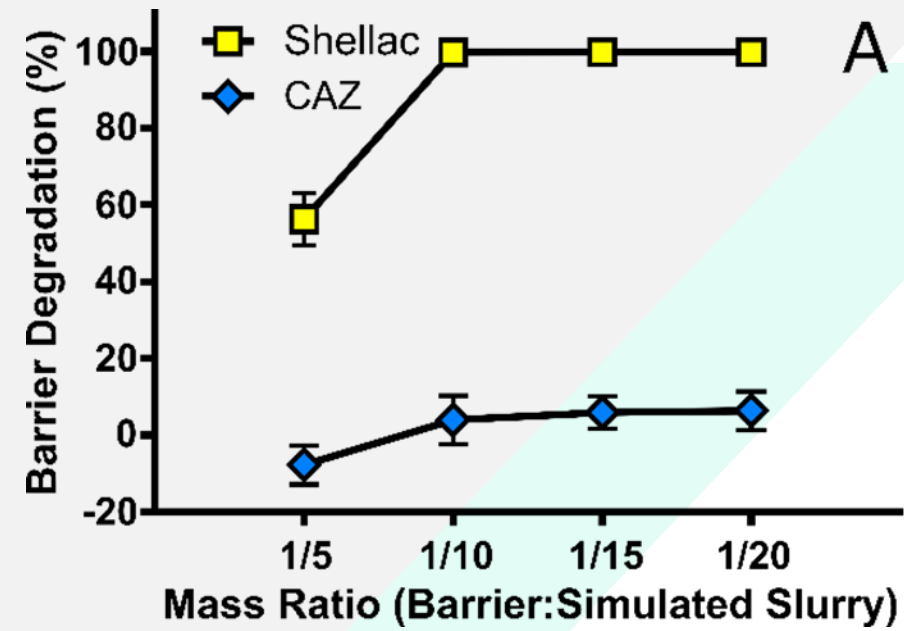


Affordable. Easily scaled. IP.

Biodegradable. Sustainable.



Tip 3: Convince your critical self



Challenge and beta test your prototype solution in relevant situations.

Sci Rep . 2020 Sep 15;10(1):15067. doi: 10.1038/s41598-020-71586-7. Robust rapid-setting antibacterial liquid bandages. C A P Bastos et al

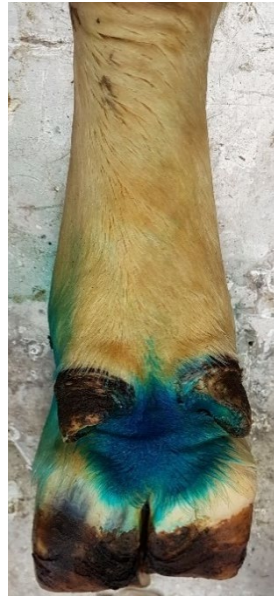
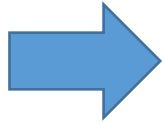
Tip 4: Use local resource

- Practitioners / KOLs (incentivise- skin in the game)
- IP Protection (CE)
- Unsecured Pre-Seed loans (CE)- targeted spend (market report, finance expertise)
- Entrepreneurs in residence (business model / case)
- Seed fund- local investors
- Follow on funding (seed +)
- Board expertise

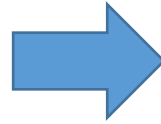
Sustainable Wound Care Solutions



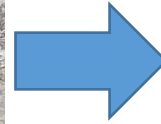
Cadaver leg



+ antibiotic
(chlortetracycline spray)



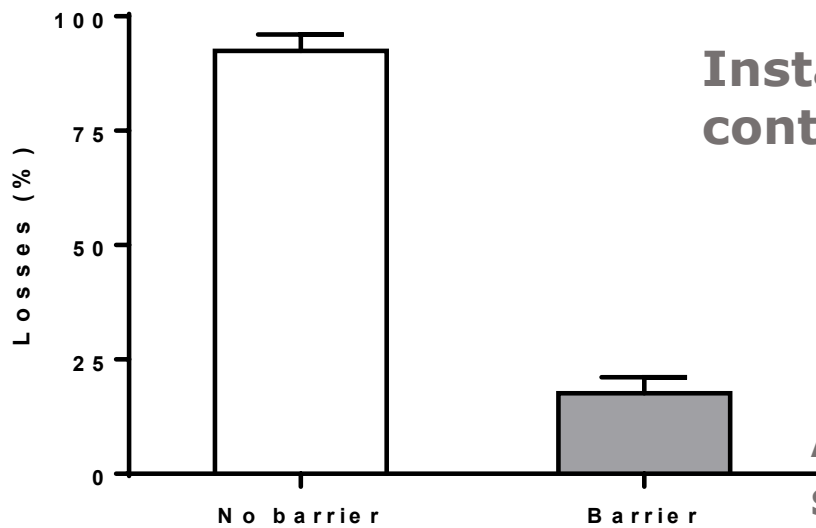
+ CAZ barrier
(Formulation S1B2)



