

Business models and inventions: SMEs, Universities, spin-offs, field related approaches (biotech, pharmacology, IT)

Patent commercialisation – from a University's perspective

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Outline

- Introduction to the University of Copenhagen
- What's important to us!
- Business models
- Our approach to commercialisation
- Easy Acces New approach to commercialisation
- To sum up



The largest university in Scandinavia

- 37,000 students
- 7,500 employees, including 5,000 scientists
- 8 Nobel prizes
- € 800 million turnover
- Ranked:
 - no. 8 in Europe and no. 43 in the world

(Academic Ranking of World Universities, 2009)

- no. 51 in the world (Times Higher, 2009)



Results: University of Copenhagen input/output 2008 - 2012

Results 2007-2011	2008	2009	2010	2011	2012
No. of Inventions disclosures	74	45	40	58	49
No of inventions where University has assumed rights	28	15	17	17	13
No of patents applied for	21	17	11	11	10
No of licensing agreements	19	13	12	21	16
No of spin-outs	3	0	0	0	5
No of licensing agreements in portefolio (2007–2010)	43	50	58	79	-
Licensing agreements in portfolio which have generated income to the University	15	27	15	32	-





The Danish University Act

- guides our IP strategy
 - ...conduct research and offer research based education...
 - ...disseminate knowledge of academic methods and results..
 - ...must exchange knowledge and competencies with society...





What's important to us!

 Collaboration with industry – more funding and knowledge

Technology being used for the benefit of society

• Generate income for the University





Business Models

- commercialisation of IP

- Sell IP
- Out-license IP to industry
 - Royalty bearing
 - Royalty free (Easy Acces)
- Spin-outs
 - Sell IP for shares
 - License



Our Approach to Commercialisation

Focus on licensing agreements

- Research collaboration agreements an important source of future licenses
- We do not sell IP
 - Loose control
 - Avoid IP lying idle

Spin-outs

- Start-ups get a license to IPR
- University does not take equity:
 - We do not have resources to sit on boards
 - University will eventually be diluted
 - Investors are sometimes happier without us!!
 - University will not end up having to negotiate deals with itself if company needs further licenses from University



Licensing strategy

- Exclusive license
 - Exclusivity for patent costs
- Retain ownership to IP

- Few non-exclusive licenses
 - Software
 - Genetic test (domestic animals)



Photochemical Air Purification

Air purification method based on the atmosphere's natural ability to clean itself

The Invention

- Ozone and UV light is added to the air
- Charged particles are formed
- Particles trapped on electro static filters
- Excess ozone is removed
- Result = clean air

Collaboration and Market

- UCPH filed priority patent application in 2008
- Pending US and EP patent application
- Exclusive License agreement Danish company



Inventors:
Matthew Johnson (to the left in picture)
UCPH, SCIENCE
Jan Arlemark, O3
Technolgy (not shown)







The Brachyspina Genetic Test

One invention – 9 license agreements

 The genetic disease Brachyspina found in cattle leads to calfs born with an abnormally short spine and other life-threatening deformities

The Invention

 Genetic test method developed by researchers at the University of Copenhagen in collaboration with colleagues from the University of Liège, Belgium The test determines whether cattle are carriers of a particular mutation resulting in calves with the Brachyspina syndrome

Collaboration and Market

 Danish company, Genoskan A/S, purchased a license to the test in 2009
 Since then the invention has been licensed to 8 other companies from France, Spain, Germany, the Netherlands, USA and Japan



Inventors:
Jørgen Agerholm, UCHP, SCIENCE
Merete Fredholm, UCHP, HEALTH
Michel Georges, University of Liege

Easy Access: No royalty New Approach to Commercialisation

Reasoning:

- Only 5-10% of IPR portfolio is of importance to University
- Let's give the rest away for free!
 - No royalty payable!!
- 1-page non-negotiable licensing agreement available online

Conditions:

- Researchers/inventors have to agree
- Companies have to produce a realistic business plan
- IPR has to be used/developed within three years
- Company has to cover patenting expenses
- University free to conduct research within fields
- Company agrees to accredit researcher(s) and university if IP is exploited





Easy Access Philosophy

developed by Kevin Cullen, ex-Glasgow University UK, now University of New South Wales, (Australia)



All IP has some value, but only a fraction has significant commercial value to the University

For the IP where we judge there is significant value we will continue to commercialise it through commercial deals

In cases where we cannot enter commercial deals we will transfer the IP to partners who can demonstrate how they will use it for the benefit of society



Easy Access IP Universities





























To sum up - business models

- Exclusive licenses
 - Patent costs is the driver
- Non-exclusive licenses
 - Short time to market
 - Short turnover time
- Easy Acces
 - Why throw potential value in the bin!





Thank you!

www.fi.ku.dk www.easyaccessip.org.uk

