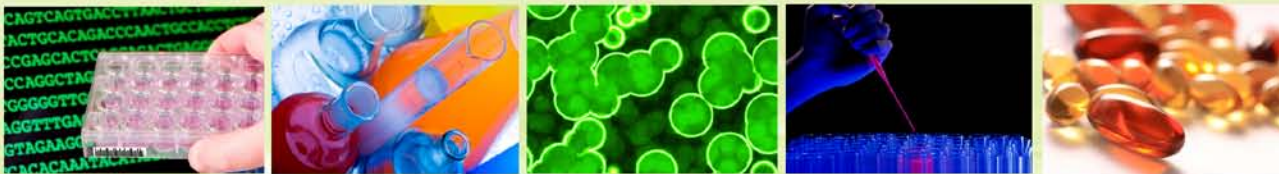


Accelerating the Commercialisation of University Innovation: Enterprise Fellowships

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Key objectives

*The Yorkshire Enterprise Fellowship is designed to help University researchers **create a business** based on their research*



Solving a Problem

- A decade ago, UK business research was concentrated in a small number of large companies
- Investment in R&D was low compared to other countries
- Conversely, the quality of UK academic research in science and technology compares well against most international benchmarks
- BYEF and YEF provide an organised platform with a professional management structure to :
 - Educate ambitious academics in business
 - Facilitate interaction with industry to develop mutually beneficial relationships
 - Benefit the public, through new product development
 - Benefit the economy by attracting investment into the region and creating jobs



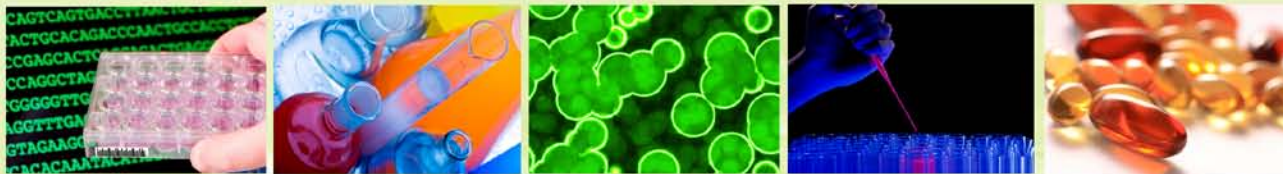
Introducing Yorkshire and the Humber

Yorkshire Forward
Regional Development agency



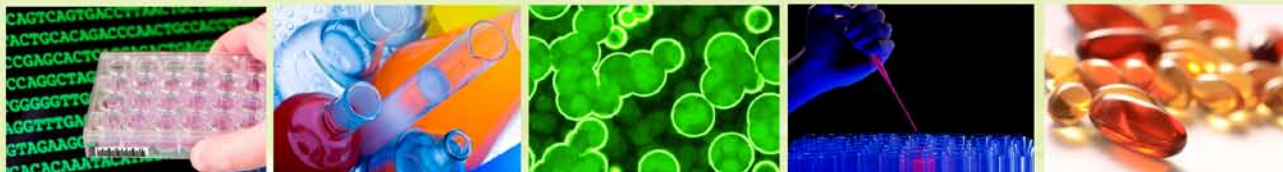
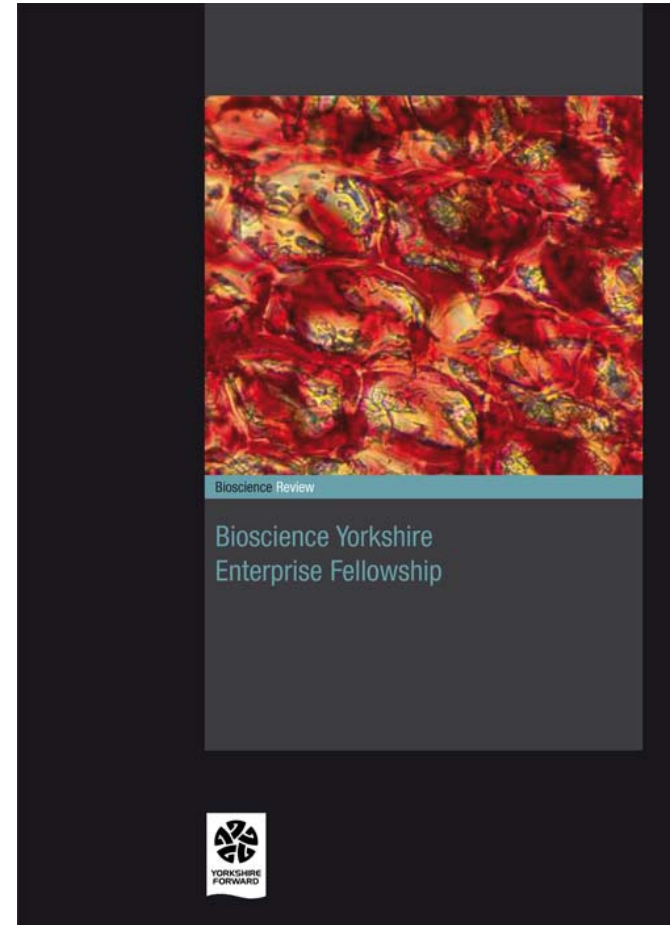
Introducing Enterprise Fellowships

