

International Health Summit

- Prague Symposium
Investing in Innovation

Alan Langlands

6 September



A new imperative

- foresight
- research and development
- technology transfer
- technology assessment
- service transformation

Key innovations

- education
- research and development
- health systems

...and a working example



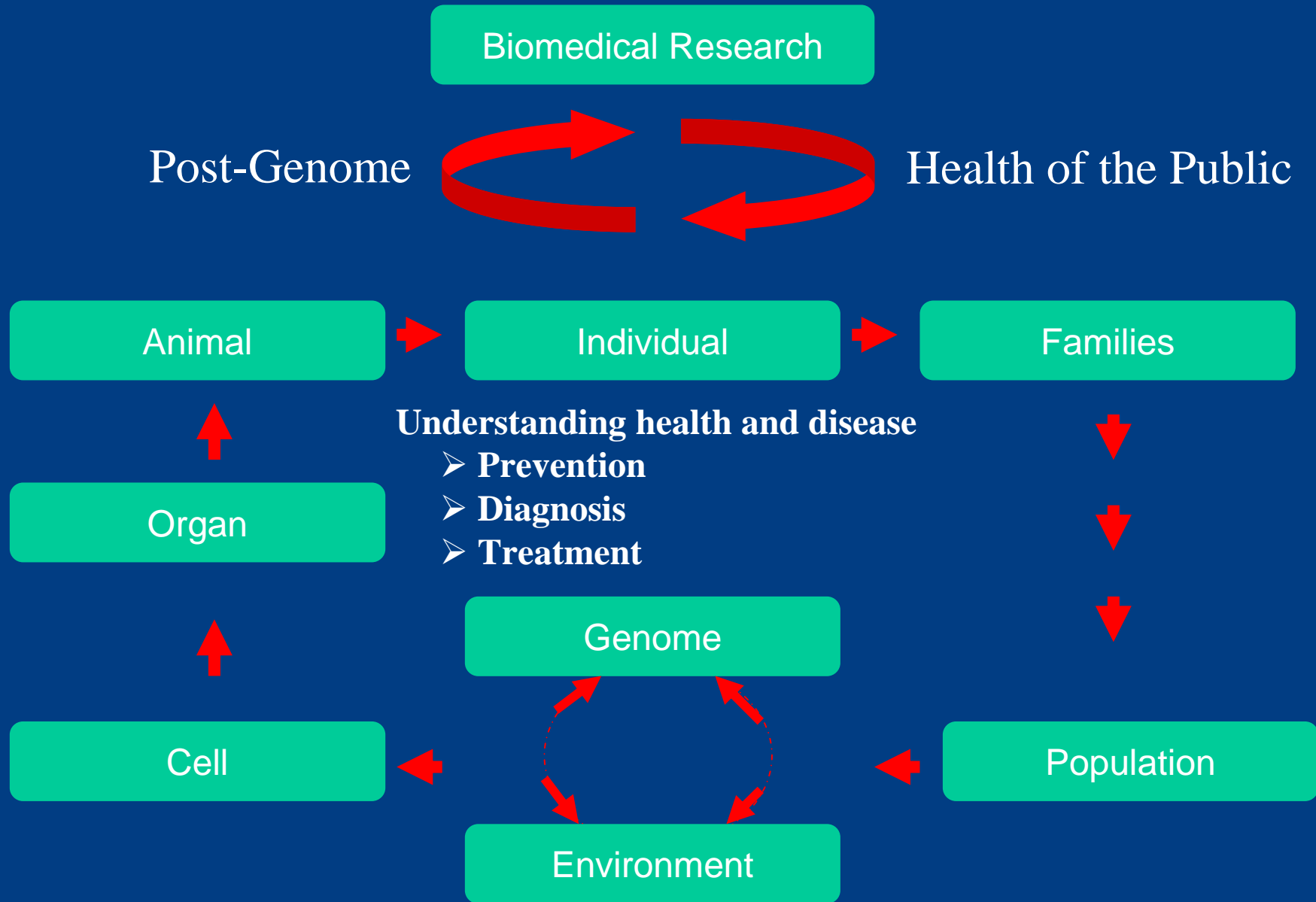


Dundee - Science City

- 3,800 people employed in biotechnology & life sciences research
- c. £60m generated in research & commercial income
- 8 of the world's top 10 pharma companies have research contracts in Dundee
- 25 biotechnology companies in Tayside including the European HQ of Upstate

