

Commercialising Chemistry

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Take home message

The Oxford Chemistry Department has contributed some £80 million to the central University as a result of spin-outs.

- £40 million cash**
- £20 million holding in quoted companies**
- £20 million fair value in unquoted companies**

The Oxford Chemistry Department

- Size*
- **The biggest Chemistry Department in the Western World**
 - **Each year 180 graduates with a four year degree including one full year of research**
 - **80 PhDs per year (cf Berkeley 64)**
 - **150 Post-doctoral researchers**
 - **79 Faculty**

The Oxford Chemistry Department

- Quality*
- **Rated 5* and now 5****
 - **12 active FRS**
 - **Produced 4 Nobel Laureates**
 - **Annual research income ~ £10 million**

Historic Spin-out Companies

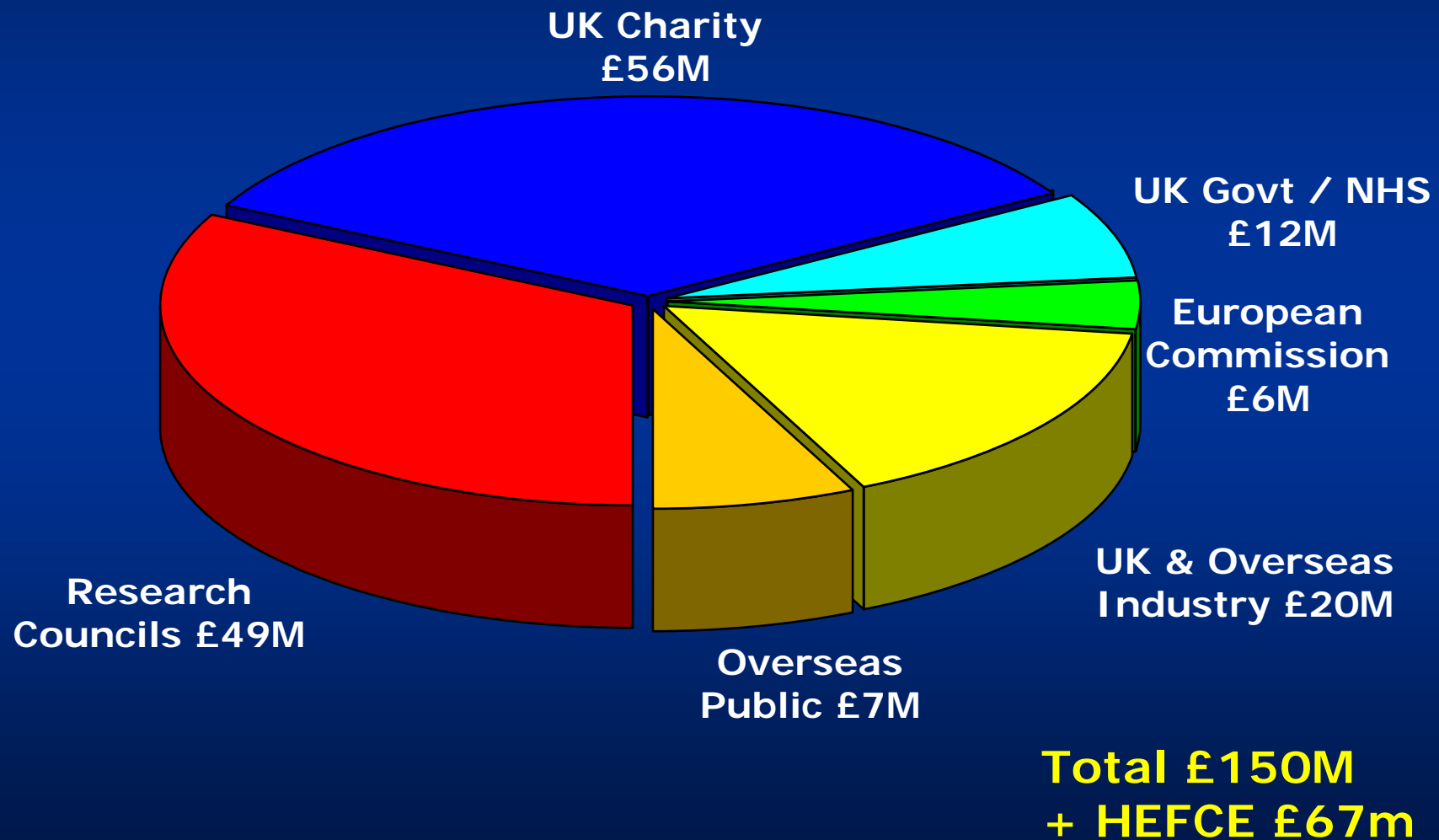
- **Medisense**
(now part of Abbott)
- **Oxford Molecular**
(now part of Pharmacopeia-Millennium)
- **Oxford Asymmetry**
(now Evotec OAI)