+ simulated slurry
(aqueous)



Tip 5: Smart visuals not *Nature* data



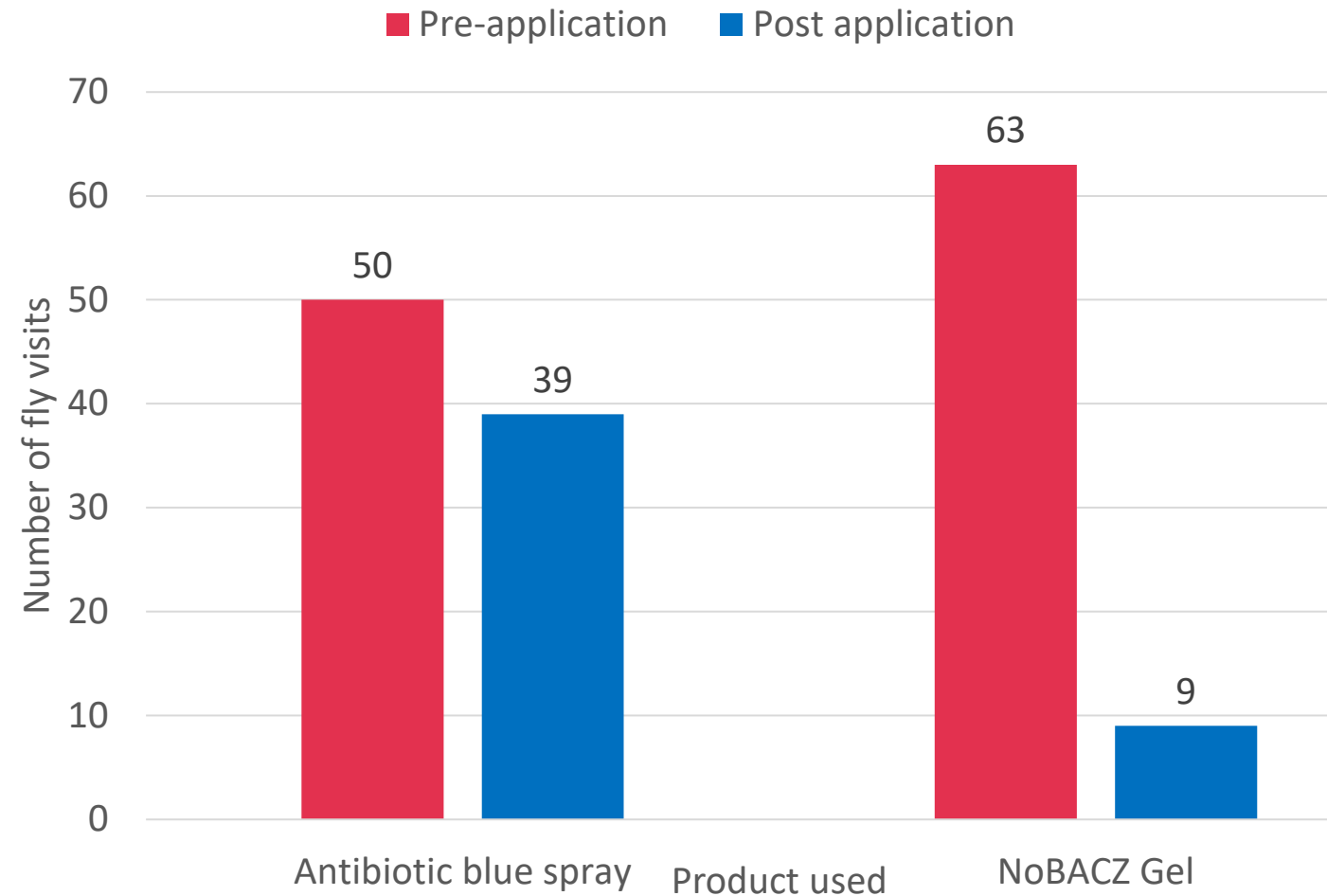
Instant curing when contacting aqueous slurry