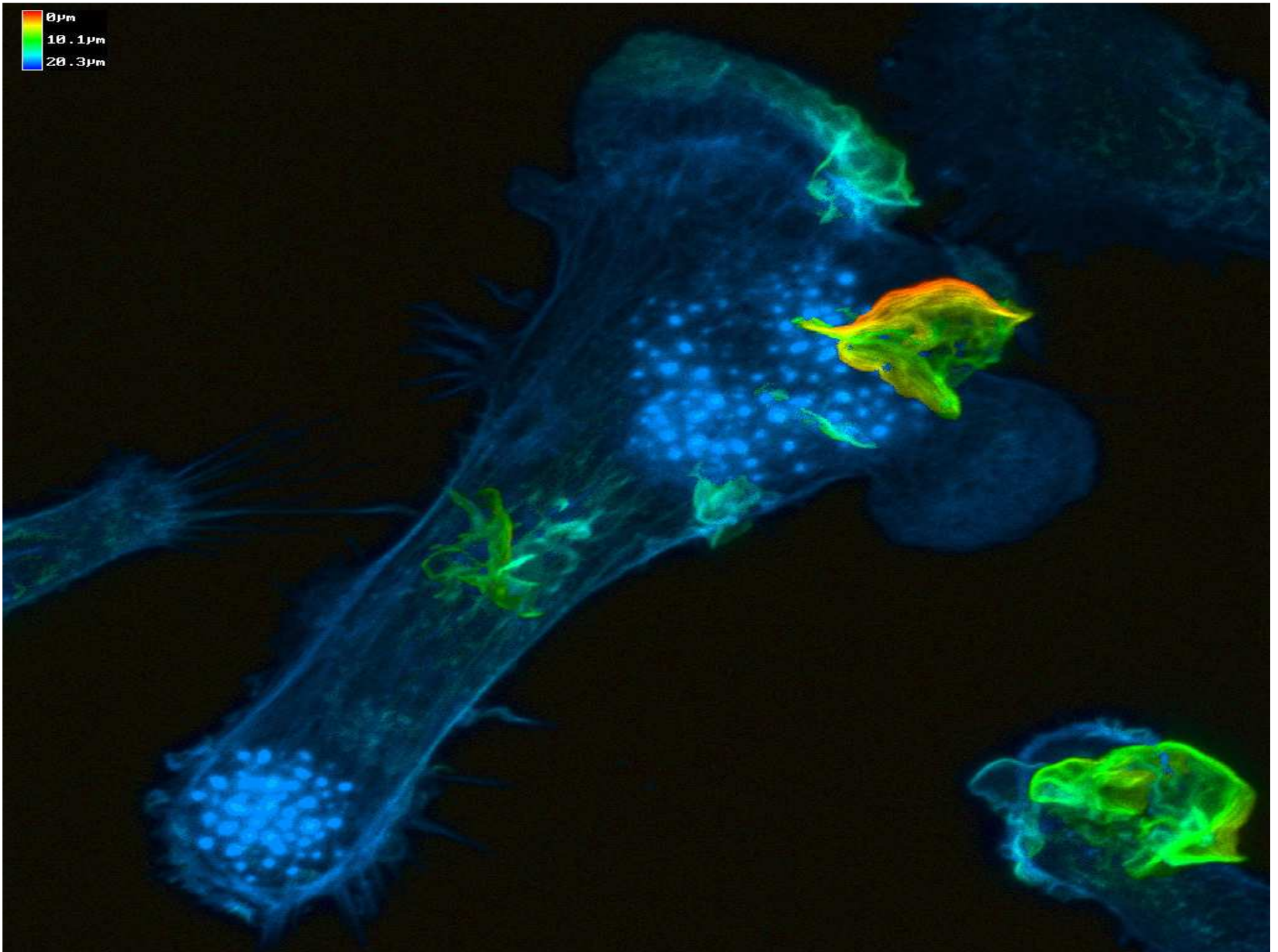


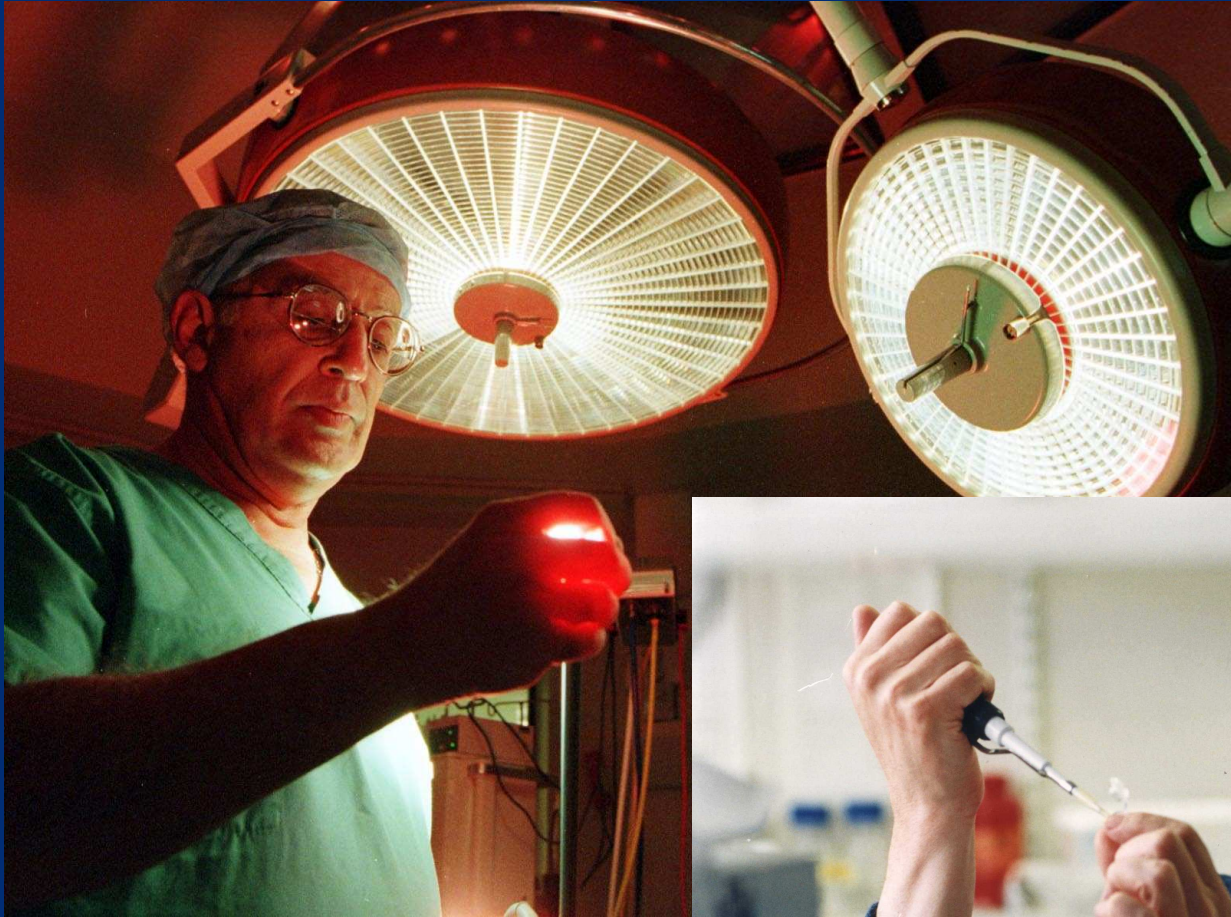
The Biomedical Research Cycle



Science and Policy Challenges Ahead

- Holistic approach
- New diagnostics
- Translating results into clinical practice
- Multi-disciplinary working
- Forging partnerships
- Training and retaining researchers
- Engaging the public







