

Unleash your ingenuity



YOUNG ENTREPRENEURS SCHEME

Briefing Session

Professor Simon Mosey,
Haydn Green Institute for Innovation and
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Nottingham University Business School

1

Can you learn entrepreneurship?





Library of Congress

Have lots of ideas and throw away the bad ones....


You aren't going to have good ideas unless you have lots of ideas and some sort of principle of selection

Linus Pauling




2

What the stakeholders think




Industry benefits from YES by encouraging talented individuals to commercialise their research




The Judge

I can give something back to the industry through YES




The Mentor & Speaker

If only someone would champion YES in my university



The Technology Transfer Officer



3

What the participants say...



The workshop really opened my eyes to the world of commercialisation of sciences and has had a huge impact on my career since



YES gave me the opportunity to demonstrate and develop skills that one rarely (if ever) gets the chance to develop during the progression of a "typical" research PhD programme



Participating and being one of the winning team members changed my life. Moreover, YES inspired me to start my own business




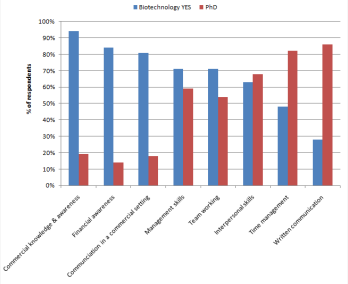
Really excellent experience that opened my eyes to a whole different way of doing things and expanded my horizons in ways I would never have imagined before entering the competition






4

Skills developed: YES vs. PhD





Skill	Biotechnology YES (%)	PhD (%)
Commercial knowledge & awareness	~95	~15
Financial awareness	~85	~15
Communication in commercial setting	~80	~15
Management skills	~70	~55
Team working	~70	~55
Interpersonal skills	~60	~65
Time management	~50	~80
Written communication	~30	~85





5

The YES family



- 1995: Biotechnology YES**
- 2003: Bioscience YES
- 2004: North American YES
- 2007: India YES
- 2007: North West YES
- 2008: North East YES
- 2009: East of England YES
- 2011: Plant, Microbial and Environment (Syngenta)
- 2012: BioMedical YES (GSK & SBC)
- 2013: Chemistry YES (RSC)
- 2015: Food, Nutrition and Wellbeing (Unilever)
- 2016: Sustainable by Design (Unilever)
- 2016: Singapore YES (P&G & A*STAR)

- 2005: Environment YES**
- 2012: Engineering YES**
- 2012: Digital YES**
- 2013: Energy YES**

6

YES19 winners

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Invecta Solutions
University College London
Innovative manufacturing process that dramatically decreases the cost of AAV virus-based gene therapy products.

Cloud Break Technologies
MRC DiMeN DTP representing the universities of Leeds and Sheffield
Home heating system which uses the power of the sun all year round to save money and the environment.

Larvita
University of Manchester
An automated, modular, vertical insect farm, which recycled food and brewery waste to produce high protein, nutrient-boosting poultry feed and a low cost, natural fertiliser.

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7

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YES20 Competitions

Celebrating 25 years of ingenuity

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8

Which ideas are eligible?

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- We are looking for hypothetical but plausible ideas
- So start with a challenge area of interest and look at new breakthroughs in that area
- For instance if you are addressing healthy ageing or next generation of beauty treatments
- You may find 'drug to mimic sunlight for safe skin tanning'
- You are allowed to take that idea forward a couple of years and attribute the invention to your team
- Or you can 'invent' a hypothetical but plausible method of safely tanning skin through changes in diet

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9

Disclosure pitfalls

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- Osiris
 - o Newcastle University
 - o Enterprise Centre
 - o Disclosure!