Antibiotic losses to simulated slurry with and without barrier

Sci Rep . 2020 Sep 15;10(1):15067. doi: 10.1038/s41598-020-71586-7. Robust rapid-setting antibacterial liquid bandages. C A P Bastos et al

Fly Visits: NoBACZ Gel versus Antibiotic

Example 2 of Tip 5: Smart visuals not
Nature data



And Finally: Where possible bootstrap and get to market uncomfortably early but safely.....



Sustainable Wound Care Solutions

Summary Lessons learned (so far)

- Immerse yourselves in the problem
- Clearly define, and stay within, the solution space
- Critically test your own solution- never get bored of stress testing
- Use Local Resource
- Generate smart visuals (market science)
- Bootstrap sensibly (finance / business are logic not magic)
- Get to a test market early and safely.
- Good luck- you make your own!

Thank you

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NoBACZ Healthcare

17th October 2023

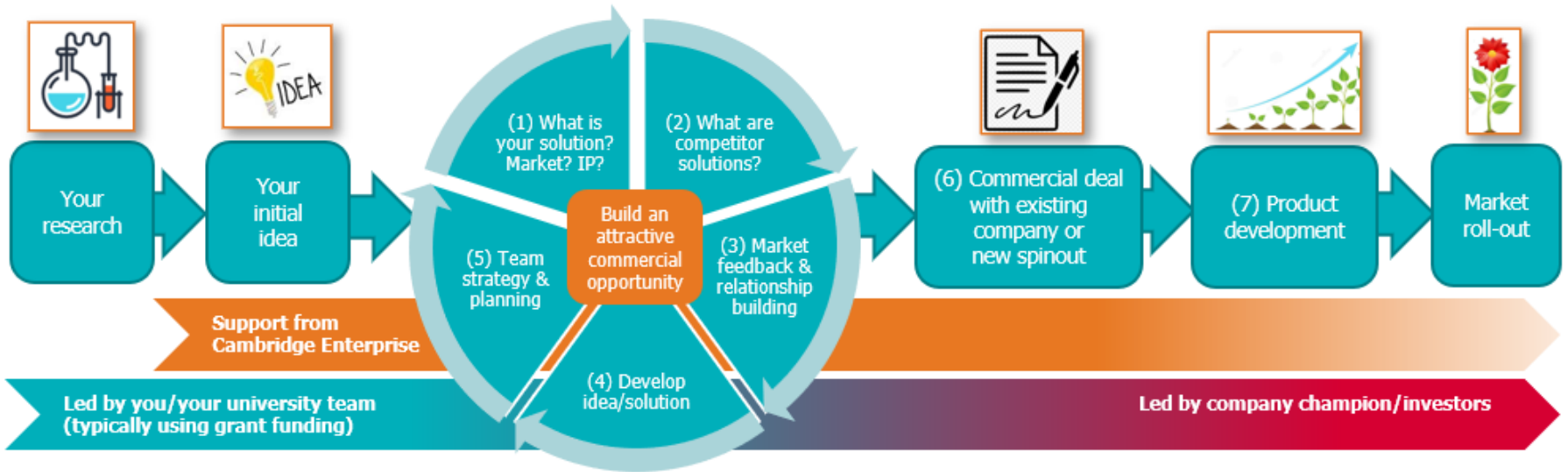
Dr Laura Donnelly

Commercialisation Manager at Cambridge Enterprise

Director of NoBACZ Healthcare



Commercialisation journey for a University idea



The NoBACZ Timeline



Initial disclosure to CE

Market research

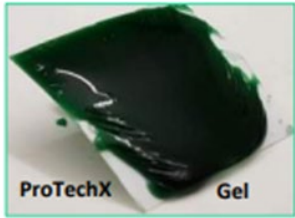
Pre-seed funding

First patent filing (Aug 2020)

Seed Extension March 2023



2017 2018 2019 2020 2021 2022 2023 2024



NoBACZ incorporated (Dec 2019)

