



A Sticky Business: Who funds Science Research?

16th June 2021

David Collier, PhD

Business Development & Partnerships Manager

Contents

- Who funds science research?
- Working with companies
- The role of Partnerships Manager
- Who owns research? - Intellectual Property
- Universities and the economy - Knowledge Transfer
- Case study
- My journey in science

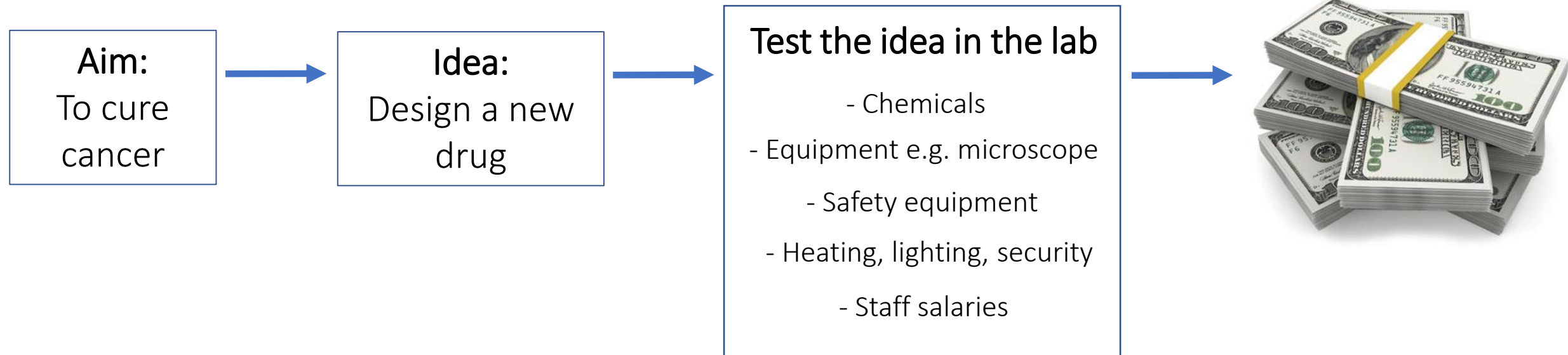
Who Funds Research?

Many of you will be familiar with the idea of scientific research in the lab



Who Funds Research?

But how many of you have stopped to consider who funds that research?



Who Funds Research?

- Research councils (e.g. MRC)
- Private funders (e.g. Wellcome Trust)
- Charities (e.g. CRUK and BHF)
- Foundations (e.g. the Gates Foundation)



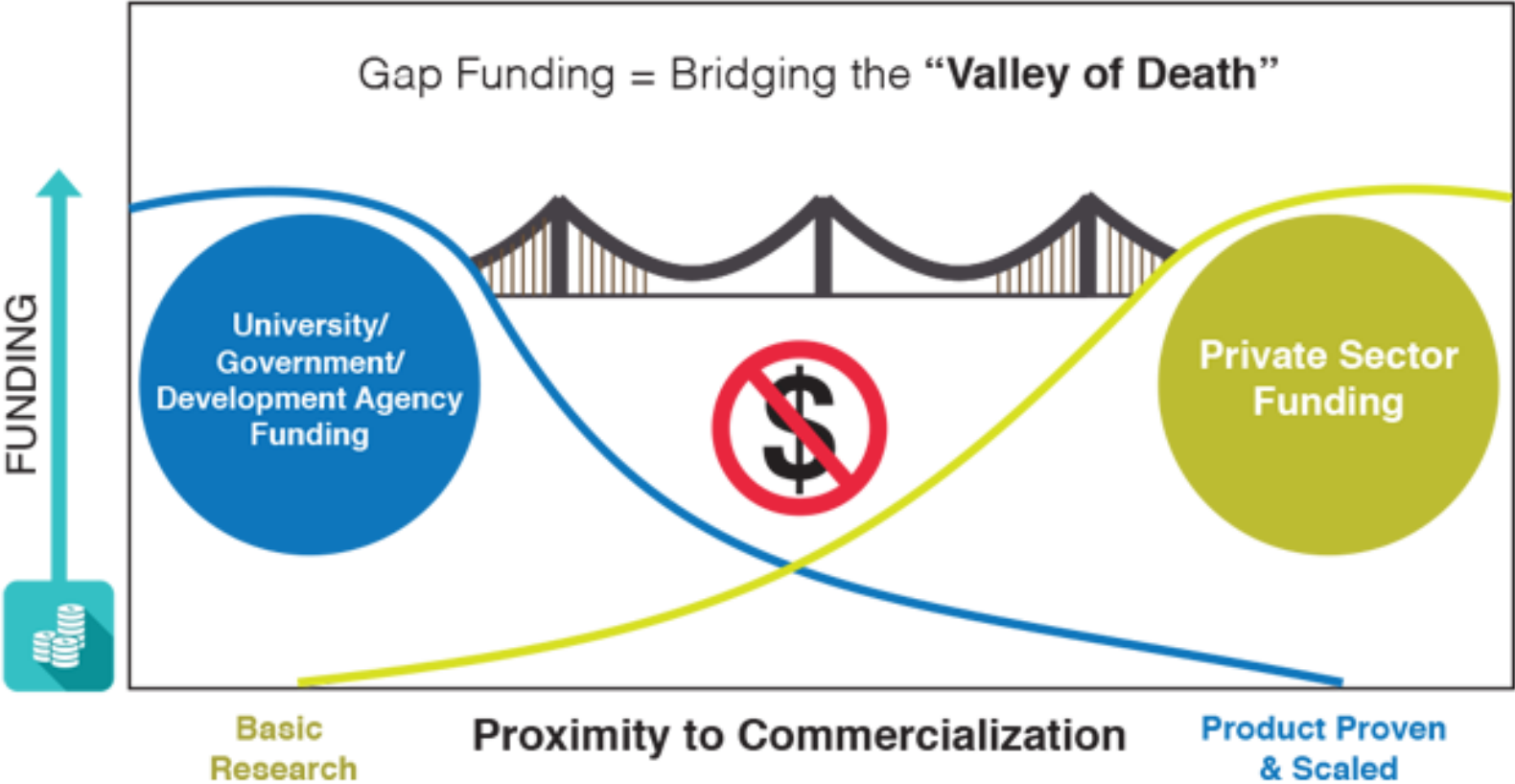
What about company funding?