- Pilot Bioscience Yorkshire Enterprise Fellowship (BYEF) scheme (2004-2006)
 - 29 Fellows - Bioscience
- New programme launched 1 December 2007, Yorkshire Enterprise Fellowship (YEF)
 - 65 Fellows – Bioscience, Healthcare, Chemicals



Bioscience Yorkshire Enterprise Fellowship

- Flagship Yorkshire Forward project (£1.2m 2004-2006)
- Pilot in bioscience only
- 29 Fellows, 9 Universities
- 9 spin out companies
- >£4m levered funding and still growing



Yorkshire Enterprise Fellowship (2007-2010)

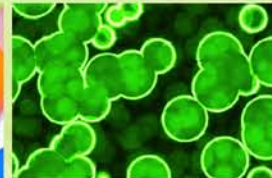
65 Fellows from 8 of the 9 HEI in Yorkshire and the Humber

- 4 NHS Trust researchers
- 61 University post-docs and lecturers (PhD to Prof)
- Divided into 4 cohorts starting a few months apart
 - Individual cohorts train together
 - Encourage collaboration & problem sharing
- £2.3m investment from Yorkshire Forward
- 30 months duration



Scope of the YEF (2007-2010)

- Bioscience
 - Chemicals
 - Healthcare Technologies
 - Research and Training Tools
-
- **Expected outcome:**
 - 20 new ventures
 - 2 companies formed to date
 - 6 Fellows are trading as university companies
 - £3 million additional levered funds
 - Over £1.5m secured to date



Admissions Procedure

- Submit 200 word non-confidential summary via website
- Checked whether within the scope of the call and whether eligible (e.g. salary funded)
- Full applications invited – refereed by 2 external experts
- Internal market assessment (is it novel and is there a market?)
- Presentation to Admissions Panel
 - External panel comprising industry experts across the sectors
 - Is the idea good?
 - Are they enthusiastic and right for the training?



What's on offer? : finance summary

The complete package comprises:

- £10,000 science award
- 11 module core training programme and all materials
- Fully funded personal mentor
- Customised market research study for each project
- Dedicated laptop PC or mac book
- Additional £1,000 commerce fund - satisfactory progress must be evident to access



Project Management

Project Teams:

- Fellow
- Mentor
- YEF team representative
- University (technology transfer/ IP office) representative
- Academic supervisor / colleague

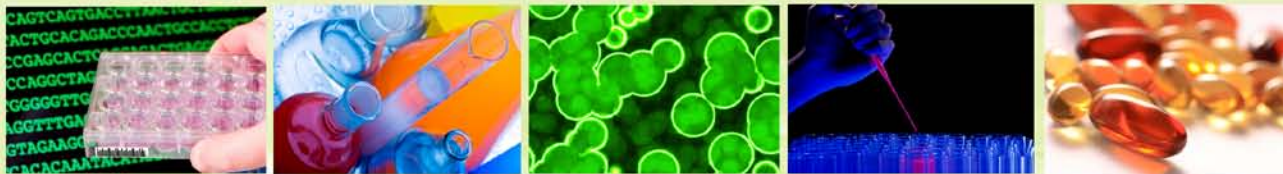
Project review:

- Quarterly review meetings
 - Run as formal board meetings - agenda, minutes etc.
- Quarterly progress reports



Specialist, personalised support

- Key to success of project
- Contract and CDA
- Best match (pre-meeting)
- Introductions and guidance
- Possible involvement longer term