IP Licence (Oct 2020)

Seed Raise (Oct 2020)



NoBACZ Healthcare

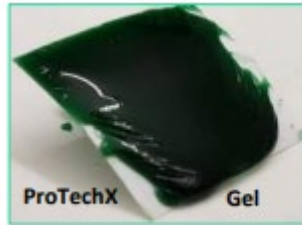


Building the opportunity: Market insight



 UNIVERSITY OF
CAMBRIDGE
enterprise PoC Funds

 Stonehaven
Consulting



*Adhesive
&
Flexible*



Thickness



Drying Speed

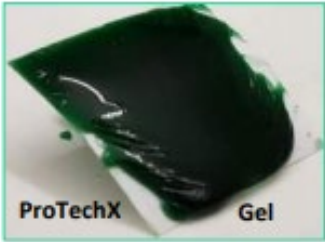


Dissolving
Speed



Digital dermatitis
market size
>\$100m

Building the opportunity: Market insight



Adhesive
&
Flexible



Thickness

Drying Speed

Dissolving
Speed



Farm and
companion animal
market size >\$800m



Building the opportunity

Pre-seed funding- summer 2020

- Select Manufacturer
- Design clinical trial
- Understand regulations
- Fundraising activities
- Establish company operations
- Development of commercial strategy