Business Development Team exists to help academics:

- talk to companies
- negotiate with companies
- secure funding from companies

Why is industry funding important?

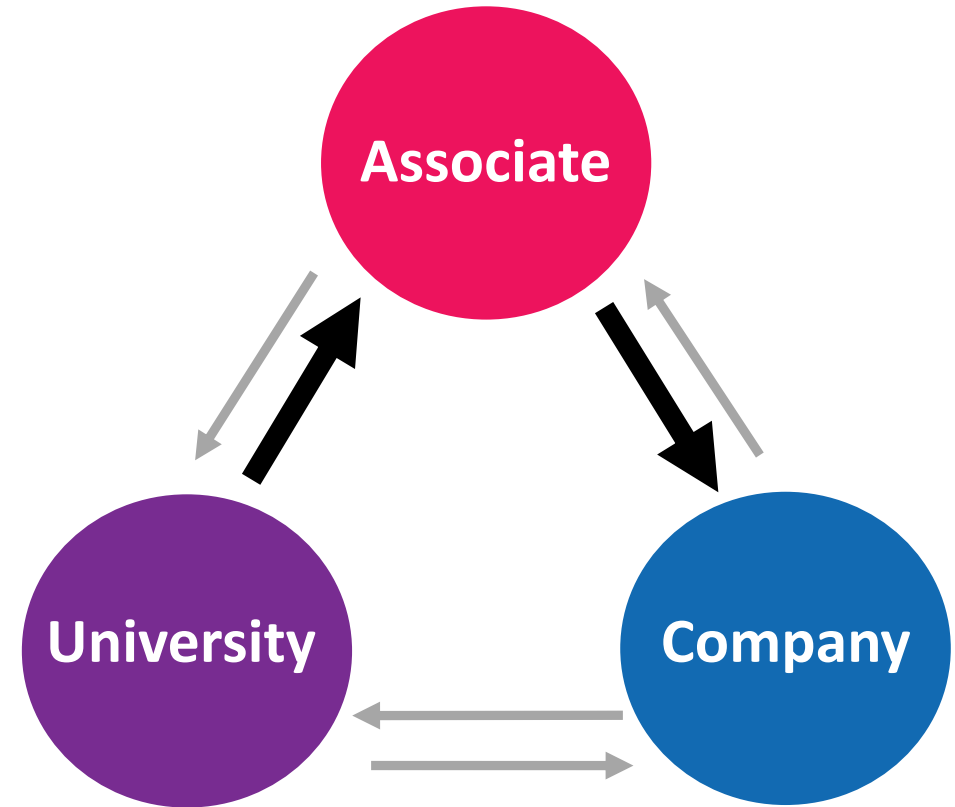
Most early stage research fails to make it to patients. Industry funding for university research helps to bridge the 'valley of death'



Who owns discoveries?

- Intellectual property = ideas, know-how, patents, inventions
- Who owns the discoveries depends on:
 - intellectual contribution
 - financial contribution
 - existing IP brought to the collaboration
 - previous contracts
- Technology Transfer professionals deal with IP, patents and spin-out companies

What is a Knowledge Transfer Partnership (KTP)?



KTP = three way partnership for the transfer of knowledge from a University to a Company



What is a Knowledge Transfer Partnership (KTP)?



