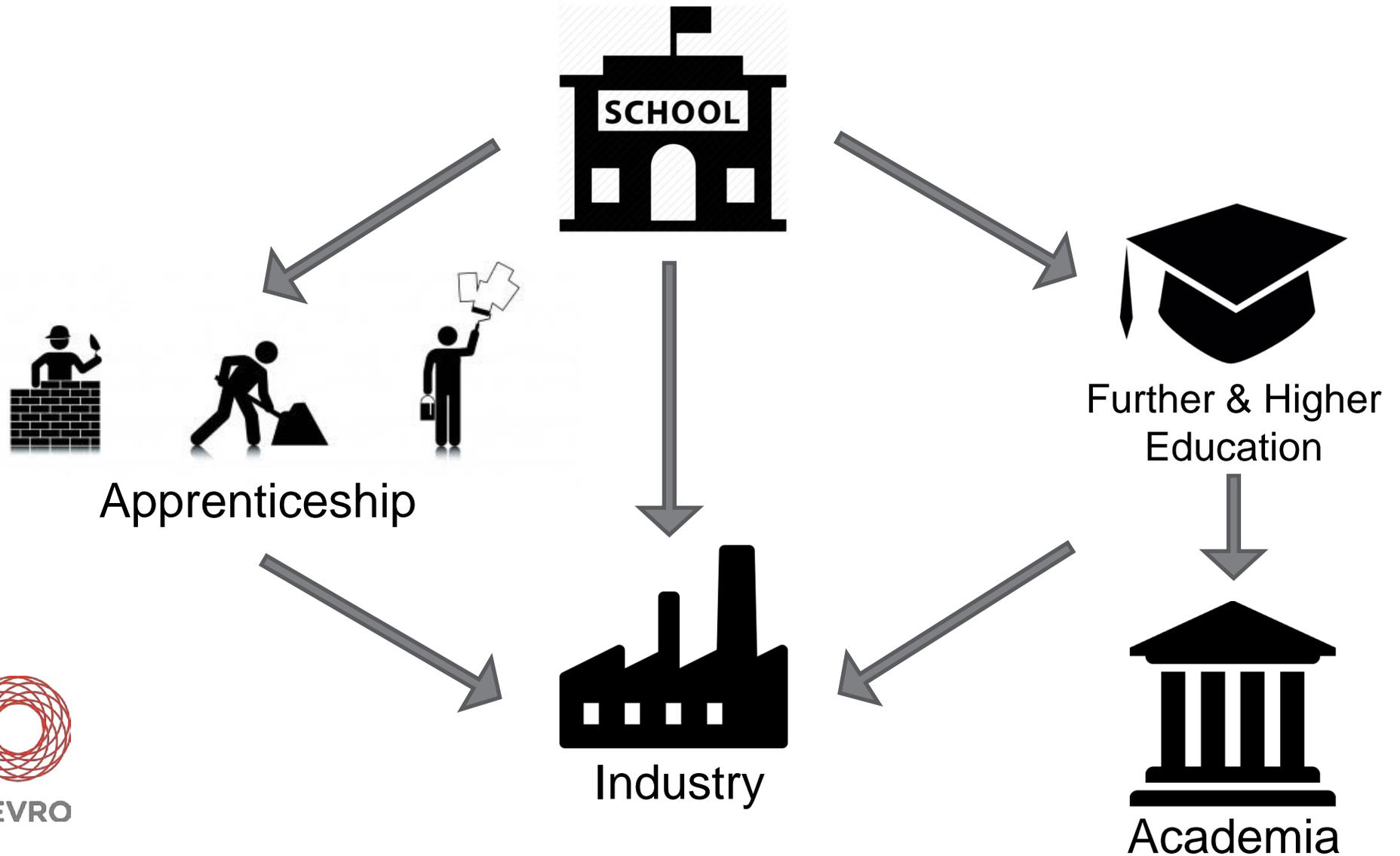

Dr Ryan T Cameron
Group Research Scientist

An Unconventional Career Path



DEVRO

What is a conventional career path?