The Virtuous Circle of Research & Enterprise

Spin outs and licensing deals which sponsor research

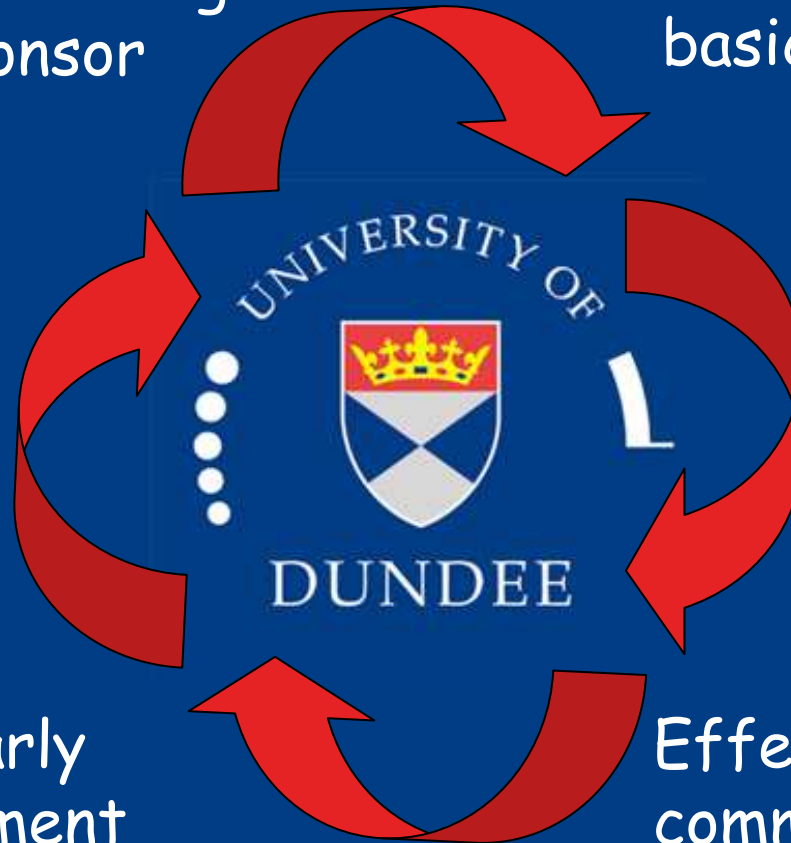
Funding for high quality basic research

Incubation - facilities and services

Programs in Entrepreneurship and new business skills

Funding for early stage development

Effective commercialisation strategies



High Quality Basic Research

- 69 research groups in Life Sciences
- World ranking cancer research
- Staff from 44 nationalities
- Diversity in funding sources
- New infrastructure (centres for post-genomics, high resolution imaging & informatics, mathematical biology)

Entrepreneurship & New Business Skills

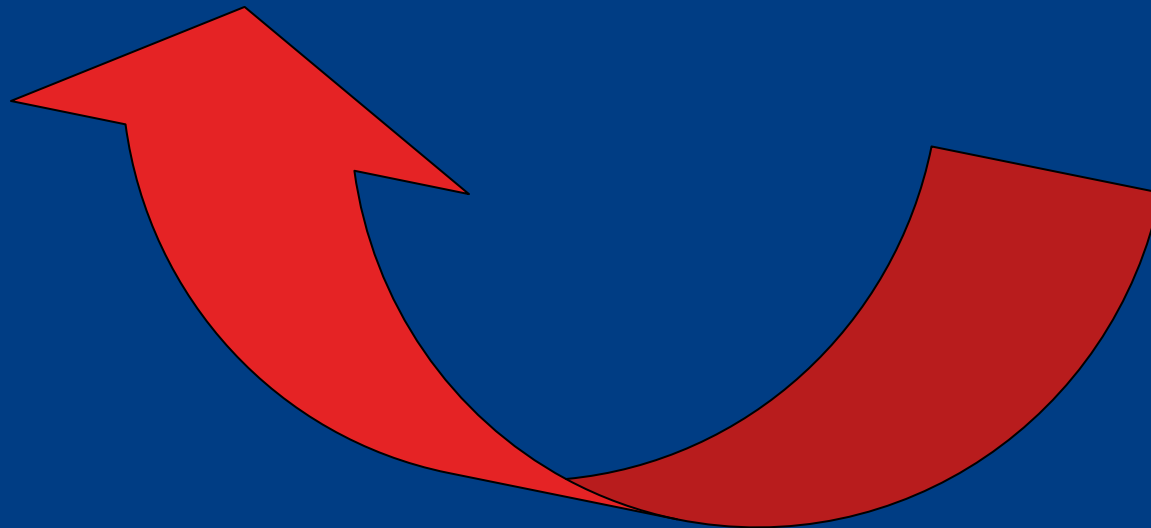
- The Scottish Institute for Enterprise
- The Dundee Centre for Enterprise Management

Linking to an international network through the Cambridge - MIT partnership.

Effective commercialisation strategies

- Direct licensing to an established company
- Consortium arrangements (eg Division of Signal Transduction Therapy)
- Spin out companies (eg Cyclacel)

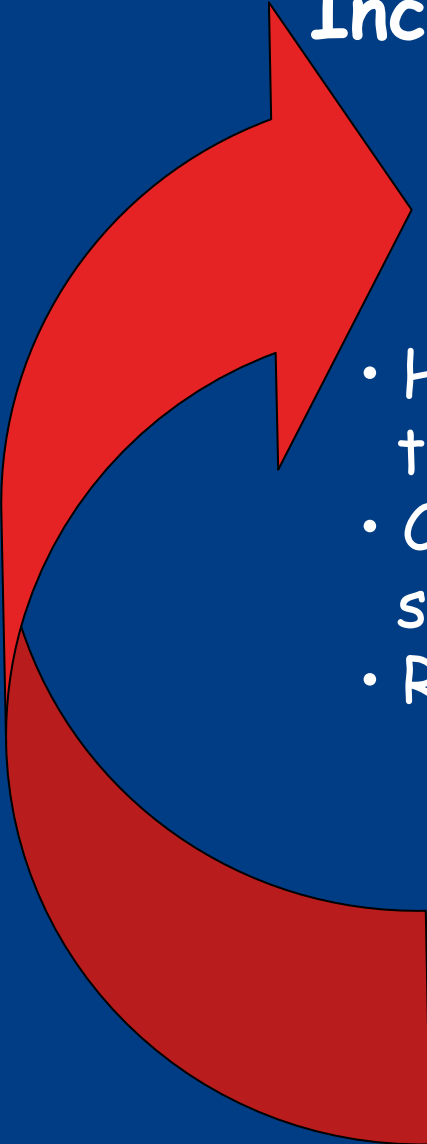
Dundee University Business Ventures Group



