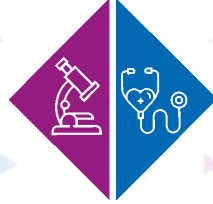


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Research Network



Biostatistics Collaboration Unit (BCU)

Prof Andy Vail

Role of Statistics in Translational research

Basic Science: *“In the basic biological sciences, statistical considerations are secondary or nonexistent, results entirely unpredicted by hypotheses are celebrated, and there are few formal rules for reproducibility”*

Translation usually involves: Collection/collation of quantitative data for analysis and interpretation.

ICH Good Clinical Practice: *“it is assumed that the actual responsibility for all statistical work associated with clinical trials will lie with an appropriately qualified and experienced statistician”*

Typical funding model

Senior Statistical co-applicant

- Expertise in design, analysis and interpretation

- Co-applicant or Named Collaborator as appropriate

- Small percentage supervision time

RA/RF (Grade 5 to 7) Biostatistician to

- Agree data collection & management mechanisms

- Pre-specify statistical analysis plan

- Undertake data validation and check assumptions

- Code analyses, graphs, tables

- Co-author results and discussion sections

- Time consuming: typically $\geq 30\%$ FTE



The University of Manchester

Advantages

Full recovery of costs: pleases Faculty

Statistical work by professional statisticians: pleases funders

Higher quality publications: pleases research team

Possible to appoint to part-time, short-term posts

Cover for prolonged absences

Contact

<https://sites.manchester.ac.uk/biostatistics/>

Email: biostatsenquiries@manchester.ac.uk

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Diagnostics and Technology Accelerator

Annie Yarwood

DiTA Diagnostics and Technology Accelerator

DiTA works collaboratively with innovators to catalyse high quality evidence generation for new IVDs and MedTech which can be commercialised, facilitating rapid translation and adoption into the health and care system.

Co-development

- Working with industry, academics, clinicians, patients and the public to co-develop devices to improve patient care and efficiency within the NHS

Partnership

- Establishing partnerships between industry, academics, patients, NHS, clinicians, and wider infrastructure, to progress innovations