Conventional Start



Left School in 1997



Chemical Engineering



Summer Job

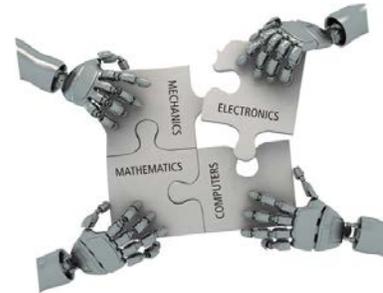


Apprenticeship

COMPAQ



Further Education

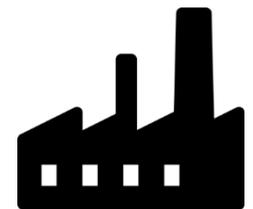


Mechatronics



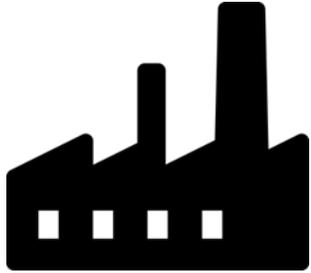
DEVRO

Qualified as
Process & Industrial Engineer
in 2000



Industry

Industry



Industry



Engineering Degree



BBC NEWS
You are in: UK / Scotland
Monday, 23 April, 2001, 21:45 GMT 22:45 UK

Compaq hopes for better future

Company expects better results later in the year. Compaq, the world's second largest personal computer maker, has reported a fall in its first quarter profits, hit by a slowdown in PC sales and aggressive pricing by its rivals.

Profits came in at the lower end of analysts' expectations at \$200m compared with \$296m a year ago.

"While we believe that the second quarter will continue to be challenging, it also provides an opportunity to make significant improvements in our business model," Chairman and Chief Executive Michael Capellas said in a statement.

Compaq has blamed a sharp decline in North American personal computer sales in the wake of the slowing economy.

Sales elsewhere around the world have remained strong, Mr Capellas said.

In March Compaq issued a profits warning and also revealed its intention to cut 5000 jobs, equal to 7% of its workforce.

Compaq said it would wait until its first-quarter results to detail where the job cuts would occur, but the company did not elaborate on the layoffs in its earnings report.

Scottish cuts
In March, Compaq announced plans to cut 700 jobs in Scotland.

Internet links:

- Compaq

Top Scotland stories now:

- New powers call for donor cards
- Girl's death sparks major inquiry
- North Sea rig hit by explosion
- Killer faces wife assault charge
- Rapist jailed over murder bid
- Scots killed in Alps fall
- National park 'goes live'
- Security van raid tip-off

Links to more Scotland stories are at the foot of the page.



FOXCONN® CZ



DEVRO

Working Abroad

Moved to Czech Republic
In 2001



Continuous Personal Development

**Increased
Responsibility**

**Management
& Training**

**New Product
Introduction**



**Czech
Language
Skills**



**Different Nationalities
& Cultures**

**Computer Aided
Design**

Project Management

**Apple
HP, Acer, Cisco**

Travelling



DEVRO

Change In Direction

- Always had a keen interest in science – Human Genome Project, Cancer Research
- Previously offered place to study Biochemistry at the University of Strathclyde
- No previous Biology education - applied for a Biochemistry degree at the University of Glasgow
- Accepted onto the degree due in part to my work experience
- 25 years old when I started my first degree



Academia



- In 1st year Uni I had one of my first experiences of not “getting” something – Genetic Crosses