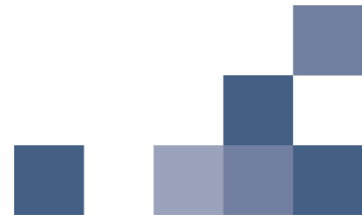


Fundraising: Seed Raise

Seed Raise: Oct 2020

- Cambridge Enterprise Seed Funds
- Angels
- Martlet Capital

Innovate UK



Fundraising: Seed Extension

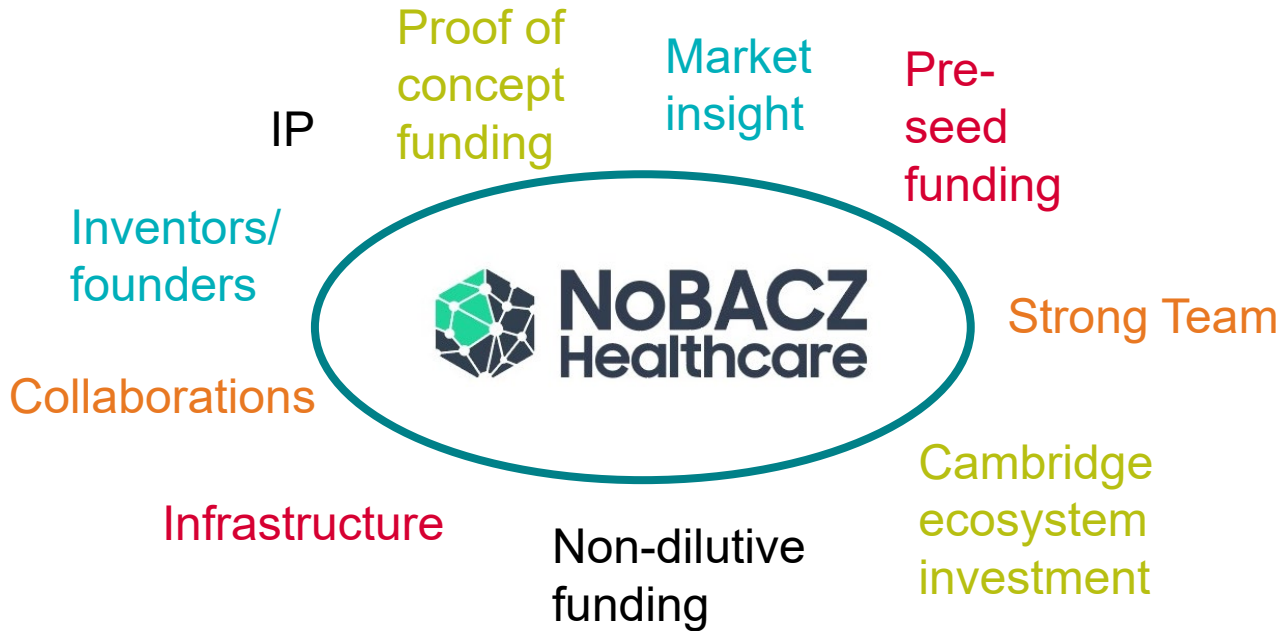
Seed Extension March 2023

- Cambridge Enterprise Seed Funds
- Martlet
- Angels
- **The Yield lab**

Innovate UK



NoBACZ Healthcare Ltd



Thank you



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enterprise

Dr Carmen Palacios-Berraquero

Founder and CEO of Nu Quantum



Desmond Cheung

Senior Investment Analyst at Cambridge Enterprise





Cambridge Enterprise Seed Funds

The Venture Investing Arm of the University of Cambridge

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17 October 2023



UNIVERSITY OF
CAMBRIDGE
enterprise

Cambridge Enterprise Seed Fund's Mission

- 1. We Back Our Own Companies**
We invest the University of Cambridge's money into its own spin-outs
- 2. Driven by Impact and Financial Return**
All investments should have high return potential – but must first also make positive impact on society
- 3. Rigorous Assessment and Governance**
Rigorous investment assessment with experienced investment committee governance
- 4. Develop Strong Syndicates and Partners**
Trusted investors and partners who co-invest and work with us regularly

Our Key Numbers

£38M

Invested over the fund lifetime

£3.1B

In follow-on funding raised by portfolio companies

4.27x

Multiple across realized investments

264

Investments made in 146 companies



Leading University Seed Fund



3rd Most Innovative University Ecosystem

Investment remit

PORTFOLIO VALUE: £124M

From Pre-seed to Series A

- Up to £2M in total available for each company
- Supporting 15 new businesses every year
- £7m to investment in sustainability by 2025

In 2021/2022

- £10.9m investment approved in 34 spin-outs
- 19 pre-seed investments
- 10 seed companies formed
- £11.8m returned to CE and the University (incl. realisations from licensing equity)

Our Investment Buckets

Sustainability

Deep Tech

POROTECH

river
Lane

nu QUANTUM

Zetta
CAMBRIDGE GAN DEVICES

Intellegens

Life Sciences

CENTESSA
PHARMACEUTICALS

aqdot
Psyomics
Transforming Mental Health

GYROSCOPE
Sphere
Fluidics

PHARMENABLE

Xampla

ECHION
TECHNOLOGIES

CPT

CAMBRIDGE PHOTON TECHNOLOGY

nyobolt

Carbon^{Re}

neutreeno

Social Ventures

wya

aspuna
invest. implement. impact

Founder talk

StemBond Technologies

Dr Andrew Hodgson

Founder and CEO of StemBond
Technologies



Dr Jason Mellad

Founder and CEO at Start Codon



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My Journey as an Academic Entrepreneur

Dr Andrew C Hodgson
Co-Founder & CEO

18th October 2023

info@stembond.tech

www.stembond.tech

I've always wanted to found and build a company.

"Any business as long as it's mine"

"This tech/idea is so good I need to found a company"

Motivation Spectrum

My Drive:

- Biotech
- Physics and Engineering
- Cancer

- Astrophysics
- Nanotech Enterprise
- PhD Physics

Focus and planning put me in the right place at the right time.



The Chalut group developed new biotechnology to harness cell function.