Collaboration

- Collaborative grant applications



Director: Dr Tim Felton



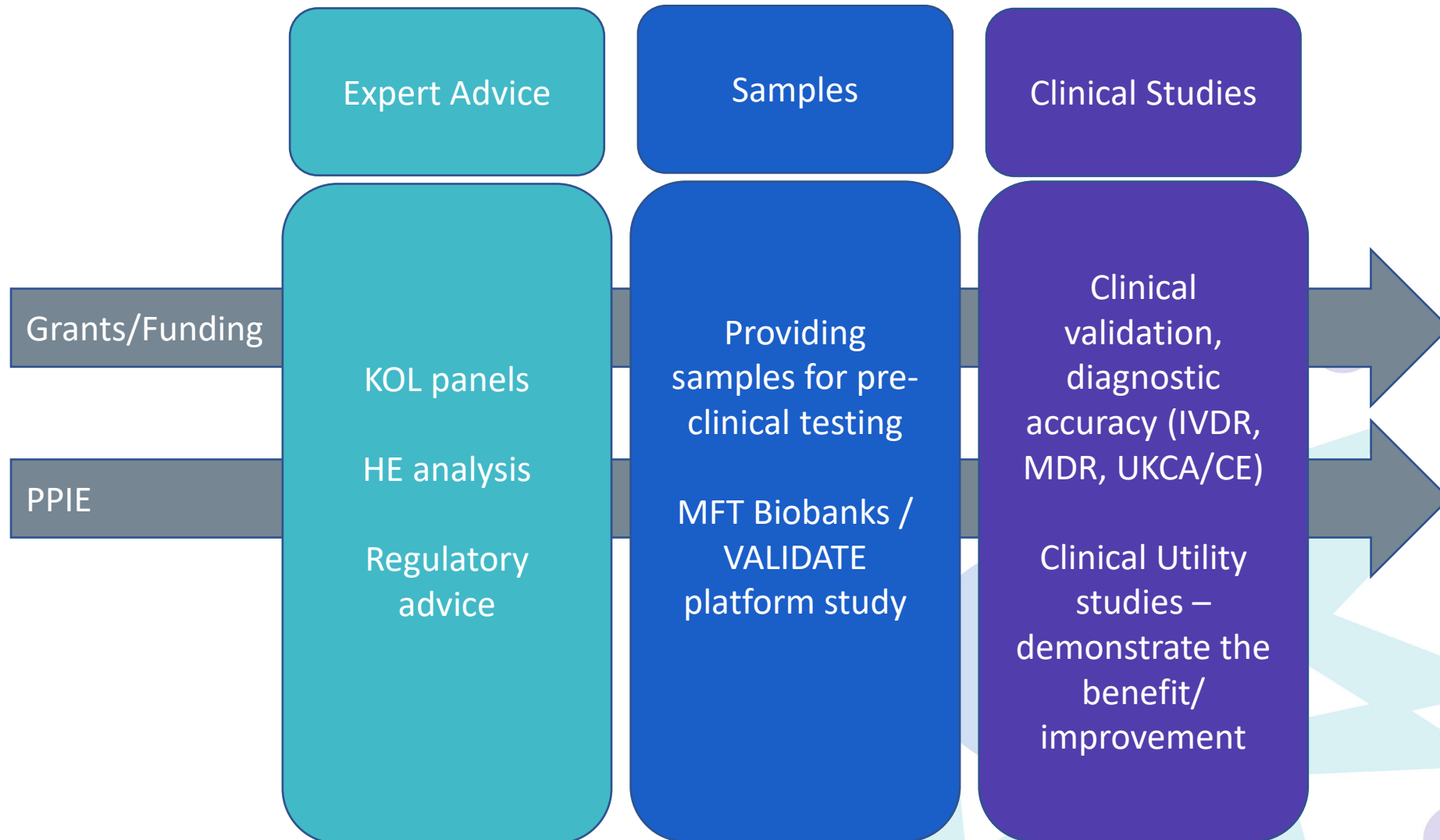
Operations manager:
Annie Yarwood

DiTAs focus is Evidence Generation



Manchester University
NHS Foundation Trust

Our activity is Based around 3 pillars:



[Get in touch: dita@mft.nhs.uk](mailto:dita@mft.nhs.uk)

VALIDATE platform

InnoVative ObservAtional In-vitro DiAgnoStic pErformance study

Platform project with master protocol and over-arching ethics where projects can be added as amendments as and when they arise

Allow us to be responsive – **rapid costings, approval, set up and delivery**

The study is **disease and infection agnostic** – study a wide range of diagnostics targeting different conditions

VALIDATE will cover **observational studies**, samples will be collected prospectively

Transform the speed at which new diagnostics can progress through the innovation pipeline towards patient benefit.



Research Design Service North West

Sarah Rhodes

The Research Design Service



Sarah Rhodes
RDS frontline advisor/Statistician



@NIHR_RDSNW

Research Design Service North West

Provides advice on research design to researchers to develop high quality research proposals for national, peer-reviewed funding competitions for applied health or social care research.



Our expertise

- Methodology including but not limited to:
 - quantitative, including statistical
 - qualitative
 - mixed methods
 - health economics
 - health psychology and behaviour change
 - specialist methodologies.
- Specific funding programme application advice.



See www.rds-nw.nihr.ac.uk/about-us/expertise-a-z for more examples

We can also help with

- Identifying appropriate funding.
- Finding collaborators and building an appropriate team.
- Involving the public.
- Formulating the research question.
- “Grantsmanship.”
- Signposting to specialised support.
- Ethical and governance issues.
- Getting the narrative right.
- A critical read of your proposal.
- And much more.



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Bionow

28

David Holmes

What is Bionow?

A Resource to Expand your network
100s of Life Science & Biomedical Companies
To Connect you to the sector
& Save money – lots of it!



Why?

Meet other Academics
Meet Industry
Connect with Collaboration Partners
Connect with Professionals and Expertise
Funding Opportunities
Save Money – lots of it!



Corporate Patron



University Sponsors



The University of Sheffield.

bionow®



bionow®
Pitching
& Pizza

bionow®
careers fair®

PRECISION
MEDICINE

bionow® business
pitching

bionow®
annual awards

How?

Bionow Awards

Oncology Conference

BioInfect (AMR) Conference

Pharma Manufacturing Conference

BioCap (Investment) Conference

Networking Networking, Networking

News/Newsletter

Biotech & Beers, Business Pitching, Coffee Mornings and more....

Life Scientist Come over for a chat...