- 1st Class Honours degree
Offered a BBSRC 4 year PhD

- PhD thesis -
The role of Hsp20 in Alzheimer’s disease



- Published several papers –
5 First name, 4 **Reviews**, 5 collaborative

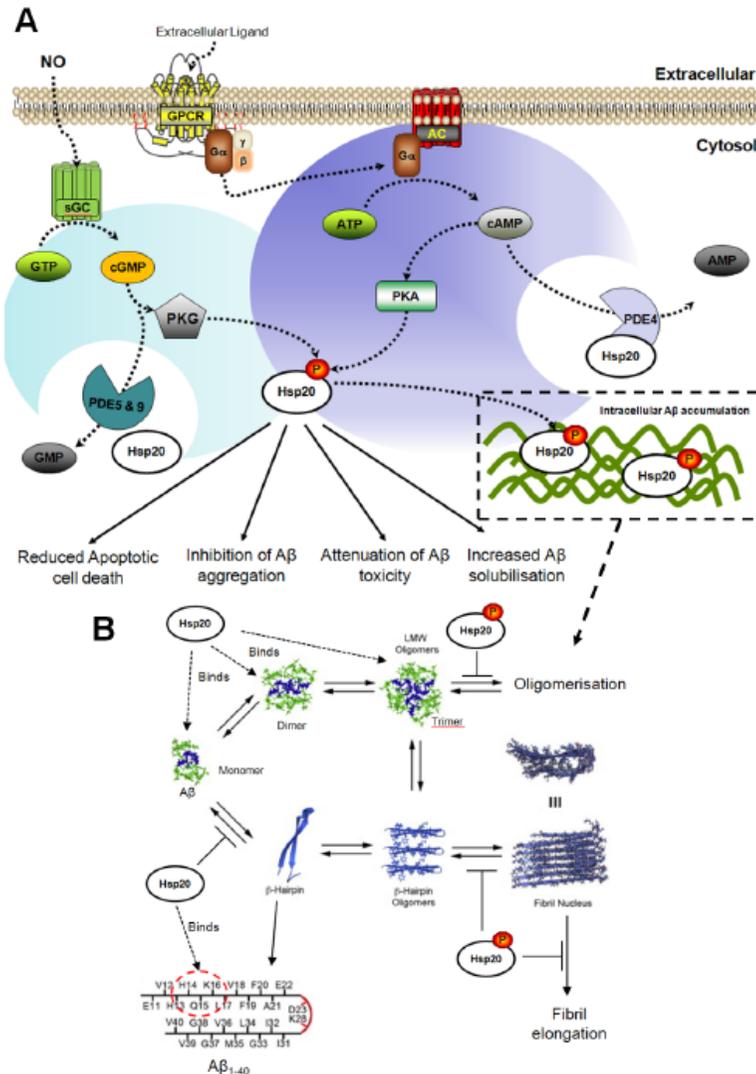


PDE Inhibitor Studies

Peptide Array

FRET

NMR



Aβ Toxicity Assay

Real-Time Cell monitoring

Novel Aβ Aggregation Assays

Figure 6.1 – A mechanism by which Hsp20 inhibits Aβ aggregation and attenuates subsequent toxicity. Cartoon diagram for the mechanism for targeting Hsp20 phosphorylation and its effect on the