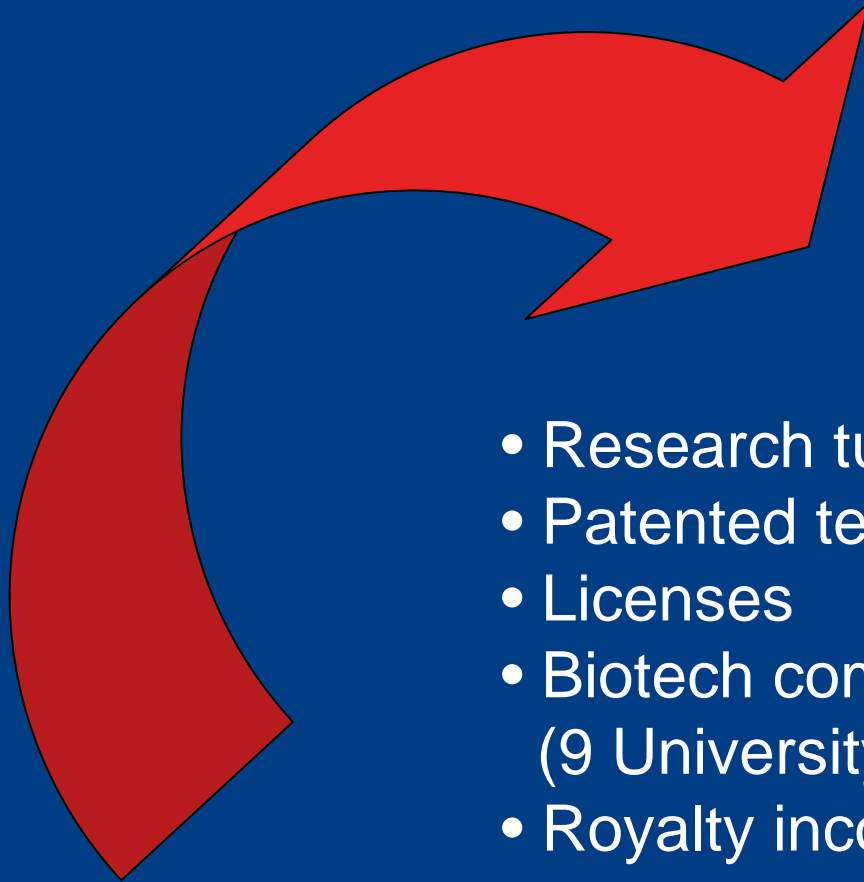
Funding Early Stage Development

- Dundee University Business Venture Fund
- Proof of Concept Fund
- University Challenge Fund
(Dundee, St Andrews, Aberdeen)
- Partnerships with venture capitalists & business angels
- Intermediary Technology Institutes

Incubation Facilities & Services

- 
- High quality / low cost facilities, close to the campus
 - Continued access to equipment & new business skills programs
 - Responsive services
 - business development & technology transfer
 - financial and legal
 - human resource management
 - personal mentorship

Spin Outs & Licensing Deals



- Research turnover £50m
- Patented technologies 84
- Licenses 40
- Biotech companies 18
(9 University spin-outs)
- Royalty income £1.3m