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10

YES

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Mechanics of Delivery

**Tracey Hassall-Jones,
Haydn Green Institute for Innovation and Entrepreneurship,
Nottingham University Business School**

11

What it involves

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April - July August September October November December

Form a team
Briefing session
Mentor sessions
Workshops
Final

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12

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What you have to do

- Before the workshop
 - Formulate your business idea
 - Be clear on your IP position
 - careful re disclosure
 - Research the market
 - market potential, competition
- To help you
 - Self-perception test
 - Intellectual Property Office website
 - Forum
 - Your own contacts e.g. Technology Transfer Office (TTO)

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13

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Forum

- Manged through a closed group on LinkedIn
- All participants have been invited to join
- Scheduled sessions in specialist areas throughout August and September:
 - creative thinking
 - patents
 - licensing
 - managing finance
- Disclosure!
- Not 'black and white'



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14

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Workshops

- Attend one:
 - Energy, engineering and environment 07-09 October Nottingham
 - Plant, microbial and environment 14-16 October Syngenta
 - Biomedical 04-06 November GSK and SBC
- Contingency plans:
 - Biomedical 24-26 February GSK and SBC
 - Energy, engineering and environment 03-05 March Nottingham
 - Plant, microbial and environment 10-12 March Syngenta

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15

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Format

Wednesday am	Speakers
Wednesday pm	Mentors
Thursday am	Speakers
Thursday pm	Mentors
Friday am/pm	Presentation

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16


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Speakers

- IP and patenting strategy
- Raising and managing finance
- Commercial and marketing strategies
- Regulatory affairs
- Company case histories



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17


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Mentors

- Available Wednesday and Thursday afternoon
- Three allocated per team
- Specialists in different areas (e.g. IP, finance, business development)




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18

Team presentations

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- Presentation to group of "Equity Investors"
- Contribution from all team members
- Structure of the presentation, up to you
- Use of Microsoft PowerPoint
- 15 mins (max) with 10 mins questions
- Feedback provided



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19

Final

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- Held Monday 7 December hosted at the Royal Society, London
- Presentations to panel of "equity investors"
- 15 minutes with 10 minutes questions
- Prize fund of £15k
 - Biotechnology YES
 - Engineering YES
 - Environment YES


Biotechnology YES
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Engineering YES
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Environment YES
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20



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The Requirements of a Business Plan Presentation

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Haydn Green Institute for Innovation and Entrepreneurship,
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21

How do I make a presentation?

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- Think about your audience
 - Potential investors for your business
- They want to know
 - Will this business make money?
 - Will this business make money?
 - Will this business make money?

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22

How do I convince them?

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- What are the benefits?
- What are the barriers?
- Can it be made, will it work, will it make money?
- Has the company the necessary experience?
- What is the appropriate strategy?

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23

Benefits

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- What is the size of the market
- Who benefits from this invention?
- How does it compare with the competition?
- Who will pay for the benefit?

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24

Vegetables with a sweeter flavour

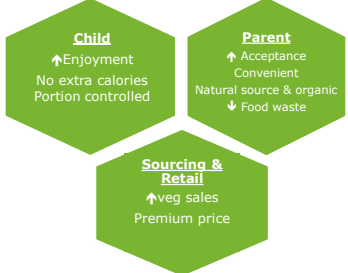


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- Discovered a new recipe and method to process natural, plant-based sweetness into a mist that produces a sweetened flavour
- Without changes to texture, appearance and shelf-life
- Properties remain stable at high and low temp

25

Benefits





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- Child**
 - ↑ Enjoyment
 - No extra calories
 - Portion controlled
- Parent**
 - ↑ Acceptance
 - Convenient
 - Natural source & organic
 - ↓ Food waste
- Sourcing & Retail**
 - ↑ veg sales
 - Premium price

26

Who will pay?

Market Size:  Organic food & drink sales 2015 - £1.95B
↑ 4.9% annually

Target Consumer:  Primary food purchaser for household

- 25-44yrs
- Middle-high SES
- Households with +3 people
- Health & environmentally conscious

Willing to pay premium for high quality, organic produce

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27


Barriers

- Laws and regulations
- Safety implications
- Environmental impact
- Reaction of competition
- Barriers to acceptance
- Can it be made, will it work, will it make money?

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28

Moz-repel plant



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- Unique Selling Points
 - long-distance
 - highly active -15ft radius
 - all biting insects
 - long-lasting
 - plant based
 - value for money
 - low-maintenance
 - does not smell
 - not a hazard

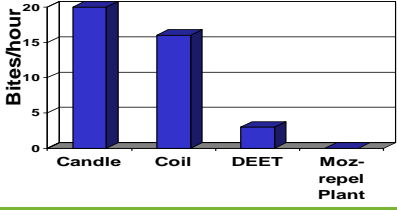
Approved by WHO & CDC 

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29

Barriers

- Will it work?



