Translational Research Funding at the Wellcome Trust

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Head of Legal & Operations
Innovation in Healthcare: From Research to Market

• Wellcome Trust Overview
• Technology Transfer
• Translational Funding Schemes
Henry Wellcome

- US salesman, worked with Silas Burroughs initially
- Established use of pills in UK made with patented machines
- Created the ‘tabloid’ trademark
- Commercialised quinine
The Wellcome Trust

- 1880 Burroughs Wellcome & Co
- 1924 Wellcome Foundation Ltd
- 1936 Wellcome Trust created
- 1986 Wellcome plc
- 1995 GlaxoWellcome plc
- 2000 GlaxoSmithKline plc

Actively managed endowment of
~ £14,000,000,000 (Billion)

Independent charity with strong international presence

Supports over 3000 researchers in more than 50 countries
Wellcome Activities

‘To foster and promote research with the aim of improving human and animal health’

• Biomedical research funding

• Research programmes in the medical humanities (biomedical ethics and history of medicine)

• Activities to promote public engagement with science

• Technology transfer to encourage commercial application of research to meet medical needs
Translational Research Funding

Purpose

To maximise the impact of research innovations on health by facilitating their route to the market

In the footsteps of our founder…

• Early-stage R&D funder
• Focused on funding gaps
• Motivated by public benefit

‘Bridging the Gap’
Translation Gap Funding

Basic research → Translational research

Grant Funds
- High risk, Creative

Translation Funds
- Programme related investment

Licence → Development → Market

Start-up → Company → IPO

Venture funds
- Sustainable advantage

Institutional
- Sustainable Business
**Typical Application Consideration Process**

- Application
  - Assess Fit
  - Expert Opinions
    - Due Diligence
      - Tech Transfer Challenge Committee (routine decision)
      - Tech Transfer Strategy Panel (strategic decision)

- Risk analysis
- Milestones
- Patent position
- Commercial Strategy

- Scientific / Technical
- IP / Legal
- Regulatory
- Business
Technology Transfer Funding Schemes

Translation Awards
Up to £20 Million p.a.

Health Innovation Challenge Fund
£20 Million p.a.

Strategic Translation Awards
Up to £20 Million p.a.

Seeding Drug Discovery
£22 Million p.a.

R&D for Affordable Healthcare in India
£9 Million p.a.
Partnership Models

Joint venture with Merck and Co.
Up to £90 Million pledged by founders
Established in India (Guragaon, NCR)

Mission
To develop high impact, affordable vaccines for people in developing countries in an innovative and sustainable manner
Partnership Models

New models:

**Stevenage Bio-Incubator**

- **Vision:** Create a place that will enable, enhance and inspire improved performance in translational research, leading to a strong and relevant pipeline of healthcare products in areas of unmet need.

- **Partnership:**
  - Business Innovation & Skill (£11.7m)
  - GlaxoSmithKline (£11m)
  - Regional Development Agency (£4m)
  - Wellcome Trust (£6m)
  - Technology Strategy Board (£5m)
Technology Transfer Funding Profile

TechTransfer Award Commitments GBP £m

<table>
<thead>
<tr>
<th>Funding Year</th>
<th>Health Innov</th>
<th>India H'care</th>
<th>Med Eng</th>
<th>SDD</th>
<th>SACs</th>
<th>STA</th>
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<tr>
<td>02/3</td>
<td>£1.8m</td>
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<td>03/4</td>
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<td>04/5</td>
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<tr>
<td>05/6</td>
<td>£15.8m</td>
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<tr>
<td>06/7</td>
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<td>07/8</td>
<td>£61.7m</td>
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<td>08/9</td>
<td>£82.2m</td>
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<tr>
<td>09/10</td>
<td>£65.2m</td>
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<tr>
<td>10/11 YTD</td>
<td>£17.6m</td>
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Technology Transfer Portfolio

216 projects supported
Range: £25k - £11.2M
Average award, £1.4M
£298.3 million committed

£466 million leveraged
3 M&A by Pharma
6 product launches
9 projects into the clinic
Contact/Questions

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IP Management and Policies

• Grant conditions encourage identification and exploitation of IP with a view to public benefit
• IP from awards generally vests with the award holder
• Should there be any benefit arising (i.e. revenues or equity) Trust will expect an appropriate share
• Via its grant conditions the Trust normally requires consent to exploit IP arising from awards
• Trust sees IP as an important means of meeting its charitable objectives to create healthcare products
• As a biomedical research charity it encourages appropriate sharing of research outcomes and dissemination of results e.g. Human genome programme
• Policy to oppose patents deemed to be unnecessarily broad and inhibitory to research
**Programme Related Investments (PRI)**

Use of Charitable Monies to Fund Early Stage Commercial Companies

Purchase of Shares or Loan to Company

Further Charitable Objectives of the Trust

Funds Company’s General Activities:

- Direct Research Costs
- Support Costs
- Rents
- Professional Advisor Fees
- IP Protection Costs
**Convertible Loan**

Unsecured Loan  
Staged Loan Advances  
Interest @ 2% above NatWest Base Rate  
Equity Conversion or Repayment Option  
Repayment any time after 3\textsuperscript{rd} anniversary OR immediately prior to Sale or Listing

**Repayment Option:**  
- 20\% Net Revenues received during Previous Year payable each Year until Loan Repaid.  
- Rises to 20\% Gross Revenues received during Previous Year after 7 years payable until Loan Repaid.

**Equity Conversion Option**  
Ordinary Shares Conversion  
Price:  
- Equivalent of £750k Pre-Money Valuation  
- Price per share at last Professional Investment Round  
- 20\% Discount on Price per share at next Professional Investment Round (BVCA member or equivalent)
**Revenue Sharing Terms**

- Receive Gross Income
- Deduct Direct Costs
- Deduct and Pay Technology Transfer Fee to Exploiting Party:

<table>
<thead>
<tr>
<th>Cumulative Income</th>
<th>Technology Transfer Fee</th>
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</thead>
<tbody>
<tr>
<td>£0 - £100,000</td>
<td>30%</td>
</tr>
<tr>
<td>£100,001 - £500,000</td>
<td>25%</td>
</tr>
<tr>
<td>≥ £500,001</td>
<td>20%</td>
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Distribute Remaining Net Income:

<table>
<thead>
<tr>
<th>Cumulative Income</th>
<th>Institution &amp; their TTG</th>
<th>Wellcome Trust</th>
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</thead>
<tbody>
<tr>
<td>£0 - £100,000</td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>≥ £100,001</td>
<td>60%</td>
<td>40%</td>
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Diversity of Translation Awards

- Diagnostics: 12%
- Therapeutics: 30%
- Vaccines: 13%
- Enabling technologies: 14%
- Medical devices: 31%
- Respiratory & Pulmonary: 3%
- Veterinary: 2%
- Ophthalmic: 4%
- Oncology: 10%
- Gastrointestinal: 2%
- Metabolic & Endocrinology: 2%
- Neurology: 8%
- Other: 16%
- Infectious Disease: 37%
- Musculo-skeletal: 6%
- Cardiovascular & Circulatory: 10%

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TT Translation Awards leverage of third party investment to date

TT Funding Commitment (Total £153 M)  Follow-on Fundraising (Currently £409M)