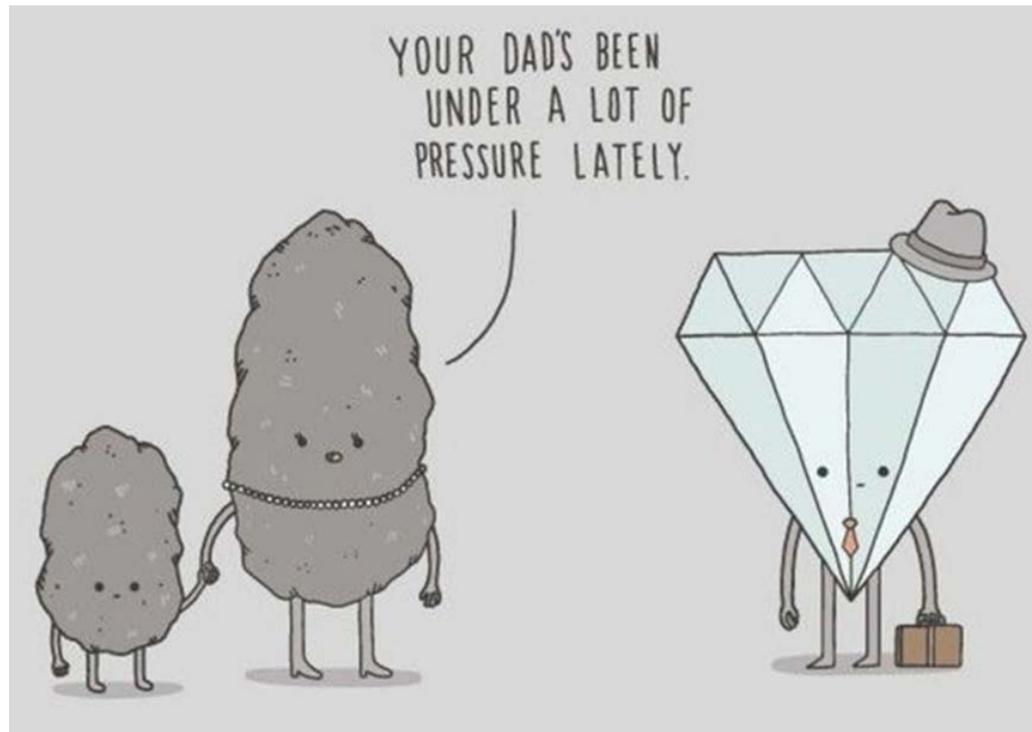
Academia

- After successfully completing my PhD I started working on a **Proof of Concept Biotech spin-out** (Sannox Therapeutics)
- **£500k funding from Scottish Enterprise** to develop several of our drug targets to treat Alzheimer's, Heart Disease, Cancer and inflammation
- **Developed several high-throughput screening platforms** to test small molecule disruptors of protein-protein interactions and PDE4 inhibitors - Screened > 70,000 compounds
- Screening platforms based on **Peptide Array and Fluorescence Polarisation** and the creation of cell-permeable disruptor/decoy peptides.
- **95% of Spin-Outs fail!**



Academia

- Extremely high-pressure role, no room for experimental error
- No team spirit either and started to not enjoy my job
- Funding was eventually pulled just short of the 2 years



JOB search



- Started to look for a new Academic job.
- Applied for loads - Couldn't even get an interview!?
- HELP!!!



- Started looking further afield to non-academic research positions
- Found the position with DEVRO with the following job spec:

- Chemist / Biochemist
- In Glasgow
- Manufacturing experience
- Czech language skills



- Was invited for an interview - First one in over a dozen applications
- Also invited to interview at the Beatson Cancer Research Institute

Decisions, Decisions

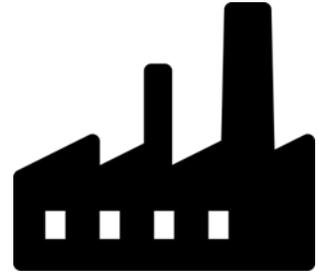
- Got offered both jobs!
- Hardest decisions I've had to make in my career
- The Cancer research job was the exact job that I envisaged when I started my science career
- Changed Priorities
- The research I had done on Devro had shown it to be a very successful company. Formation of new research group
- **The only negative was my own in built perception of prestige!...**



DEVRO



Who are DEVRO?



- DEVRO

- Development & Research Organisation
- Originally a subsidiary of Johnson & Johnson
- Set up to develop new medical sutures in the 1950's
- Inadvertently became a collagen casing manufacturer for the food industry
- Factory opened in Moodiesburn, Glasgow in 1964, then Bellshill 1976
- Management buyout from Johnson & Johnson in 1991
- Headquarters then moved to Glasgow
- Leader in their field in terms of sales and innovation



