

The EPSRC and MRC Centre for Doctoral Training in Optical Medical Imaging

The PhD with Integrated Study in Science and Entrepreneurship

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EPSRC Engineering and Physical Sciences Research Council



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OPTIMA CDT – Key Aims

- Excellent physical sciences training focused on healthcare
- Ensure students are 'business ready' and able to lead in commercial and academic sectors
- Training and exposure to the direct clinical context
- Employability via excellent scientific, business and transferable skill training
- Impact through public communication, clinical and commercial translation.





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Integrated study programme: Healthcare Innovation and Entrepreneurship

- New degree PhD with Integrated Study
- 180 credits at SCQF11 (Masters) delivered over 4 years
- Year 1 and 2 many are bespoke courses for OPTIMA
- Year 3 and 4 join MSc Entrepreneurship and Innovation











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Year	Course	Credits
1	Grand Challenge in Optical Medical Imaging	20
	Innovation-driven Entrepreneurship	10
	Build your own spectrometer	10
2	Ethics and Regulatory Processes in Translating Innovation from Bench to Man	20
	Translational Study – Innovation and Entrepreneurship Masterclass	20
3	Entrepreneurship, Innovation and Commercialisation	10
	Choice of course e.g. Entrepreneurial Finance	15
	Three Month Placement	60
4	Choice of course e.g. Entrpreneurial Challenge: Creating a new Venture	15









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Evidence for success??

1. Student experience:

2.5 years in – semi-structured interviews with 10 students

2. Response of placement hosts:

Detailed questionnaire post-placement







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Student Experience : Value of integrated study programme?

Increased skill-set – both in terms of researcher development and moving into non-academic world

Wider network and perspective on career options







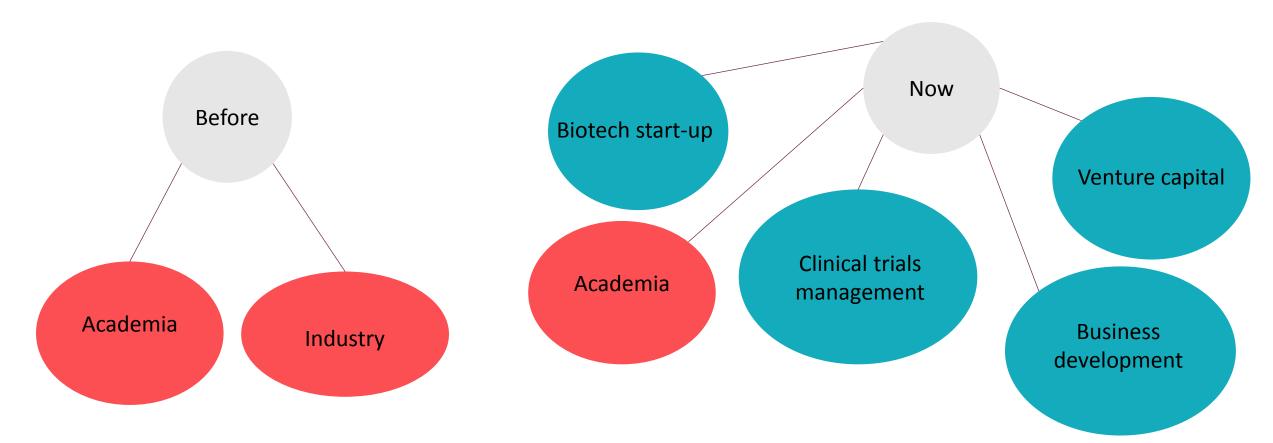




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Career then versus now



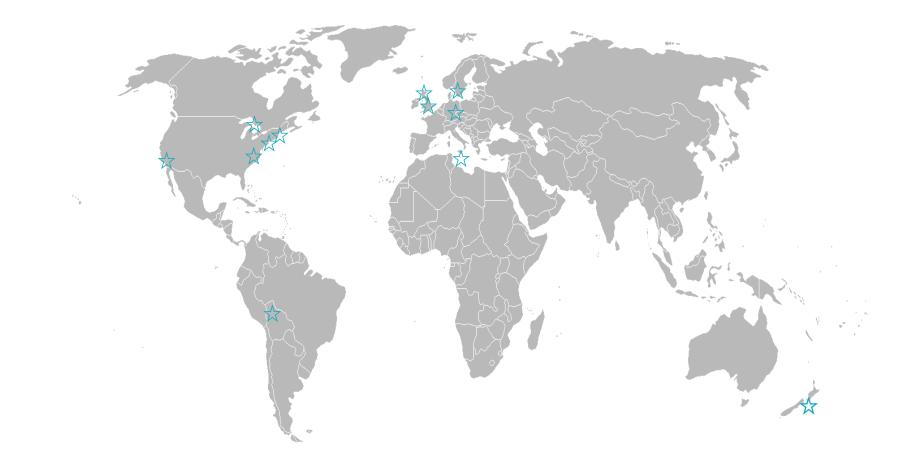








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Host organisation response to training programme - Placements

OPTIMA students are valuable to their business

The positive impact and demonstrable benefit she has made ... has been fully recognised to the extent that company leadership have agreed to establish this as a permanent function within the operation

Host company 1

[OPTIMA student] created a useful framework for presentation of application and country specific market research that we intend to use for further country/application research

Host company 2









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Summary: Thoughts and reflections

- Co creation of programme between School of Chemistry and Business School
- Value of integrated study programme:
 - skills-gap in PhD training
 - Students' perception broadened in terms of career opportunities
 - Host organisations' response
- Placements critical to consolidate and validate new skills