The Virtuous Circle of Research & Enterprise

Spin outs and licensing deals which sponsor research

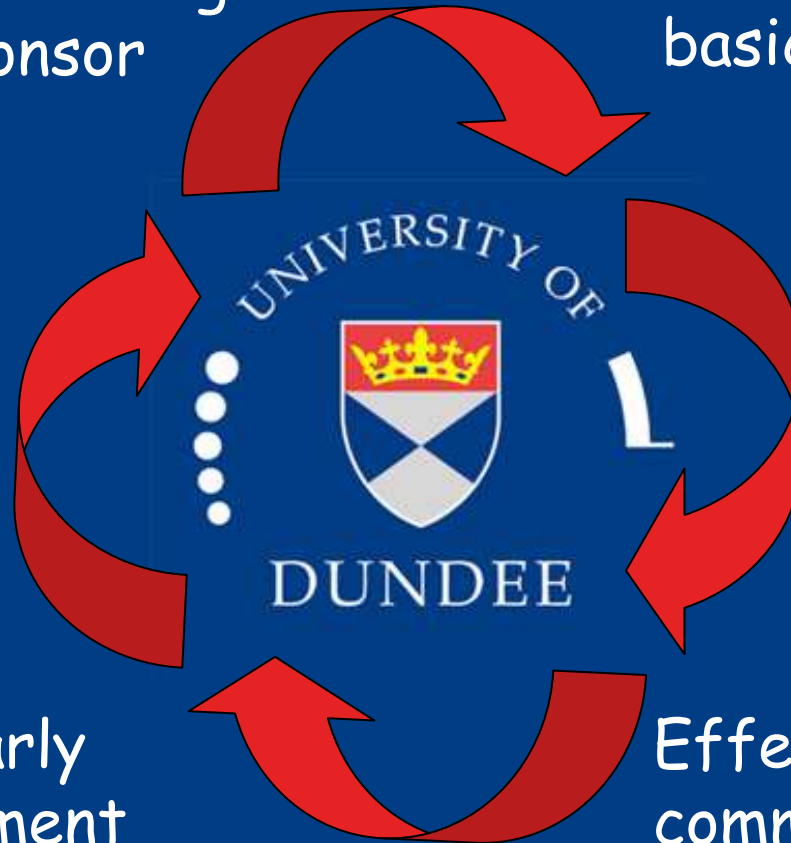
Funding for high quality basic research

Incubation - facilities and services

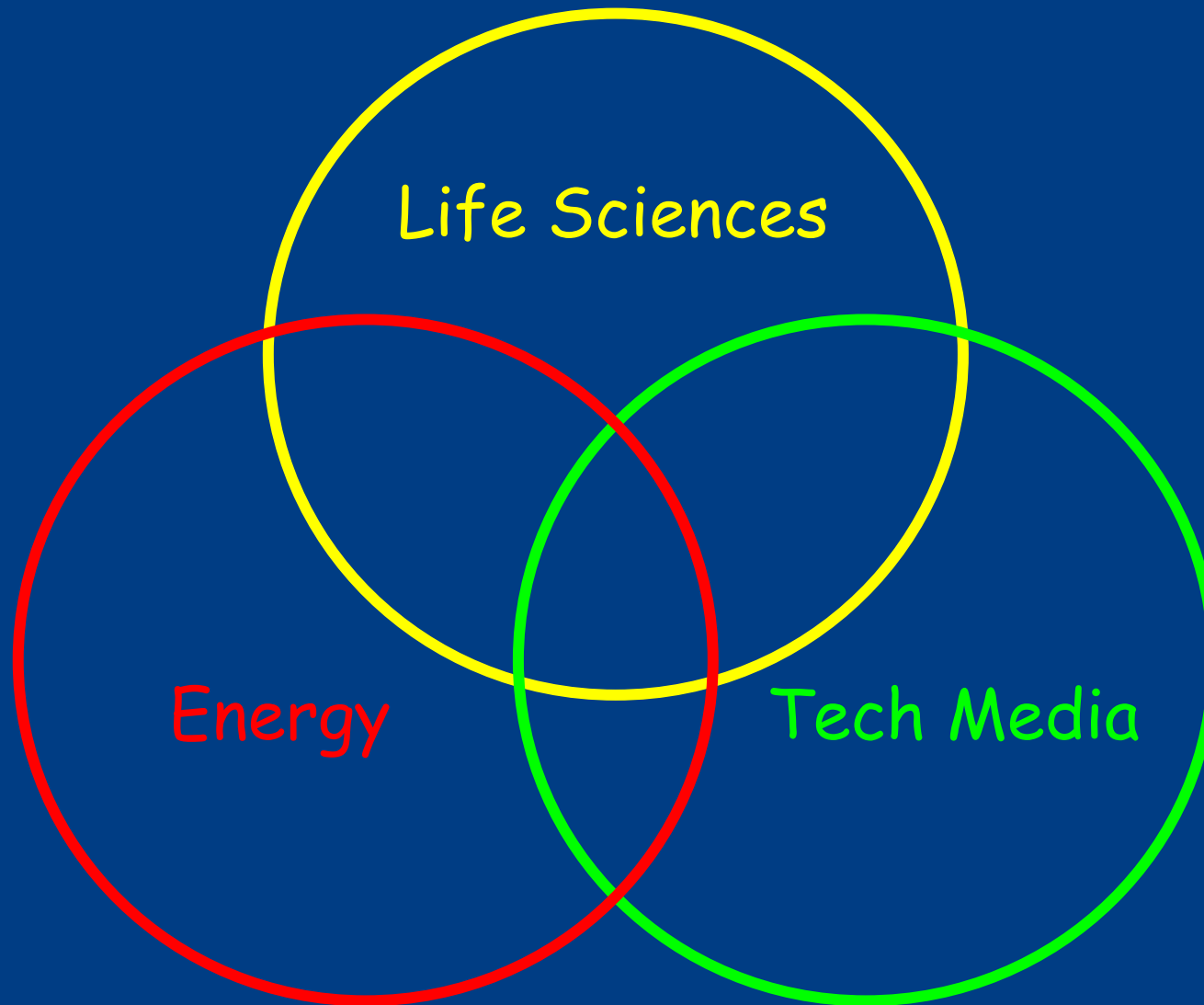
Programs in Entrepreneurship and new business skills