DEVRO



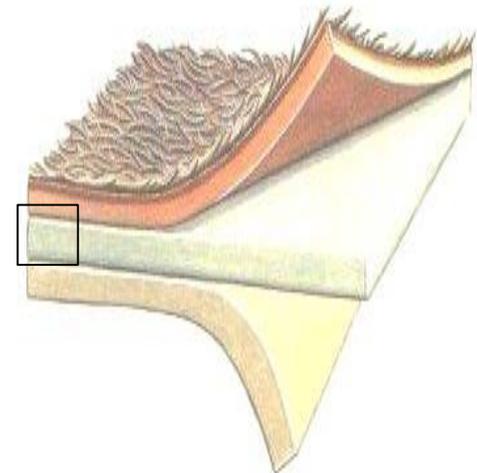
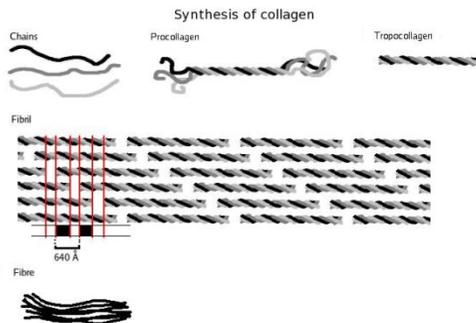
What Do DEVRO Do?

- The application of collagen sutures never became a commercial success – But ready and eager market for casing
- For centuries sausages and similar foods relied on the cleansed intestines of sheep, cows, or pigs
- Casings made out of reconstituted collagen were a revolutionary improvement over animal gut
 - Edible
 - Hygienic
 - Consistent quality
 - Efficient packaging
 - Allow faster processing & increased productivity for customers



How Do DEVRO Make Casing?

- The raw material is sourced from the corium collagen layer of cowhide, sandwiched between the grain leather and the cow's layer of flesh and fat
- The corium split is a by-product of tanneries, produced by the removal of the grain layer before producing leather
- This split is then washed and processed, resulting in collagen fibres that can be further refined to be used in various applications



Where Do DEVRO Make Their Products?

Manufacturing Plants

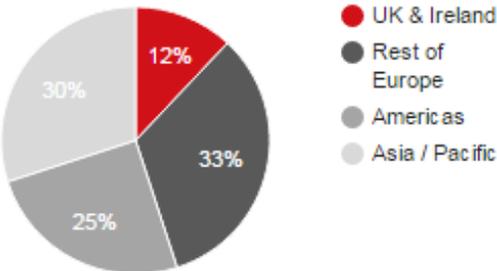


Regional Sales by Destination 2014

Sales Offices

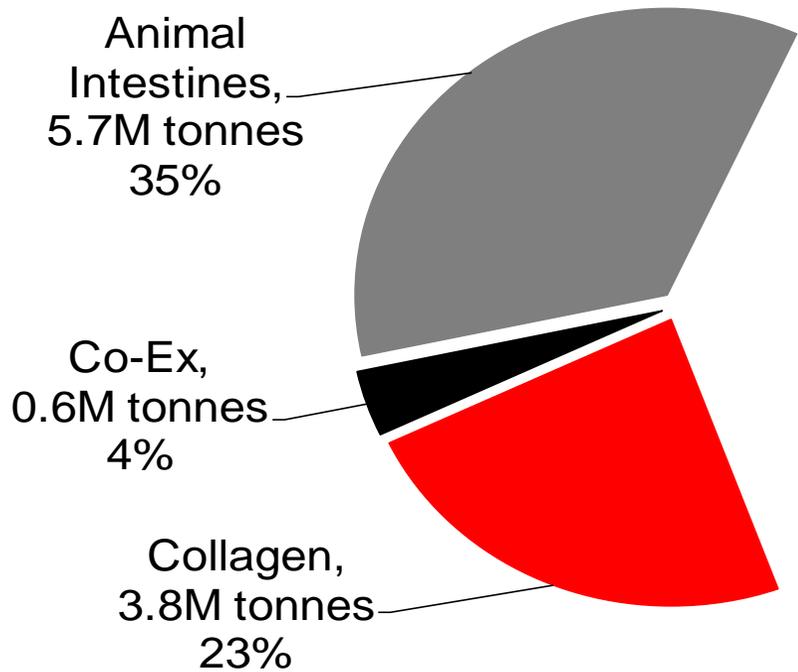
Moscow, Auckland, Beijing, Hong Kong, Tokyo & Miami

over 2,200 employees worldwide



Why Do DEVRO Exist?