Technology Transfer
from the University of Oxford

Science Research at Oxford

- **2,500 researchers in Science & Medicine**
- **2,000 doctoral students**
- **High scores in Research Assessment Exercise**
- **Annual research income £216.5 million**

Oxford Research Funding 2001-2002 £217 million



Oxford Spin-outs Pre 1998

		Capital	Equity	Main Business
1959	Oxford Instruments	£106m	-	Scientific Instruments
1977	Oxford Lasers		-	Lasers
1988	Oxford GlycoSciences	£218m	Yes	Glycobiology
1989	Oxford Molecular	£53m	Yes	Drug design
1992	Oxford Asymmetry	£343m	Yes	Chemistry
1994	PowderJect	£422m	Yes	Drug delivery
1996	Oxford BioMedica	£62m	Yes	Gene Therapy
1997	Oxagen		Yes	Genetics
1997	Oxford Gene Technology		Yes	Gene chips

Valuations (at 22/4/2002)

£1,204m

Oxford Spin-outs Post 1998

1998

Feb	Opsys	Displays
Mar	Synaptica	Neurodegenerative diseases
Jun	Prolysis	Antibiotics
Nov	Celoxica	IT
Nov	Sense Therapeutic	Pharmaceuticals

1999

Mar	Avidex Pharmaceuticals	Pharmaceuticals
Jun	Oxxon Pharmaccines	Pharmaceuticals
Jun	Dash Technologies	IT
Aug	Oxonica	Nanotechnology
Aug	Abington Sensors	Sensors
Dec	Oxford Medical Imaging	Image analysis

2000

Jan	Third Phase	Clinical trials management
Apr	Mindweavers	Sensory development
May	Oxford BioSignals	Vigilance monitoring
Aug	Oxford BioSensors	Biosensors
Dec	TolerRX	Immunology
Dec	OXIVA	Medical software
Dec	PharmaDM	Drug design

2001

Mar	OxLoc	GPS/GSM tracking
Mar	The Oxford Bee Company	Pollination
Apr	Oxford Ancestors	Genealogy
Apr	Novarc	Press tooling
May	Oxford ArchDigital	Digital archaeology
Nov	NaturalMotion	Neural networks
Dec	Inhibox	Drug searching

2002

Jan	Pharminox	Cancer Drugs
Feb	Minervation	Health Information
Mar	Spinox	Artificial silk
May	Zyentia	Protein Structures
Aug	Oxitec	Insect pest control
Oct	Oxford Immunotec	TB Diagnostics
Nov	ORRA	Risk Analysis
Nov	Glycoform	Cancer drug dev't
Nov	BioAnalab	Pharma Testing

Oxford Spin-outs Post 1998 (cont.)

2003

VASTox Ltd
ReOx Ltd
Riotech Pharmaceuticals Ltd
Oxford Consultants for Social Inclusions Ltd

2004

Oxford Medical Diagnostics
G-Nostics
Surface Therapeutics Ltd
EKB Technology Ltd

2005

RF Sensors
Oxford NanoLabs Ltd
Celleron
Oxford Catalysts

2006

TdeltsS
Oxford Medistress
Particle Therapeutics
Aurox Ltd
Oxford Advanced Surfaces
OxTox

Intellectual Property

**Absolutely fundamental to the Oxford situation
in the University's ownership of IP.**

The University spends £1 million per year on patents

Typical Equity Split

Funders **30%**

Management **20%**

University **25%**

Academics **25%**

(Department receives 15% of University benefit on exit)