Funding for early stage development

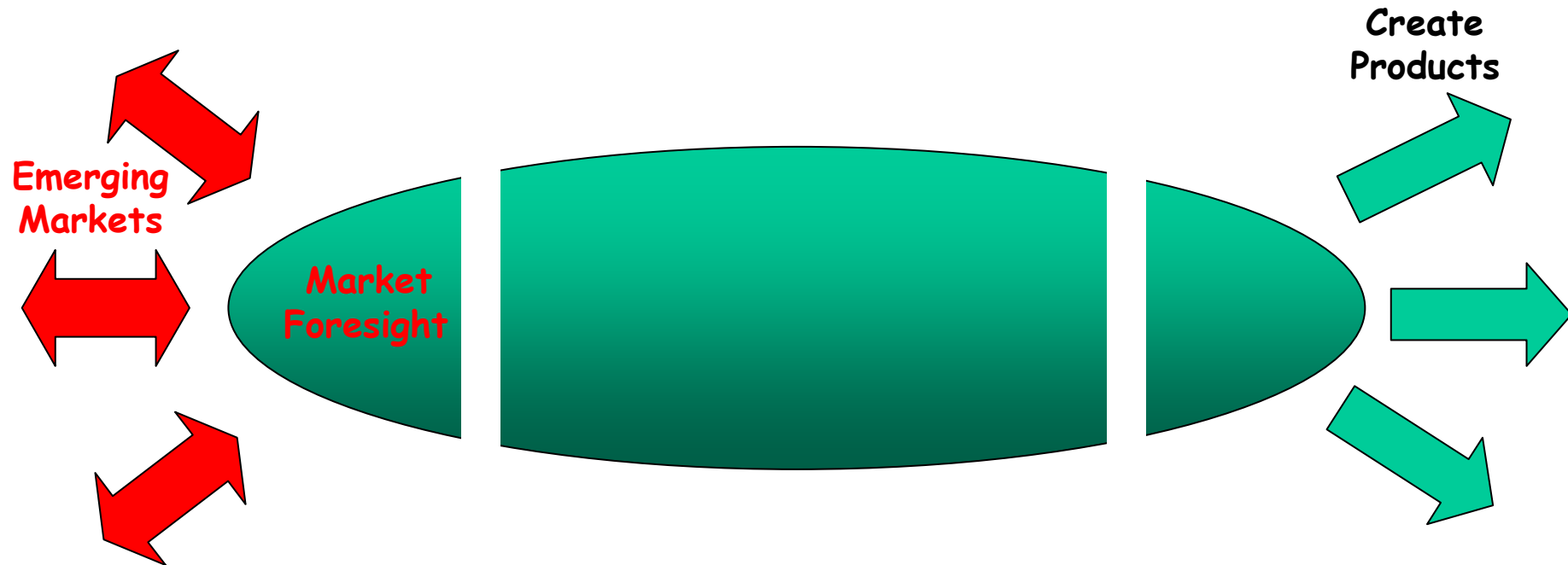
Effective commercialisation strategies



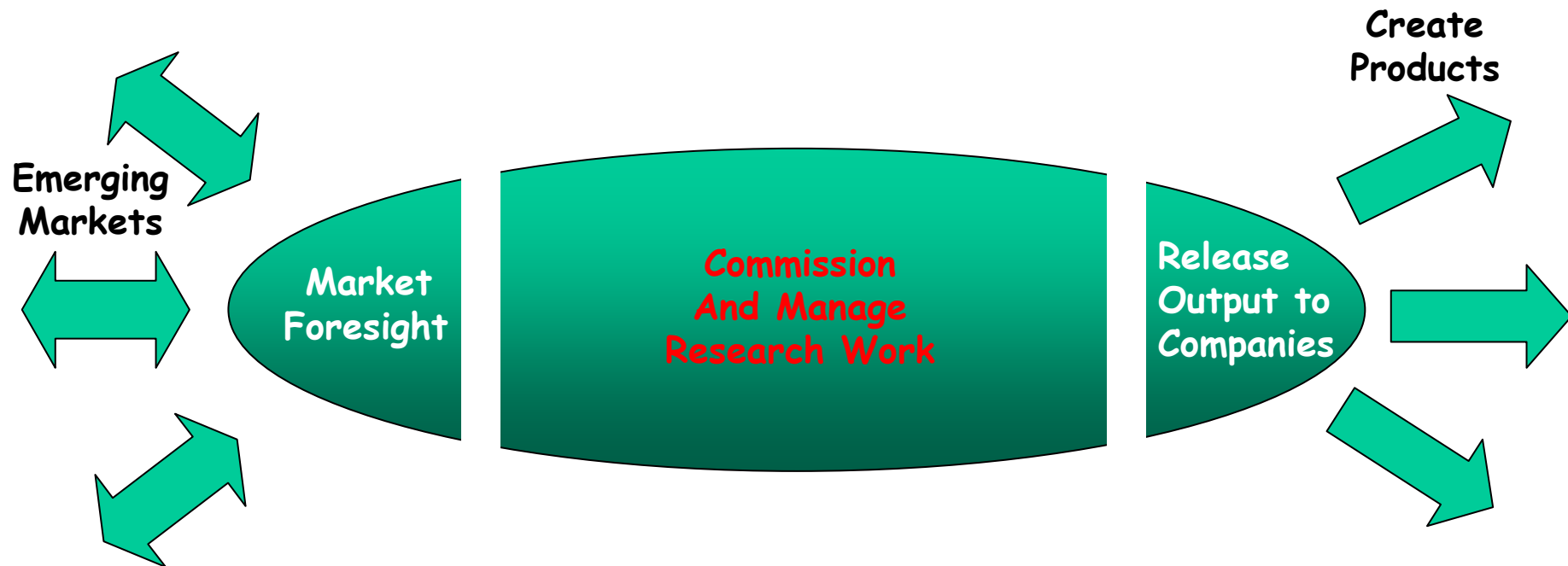
Intermediary Technology Institutes



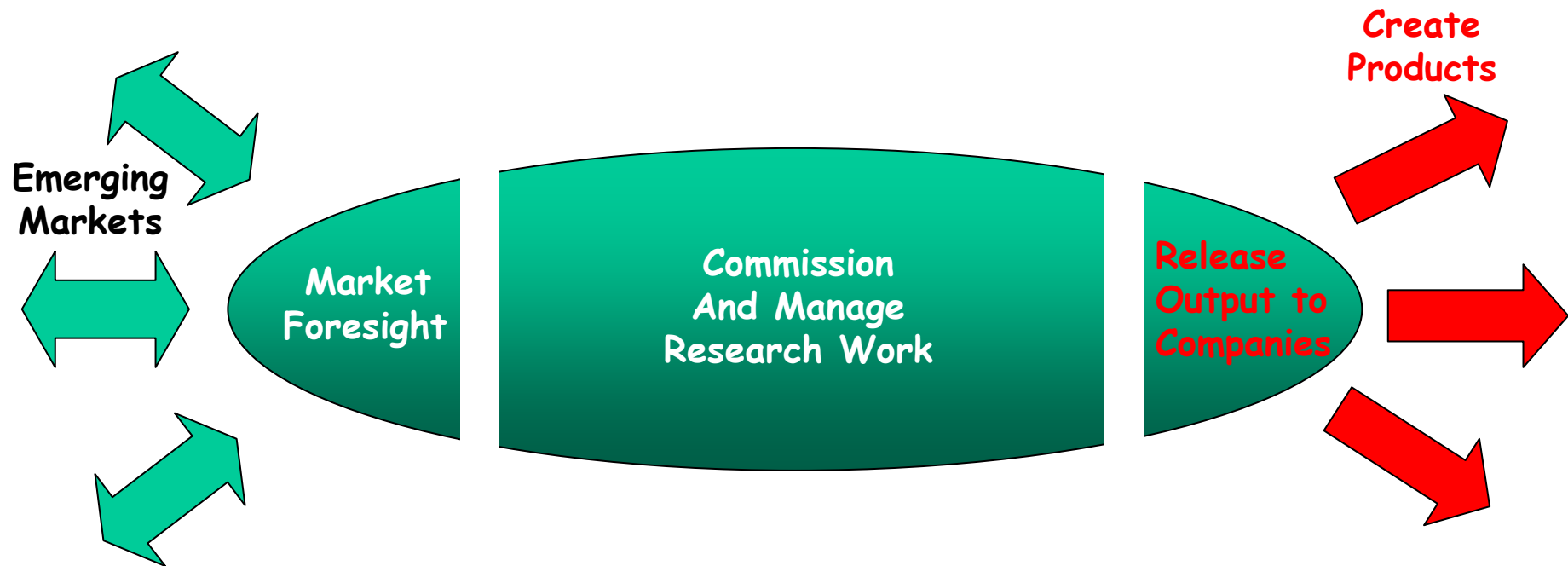
Foresighting Emerging Markets



Developing Platform Technologies



Creating New Market Opportunities



The Dundee Life Science Cluster

- Increased research funding
- Growth in company base
 - Local generation
- Top location for Life Sciences in Europe
- Contributes to Scotland's economy
- 2nd most important Life Science Cluster in the UK
- Location for Life Science Intermediary Technology Centre (£15m per annum 10 years)



More Information

a.langlands@dundee.ac.uk

www.dundee.ac.uk