2015 global sausage production - edible casing sectors
(10.1 million tonnes)



\$2.3 Billion Industry



Source: Devro plc Market Intelligence database – 2015 by type (calibre 13-34mm) – Co-Ex data based on estimated “linear meterage” equivalence

Back To Industry

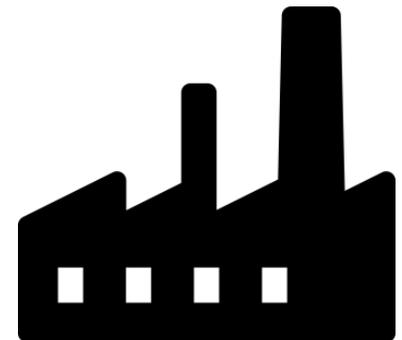


- So why change direction (again...!)?
 - Opportunity
 - Job Security
 - Money £££
- What relevance has Alzheimer's biochemistry to collagen?

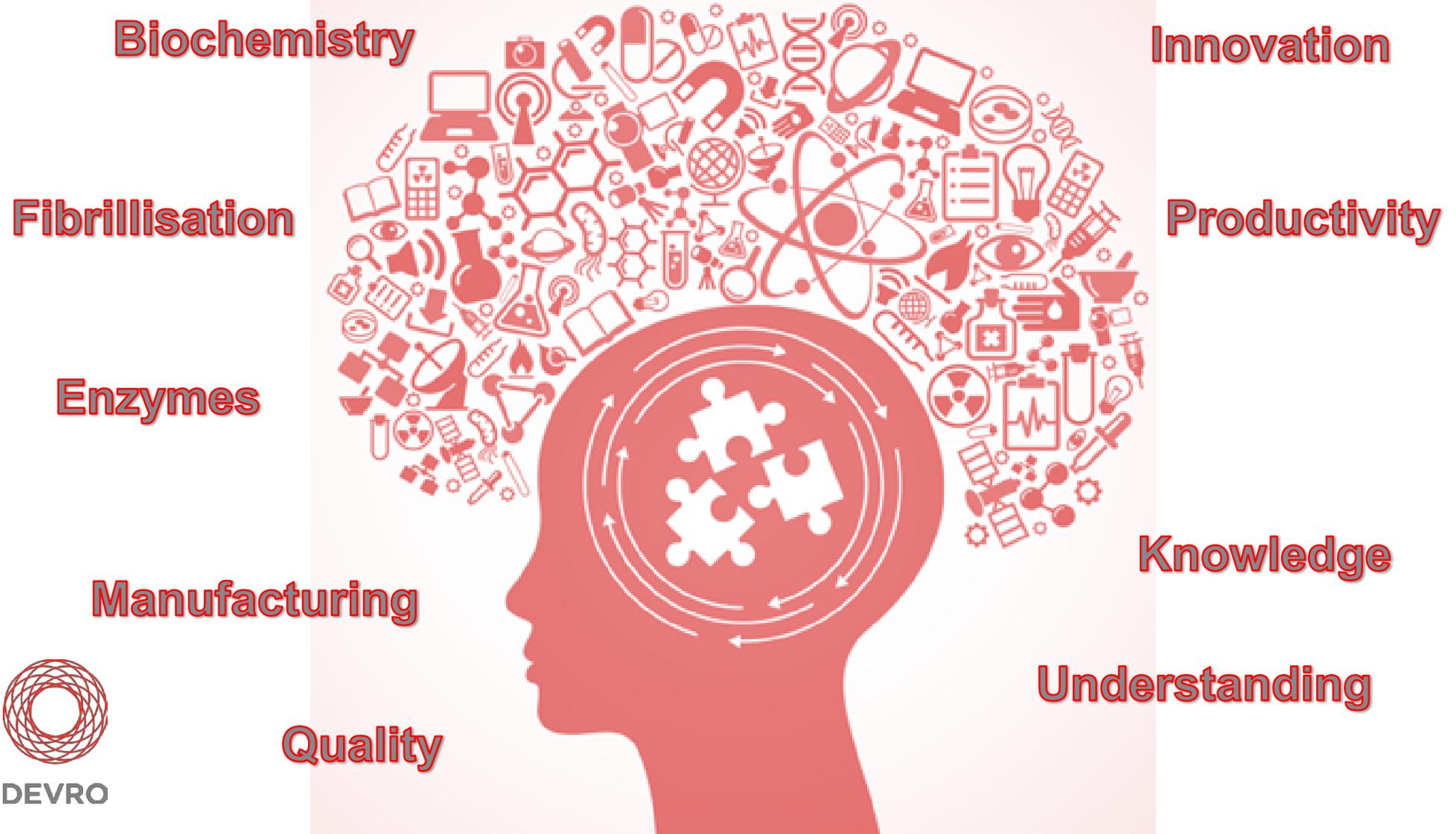
- What relevance has computer manufacturing to producing collagen casing?.....