Training Programme

15 modules over Fellowship year including:

Technology road-mapping

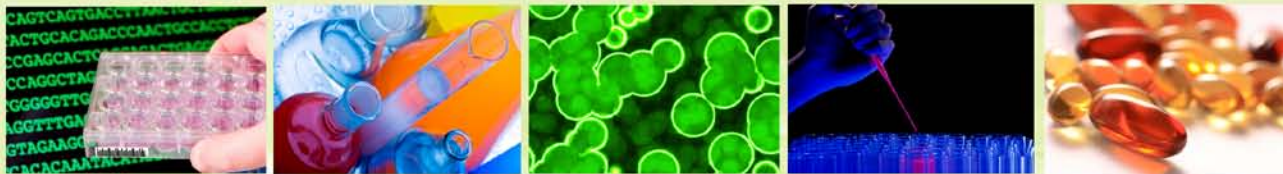
Making the move from academia to commerce

IP and IP clinic

The Role of the Company Director

Communication Skills

Dragons Den



What's on offer? : additional support

- Online project management facility
- Signposting to funders and investors
 - Input from YTKO rep, mentor, university
 - Dedicated website updated regularly
- Hot Desk PC with MS Project software, printing, meeting rooms, library
- Promotional Material
 - Access to YTKO Graphics team for design of promotional material



Bite Force Measurement Meter

UNIVERSITY OF LEEDS

To obtain further information please contact me on

Tel: 0113 24 1413
 Email: g.mountain@leeds.ac.uk

Dr Gary Mountain, Senior Child Health Lecturer
 The University of Leeds & Yorkshire Enterprise Fellow

A new bite force measurement instrument for the efficient, accurate and safe measurement of single tooth forces has been designed and scientifically tested.



Bite Force Measurement Meter

This is a suitable test whenever information on occlusal forces is required in children or adults, such as:

- Testing restorative materials e.g. stainless steel crowns
- Testing painful teeth that are orthodontically activated
- Locating occlusal interferences for straight or the bonded patient
- Evaluation of bite force size and post dental impact
- Stability of jaw prostheses
- Testing bite force ability pre and post total restoration of teeth
- Evaluating parafunctional activity
- Pre and post orthognathic surgery
- Temporomandibular Dysfunction
- Dental medical research
- Patient education
- Pre and post evaluation Maxillofacial surgery



Or any dental clinical care management pathway where occlusal forces play a part!

The instrument will offer a straightforward and cost-effective means of making bite force measurements, using previously marketed devices which have been complex and expensive.

We are in the process of developing a commercially viable branded portable occlusal force meter and wish to identify potential commercial partners interested in buying or distribution.

To obtain further information please contact me on:

Telephone: 0113 24 1413
 Email: g.mountain@leeds.ac.uk

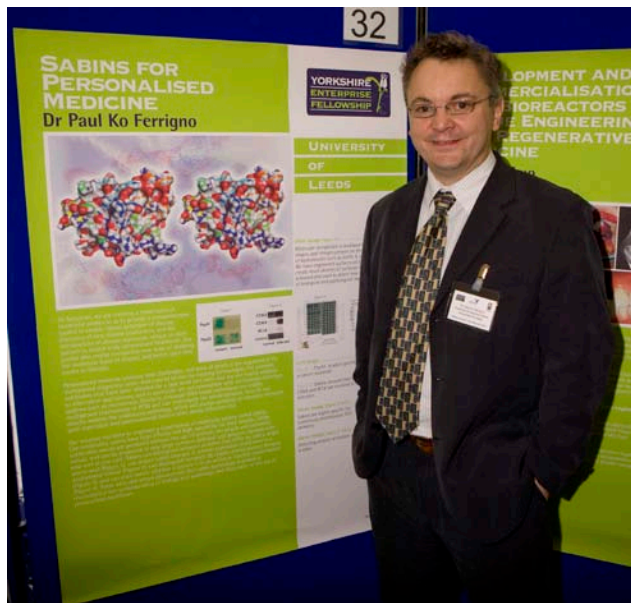
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What's on offer? : additional support