Biting rates

Method	Bites/hour
Candle	20
Coil	17
DEET	3
Moz-repel Plant	1

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30

Barriers

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- Can it be made
 - Scale up issues
- Will it make money?

	£	\$	Gross profit margin
Cost of production	1.13	1.89	
Wholesale price	8.50	14.2	87%
Recommended retail price	20.0	33.5	58%

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31

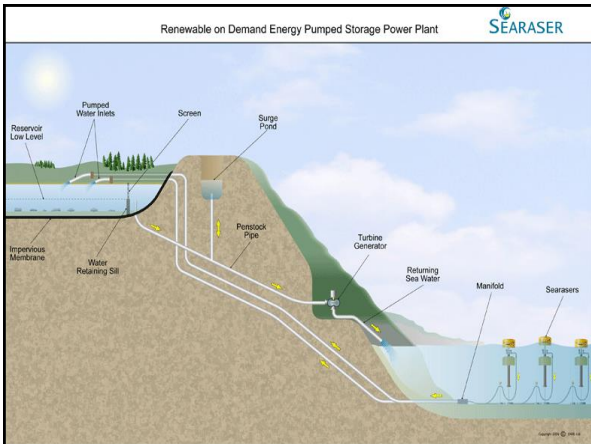
Necessary experience

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- Marketing – mass vs niche
- Technology – develop and manufacture
- Finances – equity and cash flow
- Management – partners and employees
- Production – quality vs price vs volume

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32



33

Experience for Searaser

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- High investment ⇔ High profits
- Very low running costs
- Payback Period of five years
- Setup would last for fifty years
- Partner with an infrastructure company and produce energy
- Sell to energy suppliers

npower e-on greenenergy SWEB ENERGY

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World's first high head seawater pumped storage (Japan)

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35

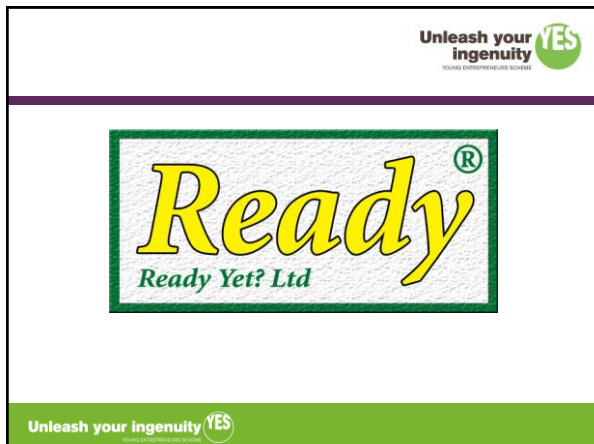
Commercial strategies

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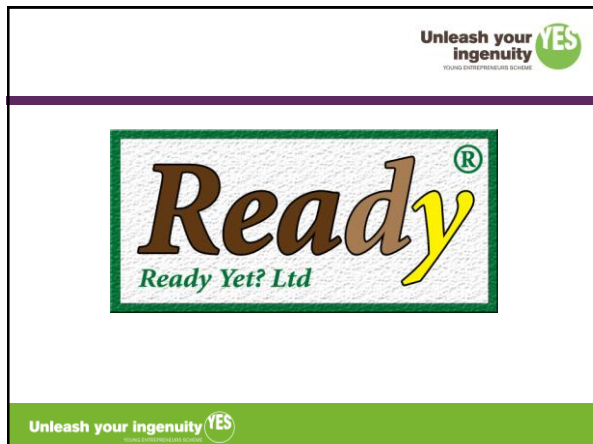
- Different commercial strategies:
 - Start up/ spin off
 - Consultancy
 - Licensing/ collaboration
- Strategies can and should change as the technology develops

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36



37



38

Strategy

- Could not raise £2.5m for label manufacturing plant; patent protected but who to license to?
 - Label Manufacturers
 - Avocado Growers
 - Avocado Importers
 - Distributors
 - Supermarkets

39

Conclusions

- Don't panic!
- New way of thinking
- Help and advice every step of the way
- Good luck and any questions?

40

Questions

Please raise your hand and remember to unmute your microphone by pressing the microphone icon on the toolbar

41