(Stand 28 – Pioneer Suite)



bionow®

MANCHESTER
1824
The University of Manchester



BioCap



Corporate Patron



University Sponsors



UNIVERSITY OF LEEDS



The
University
Of
Sheffield.

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Research Network



Commercial Partnerships, CRUK

Martyn Bottomley

The background of the slide features a dark blue, textured pattern of small dots. Overlaid on this is a photograph of a person's arm. The person is wearing a blue lab coat. On their forearm, there is a tattoo of a globe with yellow and green landmasses. The text 'ABOUT US' is written in white, uppercase letters on the left side of the image.

ABOUT US

We are a specialist drug discovery, development and commercialisation company that fast tracks scientific breakthroughs for patient benefit.

Martyn Bottomley, Commercial Partnerships Team

SUPPORT AVAILABLE TO RESEARCHERS



COMMERCIALISATION AND INDUSTRY ENGAGEMENT



A department dedicated to helping you accelerate your discoveries to patients



A regional team to support you through the research translation process

ENTREPRENEURIAL PROGRAMMES



Educational, training and financial support programmes to equip you with the knowledge and skills to commercialise your research

DEDICATED TRANSLATION FUNDING, INFRASTRUCTURE & PLATFORMS



Access to therapeutic discovery and development capabilities



Translational grant funding to progress drugs, devices, diagnostics, data and software



Seed and venture capital funds

COMMERCIAL GAP FUNDING

Funding to bridge the gap to commercialisation

PROTECT NEW
IDEAS

DEVELOP

ENGAGE WITH
INDUSTRY &
INVESTORS

MANAGE &
TRACK

PATIENT BENEFIT
& SOCIETAL
IMPACT

PROJECT DEVELOPMENT FUND (typically 'Fast50' £50k awards)



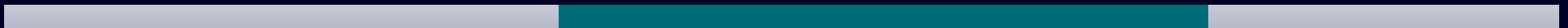
PATENT COSTS* (as required)



SEED FUND (£15-30m Fund – equity investments or convertible loans from £50k pre-seed to £1m seed/series A)



SV7 IMPACT MEDICINE FUND (£275m)



*where patent protection is appropriate

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▶ Research Network



07

University of Manchester Innovation Factory

Duncan Henderson

The University of Manchester Innovation Factory

‘Commercialising
The University of Manchester’s
innovations and IP to create
positive economic & social impact’

Dr Duncan Henderson – Director of Projects Life Sciences

Duncan.Henderson@uominnovationfactory.com

+44 (0) 7917 422297 (work mobile)

Translational Research @ Manchester 2022



The University of Manchester

Why?



**Commercial &
societal Impact**



**Wider
Recognition**



UK Economy

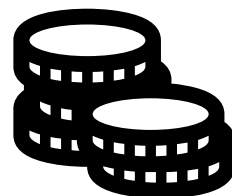


**Worldwide Industrial
Investment**

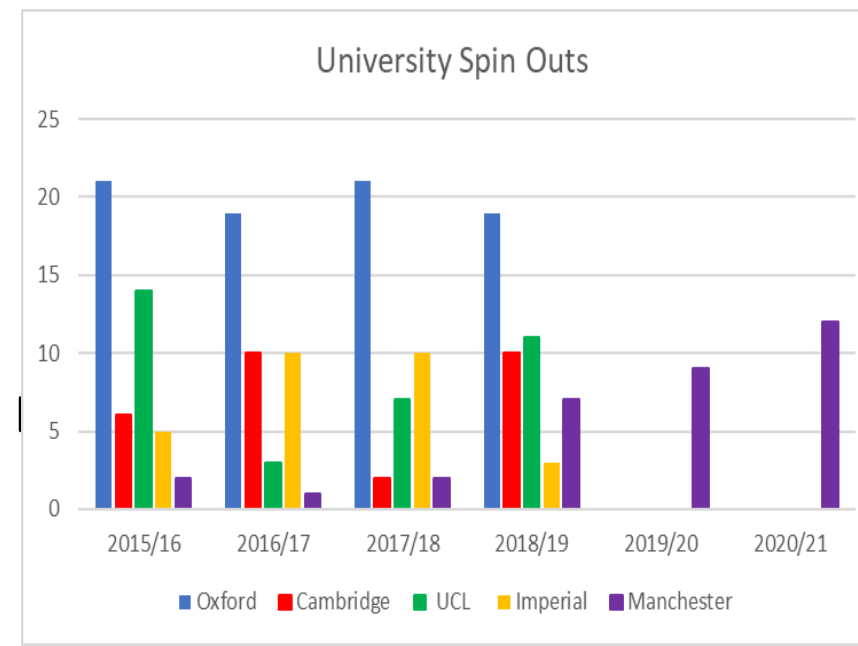
**Commercialisation is usually the best
route to get an idea/product adopted**

MANCHESTER
1824

The University of Manchester



**Revenue
Share**



What?