DEVRO



Transferable Skills



Transferable Skills

What skills?

- Employers are continually looking for people with degrees to fill roles that would not have required this level of education in the past

Why?

- Going to university equips people with a range of useful skills
- These include:
 - Teamwork
 - Leadership/initiative
 - Problem solving
 - Written & verbal communication skills
 - Time management
 - Decision making
 - Self-reliance



DEVRO



ADVICE

- **ASK** your supervisors to check CVs, cover letters etc. as they see these things more often than you and know the good from the bad
- **DON'T** think that your career is set in stone – you will have the skills to go into various other roles
- **VET** your CV and make sure you tailor it for each job applications and think about transferable skills
- **INVESTIGATE** a company before applying for a job or going to an interview
- **CONSIDER** were the job and market might be in 5 to 10 years and don't be afraid to scrap it all and start again
- **EXPECT** disappointment when applying for jobs but there will be the ideal job out there waiting for you



Final Thoughts...



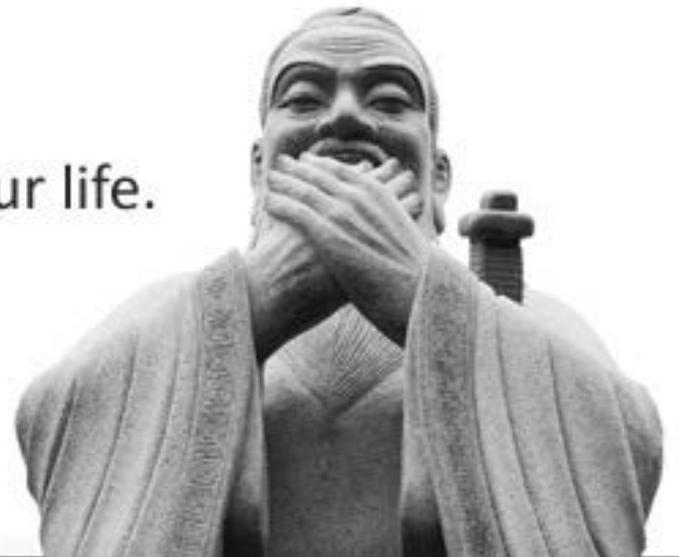
DEVRO

- There is no such thing as a “Conventional Career Path”
 - The lines between different paths are being continually blurred - Particularly Industry and Academia
- The theme of today’s seminar is “Made In Scotland”
 - This is associated with high quality products such as Scottish Whisky, Scottish Beef, Scottish Salmon etc.
- This is as much about the people as products
- People are developing themselves in Scotland & taking world class skills with them on various paths all over the world



Choose a job you love,
and you will never have to work a day in your life.

— Confucius



Thank You!



DEVRO

ryan.cameron@devro.com