New Research Laboratory



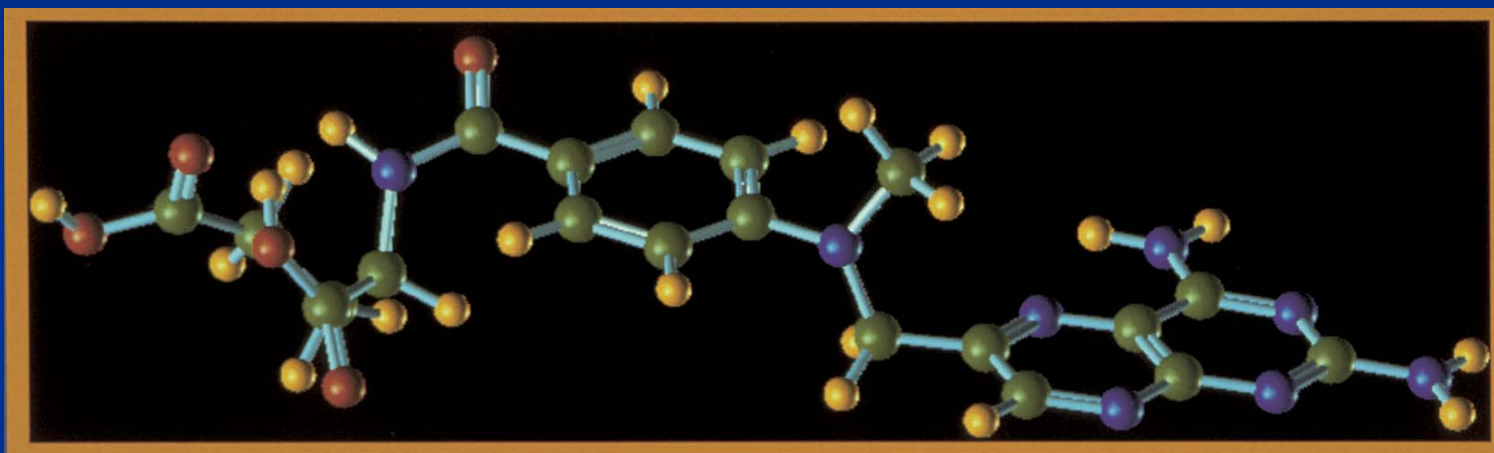
The IP Group Partnership

For 15 years IP Group will receive half of the University equity in any Chemistry spin-out in return for an up front sum.

Modus Operandi

- **‘Chemist’ is defined by RAE**
- **If another department involved,
academics define the split**
- **IP Group adds analysts’ knowledge**
- **IP Group sources funds**
- **Similar arrangements apply to licensing**

Oxford Molecular



**Admission to the Official List of
The London Stock Exchange**

Placing Sponsored by

Henry Cooke Corporate Finance Ltd

Oxford Molecular Group Plc



1989 *Founded with £350,000 Venture
Capital by Graham Richards and
Tony Marchington.
Based in the Science Area*

1991 *Moved to Oxford Science Park*

1992 *Offices opened in Paris and Palo Alto*

1993 *Acquired Biostructure SA*

1994 *Successful flotation on
London Stock Exchange
Acquired Intelligenetics Inc*

1995 *Acquired CAChe Scientific*

1996 *Acquired Chemical Informatics
division of PSI International*

*Acquired Unichem from Cray Research
Acquired Health Designs Inc.
Acquired MacVector from Kodak*

1997 *Acquired GCG Wisconsin
Founded Cambridge Combinatorial
(now Cambridge Discovery Chemistry)*

1998 *Acquired Chemical Design Ltd.*

Oxford Molecular Group Plc



Capitalization

Highest £450 million

Lowest £30 million

Highlights

*Largest share of world
bioinformatics market - 25%*

*Biggest share of Japanese
molecular modelling market*

60% of sales in USA

400 employees, half in USA

2001 Inhibox

*Based on the screen saver project of
Graham Richards for drug lead discovery*

www.inhibox.com

2002 Glycoform

*Glycochemistry from the research of
Ben Davies and Anthony Fairbanks*

www.glycoform.com

2002 Zyentia

*Structural modification of proteins derived
from Chris Dobson's research*

www.zyentia.com

2002 Pharminox

*Small molecule oncology originating with
Gordon Lowe*

www.pharminox.com

2002 ReOx

*Drug discovery based on controlling activity
of hypoxia inducible factor, incorporating
work of Chris Schofield*