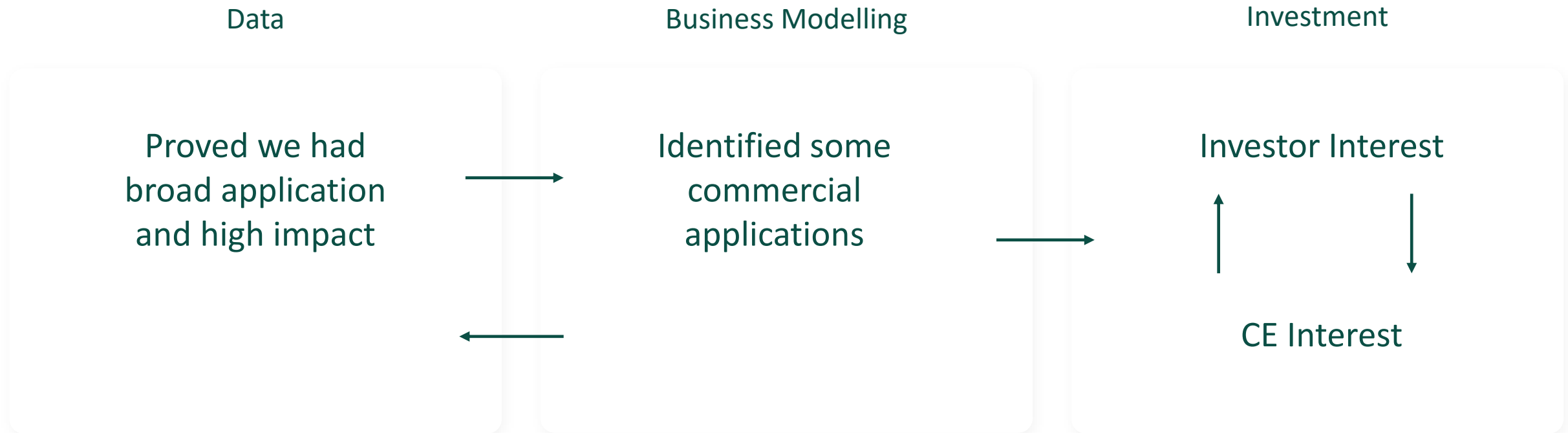


A new hydrogel was invented that could revolutionise cell culture.



We had a solution, but what was the right question?

We had to convince Cambridge Enterprise of a business opportunity to support the patent application.



Pre-`Pre-seed` goal if you have a UoC invention: coordinate investors and Cambridge Enterprise to license your IP and raise investment

Between Pre-seed and Seed, we defined the company vision, mission and focus.



- Built our board
- Rented space
- Hired staff

There is no fixed route, framing is critical, and this is not a ‘war’!



Build an idea of what is possible from as many talks and books as you can access.



Frame your idea in a way that interests your audience.

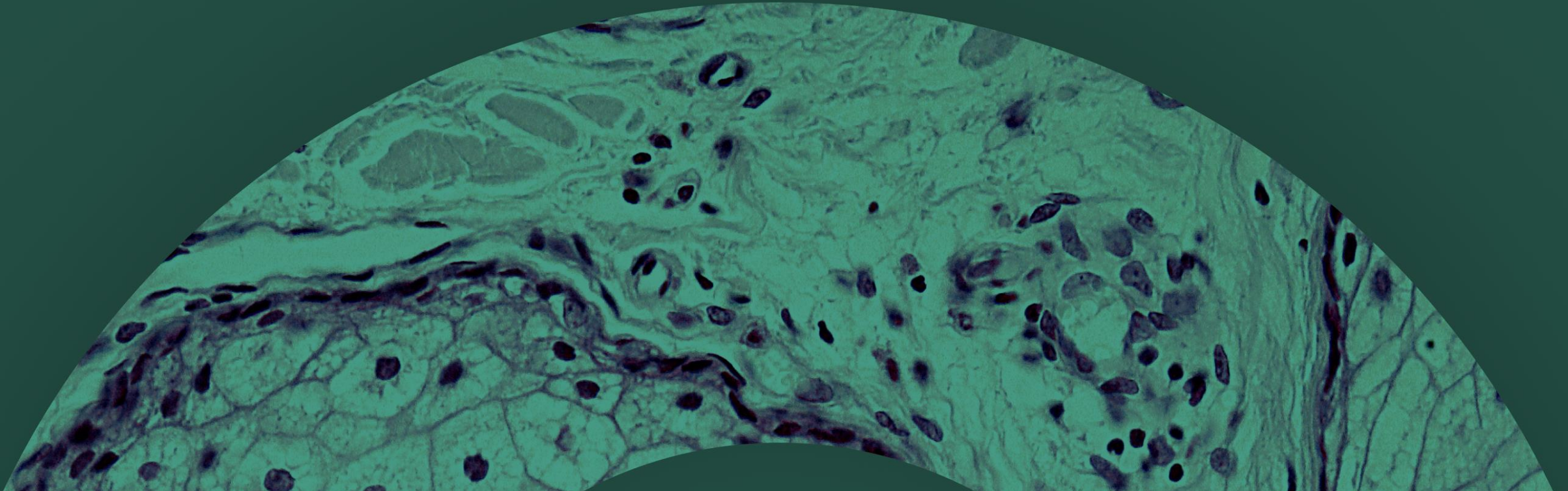


Find a way to make this fun for you. It's not a battle; it's your life. [Look after yourself and enjoy it.](#)