Company has problem it
can't solve



What is a Knowledge Transfer Partnership (KTP)?



Company engages with a
university



What is a Knowledge Transfer Partnership (KTP)?



University knowledge
allows Company to
overcome problem and
achieve greater
prosperity



KTP Case Study

The Sugru logo consists of the word "Sugru" in a white, rounded, sans-serif font, set against a red, rounded rectangular background.

'Fix, improve and reimagine the things we already have. If we double the life of our stuff, we halve what goes to landfill.'

Sugru is a mouldable glue used to stick anything to anything; to fix things that would otherwise be thrown away.

Obstacle: To enter new markets Sugru needed to develop its product, but didn't know how

Solution: Work with QMUL chemists to learn about flexible-linker chemistry

Realisation: KTP with QMUL

Benefits for company: New, improved Sugru is now usable in toys and factory processes

Benefits for university:

- two academic papers
- won a Future Innovator Award
- new IP generated



KTP Case Study



Lucideon is a materials development company, working in medical ceramics & healthcare.

Obstacle: High outsourcing fees for cell/ceramic testing

Potential solution: develop in-house cell culture facility

Realisation: KTP with QMUL

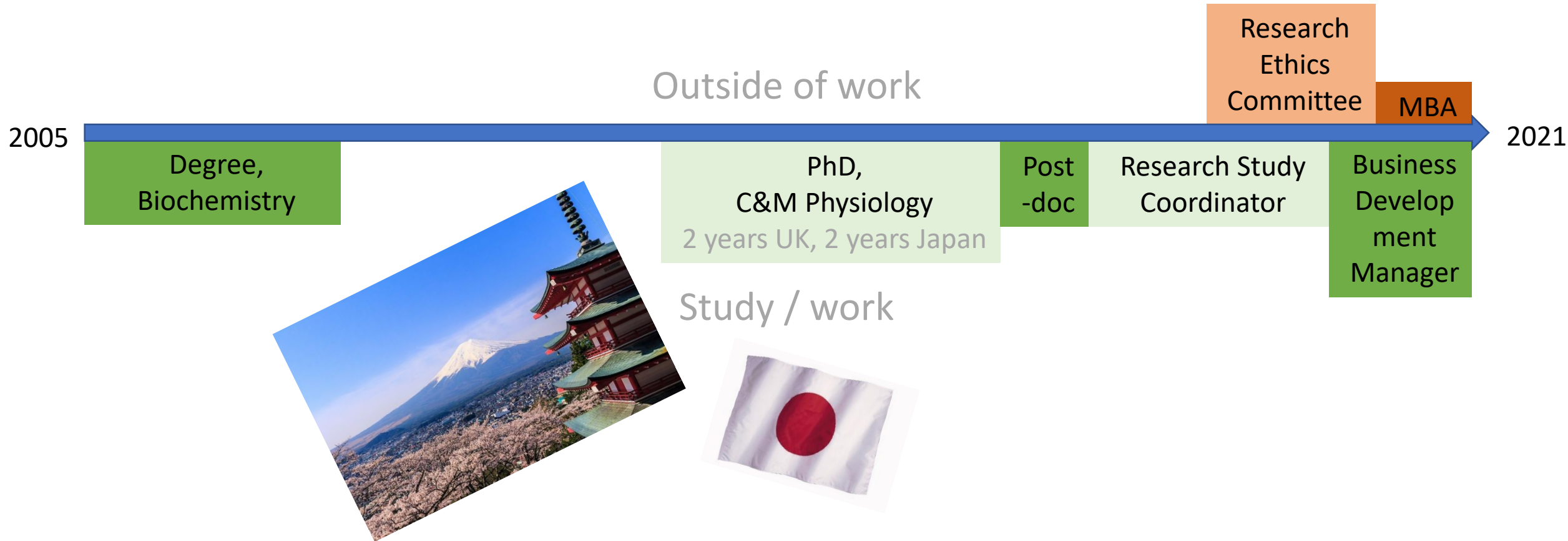
Benefits for company : Company can do its own cell testing indefinitely, saving money and facilitating innovation

Benefits for university:

- long-term relationship with company
- papers & case studies
- new IP generation



My Journey



Wrap-up

- The importance of funding for making research happen
- Sources of funding - Research Councils, Charities etc
- Company funding for translation of research
- Intellectual Property
- Knowledge Exchange/Transfer
- Alternative careers in science & innovation:
 - PhD & post-doc (laboratory scientist)
 - Research study coordinator (patient consent, sample & data management, ethics & regulatory)
 - Business Development & Partnerships (connecting academics to companies, research funding, contracts)
 - Technology Transfer (university intellectual property & licensing)
 - KTP Associate (similar to a post-doc but based at a company)
 - Research policy or grants (work for university or research funder)



Queen Mary

University of London