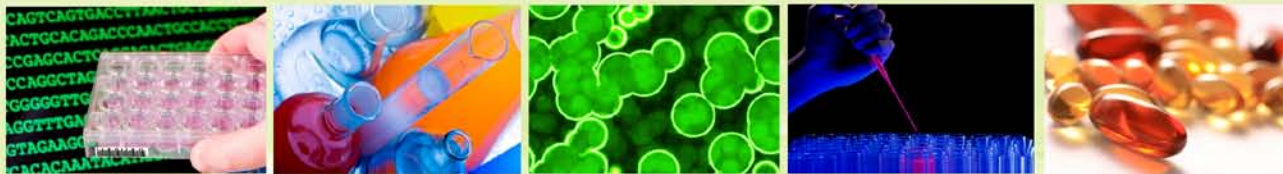
Networking Events

- Showcase Proof of Concept Poster Event
- YEF Poster Networking Event
- Gala Dinner



Case Studies – Examples of Spin-outs

- **Cizzle Biotechnology Ltd** (Dawn Coverley, University of York)
Developing gene-based strategies for the treatment and diagnosis of lung cancer
- **Joint Motion Analysis Ltd** (Mike Troke, York St John University)
Instrument to measure spine flexibility
- **Medella Therapeutics Ltd** (Tim Skerry, University of Sheffield)
Developing antibodies that will stop the growth of cancerous tumours
- **Chromocyte Ltd** (Graham Pockley, University of Sheffield)
Experimental planning and purchasing site for multicolour flow cytometry
- **Aptuscan Ltd** (Paul Ko Ferrigno, University of Leeds)
Non-antibody protein probes for diagnostic applications



Case Study – Cizzle Biotechnology



- BYEF Fellowship
- 2006 - seed-corn financing from the White Rose Technology Seedcorn Fund (WRTSCF)
- Further investment in early 2008 by WRTSCF and additional investment by The Viking Fund and Yorkshire Cancer Research
 - Business development and expansion of research and development activities are ongoing



Case Studies – Alternative income generation

- Trading as a university service
- Licencing deal
- R&D Collaboration
- Follow-on grant funding



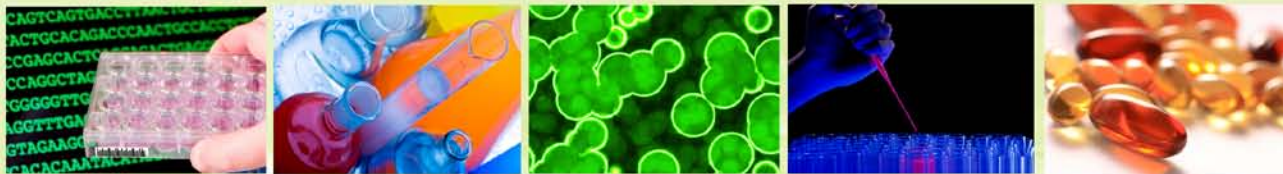
Case Studies

- Unsuccessful Projects
 - Fellows not engaging
 - Technicalities in funding application
 - University internal review processes



The Yorkshire experience

- Applications reviewed from hundreds of possibilities
- 94 applications accepted - backed by Universities/NHS innovation hub
- 11 companies formed - 30 likely
- £3.5m public sector spend over 6 years
- >£5.5m levered to date and rising



The Future for Enterprise Fellowships

- Through YEF and BYEF we have developed best practice for these schemes
- The format is transferable to different sectors
- Ready to be rolled out to other regions
- Application to ERDF to extend the Yorkshire Experience
- Wonderful feedback from Fellows and team members





YEF Projects Booklet



Non-confidential summaries of all successful YEF applications

For a copy email your name and address to:

lindsay@ytko.com



Feedback from the Scheme

"This is a very good experience for individuals at whatever stage of their career they are. It gives them an insight into the commercial world and what is necessary if they are to succeed in it. It is a Fellowship which is much valued by those who succeed in competitively obtaining one."

Professor Diana Anderson, YEF Fellow

"The experience of being an Enterprise Fellow has afforded me the opportunity to explore and develop my skills well beyond a typical postdoctoral position."

Dr Brian Burke, BYEF Fellow

"The Fellowship has been invaluable to my project. Without doubt, it has speeded up product preparation for commercialization, with invaluable input and guidance provided by my mentor. At a personal level, I have gained enormously from the YEF training sessions in marketing, team building and leadership, intellectual property, financial acumen for directors and others."

Dr Steeve Lamvohee, YEF Fellow

www.yef.org.uk