www.reox.co.uk

2003 VASTox

*Drug discovery from Steve Davies using
chemical genomics. IPO 2004*

www.vastox.com

2004 Oxford Medical Diagnostics

*Laser based analytical techniques from
Gus Hancock*

2005 Oxford Catalysts

Catalysts for clean energy form the research of Malcolm Green and Tiancun Xiao. IPO 2006

www.oxfordcatalysts.com

2005 Oxford Nanolabs

*Single molecule detection based on research of
Hagan Bayley*

www.oxfordnanolabs.com

2006 Oxford Advanced Surfaces

*Coatings using chemistry of
Mark Moloney*

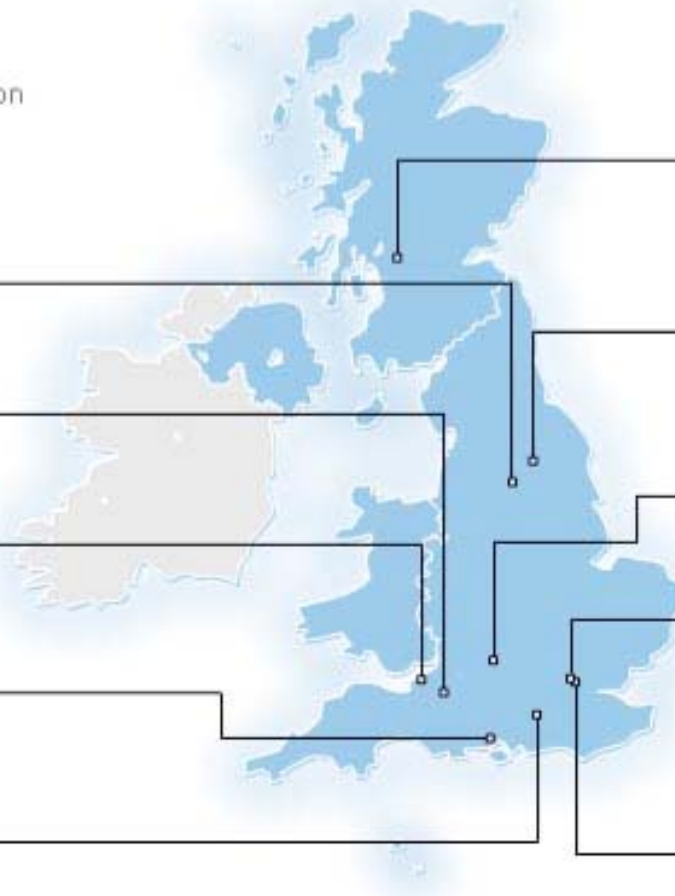
2006 OxTox

*Electrochemical detection based on the
Research of Richard Compton*

IP Group Partners

IP Group Partners

Select a partner logo for more information



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TIFF (Uncompressed) decompressor
are needed to see this picture.

Modern Biosciences

IP Group set up Modern Biosciences in May 2005 as a specialist drug in-licensing and development company. Its objective is to operate as a channel between the life science academic research community Within the UK and the pharmaceutical industry. Modern Biosciences' business model provides a channel for exciting early stage drug candidates to reach industry and is based around:

sourcing drug candidates from partner organisations

funding and managing development programmes to value inflexion

forming commercial alliances with industry for later stage development and marketing

Modern Biosciences entered into a Memorandum of Understanding with the University of Manchester relating to the commercialisation of drug related intellectual property in March 2006.

It has since entered into an exclusive licence and research agreement with the University of Manchester and the University of Salford for the development of a new class of cancer drug.

Modern Bioscience's Chief Operating Officer is Dr Alex Stevenson. He has spent the last 10 years working in a variety of scientific and management positions, with a particular focus on drug development and IP commercialisation.

For more information, please visit Modern Bioscience's website at www.modernbiosciences.com.

IP Group Plc Highlights

*FTSE main board company
capitalisation of £350 million.*

Profit half year 2006 - £30 million.