We protect and commercialise University IP

Commercialisation in a university setting involves capturing innovations through the identification of Intellectual Property (IP)

The University needs to own the IP – it may not, it may be shared...

- Various forms of IP can be protected and can be of value

patents

copyright

materials

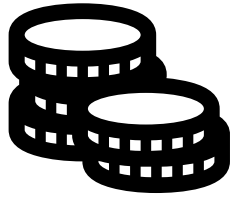
Knowhow

Data

code

assays

Innovation Factory output: last 3 years	2019/20	2020/21	2021/22
New Invention disclosures	90	80	120
Spinout companies	9	13	10
Licencing income	£1.5m	£7.4m	£4.9m
First investment in spinouts		£3.4m	£6.3m



Funding



IP Evaluation



Market
research



Grant application
support



Consultants

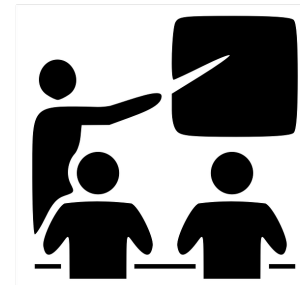
On the road to
commercialisation how can we
help?.....



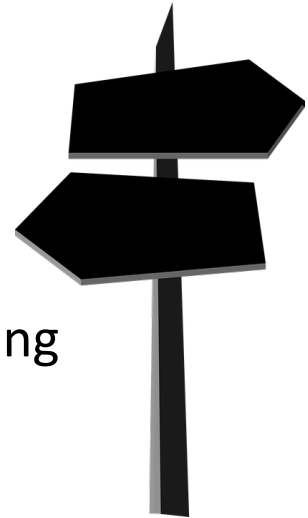
Advice



Project
planning



Training/mentoring



Signposting

Who?

Duncan Henderson
Director of Life Sciences



The Life Sciences Team

SHS



Joannah Denbigh



Yousef Taktak

SBS



Sam Rhoden



Sonia Nikolovski

SMS



Ewalina Rozyka



Tansi Khodai



Ida Jackson



Nathalie Dhomen

OPERATIONS

Cancer



Roisin McCallion
Commercialisation Director



Fay Kassibawi



Elliot Jennings

**BUSINESS
DEVELOPMENT**

Lifescience Spinouts Launched in last 3 years

- | | |
|--|--|
| <ul style="list-style-type: none"> • Complement Therapeutics Ltd - Complement therapeutic for age related macular degeneration. Simon Clarke SBS • VREvo Ltd – Virtual reality medical teaching tool. Anthony Payton. SHS • InPepCide – Anti-Fungal. Mike Bromley SBS • Gene Gini – Transcriptomic frequency analysis software. Philip Day SBS • Careloop – Mental Health platform & app. Lewis Schon SHS • Link Biologics – Osteoarthritis Therapeutics. Tony Day. SBS • Ravan - Anti Viral Therapeutics and Senesce. Ian Hampson SMS • Sebomix – Early Diagnostics for Parkinson's. Perdi Barran MIB Chemistry | <ul style="list-style-type: none"> • Mantra – Hypoxic Tumour Biomarkers. Catherine West SMS • Spotlight – AI for pathology analysis in Blood Cancer Martin Fergie SHS • Tabrix – Tuberculosis Therapeutics. Lydia Taberner. SBS • Retendon– Synthetic Tendon Repair device. Sarah Cartmell. SNS Materials • PolyNerve – Synthetic Nerve Repair Sandra Downes SNS materials • MiTrial – clinical trial organisation software. Alexander Horsley SBS • Imperagen – Enzyme engineering. Andrew Almond et al. MIB Chemistry • Apini – eNAMPT small molecule. Sam Butterworth SHS |
|--|--|

Fin