Enhancing the Human Immune System

info@stembond.tech | www.stembond.tech



Founder talk

Mosaic Therapeutics

Dr Adrian Ibrahim

Co-Founder and SVP of Mosaic Therapeutics



Dr Anne Horgan

Partner at Cambridge Innovation Capital



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CIC at a glance

Founded in
2013

>£0.5bn
Assets under management

2 IPOs
4 unicorns

>40
Portfolio companies

>£0.25bn
Invested in portfolio

>£2.4bn
Raised by portfolio

Our investment team



Andrew Williamson
Managing Partner



Paul Anson
Operating Partner



Michael Anstey
Partner



Anne Horgan
Partner



Edward Inns
Senior Associate



Ian Jauncey
Operating Partner



Ian Lane
Partner



Dipesh Patel
Operating Partner



Robert Tansley
Partner



Chris Tapper
Senior Associate

Our operations team



Rob Sprawson
Partner and CFO



Eva Bello
Executive Assistant



Tori Denman
Investor Relations



Stefan Galander
Operations Analyst



Michelle Lamprecht
Head of Corporate Affairs



Matt Maynard
Events Manager



Nick Richards
General Counsel



Vivien Szolik
Receptionist



Sylwia Szulc
Finance Manager



Victoria Woodward
Head of Business Support

Professor Neil Lawrence, Adviser in Residence
Mihriban Tuna, Entrepreneur in Residence
Rupert Baines, Entrepreneur in Residence
Damian Crowther, Entrepreneur in Residence



CIC investment sectors



Future of Compute

Artificial intelligence
Semiconductor design
Quantum computing



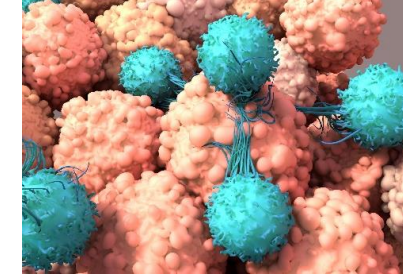
ClimateTech

Renewable energy
Energy storage
Sustainable materials



MedTech

Robotics
Genomics
Diagnostics and devices



Therapeutics

Small and large molecules
Advanced therapies
Digital therapeutics

CIC portfolio companies



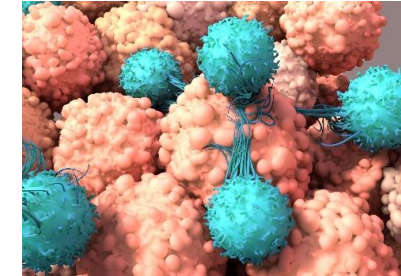
Future of Compute



ClimateTech



MedTech



Therapeutics

river
lane

AudioTelligence

Cytora

CGD
CAMBRIDGE GAN DEVICES

CMR
SURGICAL

STORM
THERAPEUTICS

UnlikelyAI

SELDON

EPITOPEA

Carrick
therapeutics

Pragmatic

Congenica

Origami
ENERGY TECHNOLOGY

Secondmind

Complement
THERAPEUTICS

Salience
Labs

Bicycle

PRETZEL
THERAPEUTICS

NSTREAM

Fluidic
Analytics

IMMUTRIN

MOSAIC TX

predict
IMMUNE

PervasID

microbiotica

Exited

imagen

Inivata

sense

Audio
Analytic

PetMedix
ANTIBODY INNOVATION IN ANIMAL HEALTH

GYROSCOPE
VISION FOR LIFE

MORPHOGEN-IX

ZFactor

CIC portfolio companies have raised over £2.4bn in capital from specialist investors and strategics

Life Sciences



Deeptech



Q&A panel

Founders



Dr Jonathan Powell



Dr Carmen Palacios-Berraquero



Dr Andrew Hodgson



Dr Adrian Ibrahim



Dr Phil Elstob



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Q&A panel

Accelerators, investors and advisors



Dr Laura Donnelly



Desmond Cheung



Dr Jason Mellad



Dr Anne Horgan



Dr Robert Tansley



Spinning out your research – the journey of an academic entrepreneur


Welcome

Dr Christine Martin

Head of Seed Funds, Cambridge Enterprise



Spinning out your research – the journey of an academic entrepreneur



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