Translation Manchester Research Network

Supporting Translational Research
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Translational research is the process by which scientific research is ‘translated’ into patient focused research and implemented to improve the healthcare and wellbeing of the population.

The translational research pathway includes a series of stages which take non-clinical, discovery research through human and clinical applications into communities and populations. It can be applied to any functional healthcare intervention and includes medical procedures, medical devices, treatment pathways, drug development pathways, diagnostic imaging and diagnostic tests, software development, novel technologies, education, training and lifestyle changes.

The translational research pathway can be categorised into four discovery stages (D1-4) and four translational stages (T1-4) as seen on Page 5.

Progression along the pathway is not always linear or sequential and most research projects will include work that falls into multiple stages of the pathway. Most healthcare related research projects are translational or have the potential to be translational, even if the long term vision and implementation is far away from being realised.

Moving research along the transitional pathway requires skills and expertise from a wide range of professionals. Within the Greater Manchester region we have the skills and expertise that are needed to realise the real world potential of the innovative research undertaken at University of Manchester.

The Wellcome Translational Partnership Award (TPA), delivered through Translation Manchester, will help researchers identify translational research opportunities and facilitate new connections to support the progression of research along the translational pathway.
The Eight Stages of the Translation Pathway

Adapted from Gannon F. The steps from translatable to translational research. EMBO reports 15 (11) 1107-1108, 2014

Follow the link for more details on each stage of the translation pathway.

http://documents.manchester.ac.uk/display.aspx?DocID=41767
Introduction to Translation Manchester

Translation Manchester was established in May 2018 as part of a Wellcome initiative to help overcome the obstacles to conducting translational research in Greater Manchester, by bringing together a network of support, facilities and expertise to make the pathway to translation quicker and easier. Translational Research Managers (TRMs) aid investigators by ensuring translatability of ongoing projects, forging new and productive connections between academic researchers and the clinical workforce and leading two translational funding schemes—‘Projects for Translation (P4T)’ and ‘Access to Expertise (A2E)’. If your research requires support, funding or making new connections to move you one-step closer to patient benefit, Translation Manchester is here to help.

Translation Manchester is part of the Research Strategy and Innovation (RS&I) team within the Faculty of Biology, Medicine and Health (FBMH). The key driver to the formation of the RS&I team was to bring together several interlinked but previously separate teams; Strategic Funding Team, Business Engagement, Fellowship Academy, International Partnerships and Translation Manchester. The RS&I team, led by Chris Dolan, provides coordinated expertise spanning the translational pathway including provision of grant and industry funding intelligence, bid development support, internal and external consortia building, navigating internal approval and submission processes and operational management of strategic projects.

“However excellent our research is, we have a duty to society to ensure that it is applied for benefit to health, well-being and the economy. The essence of that translation is connecting people with complementary skills and assets at all stages of the process.”

Professor Luke Georghiou
Deputy President and Deputy Vice-Chancellor
PI of the Wellcome Translational Partnership Award (TPA)

“At Translation Manchester we support researchers to identify and overcome translational research bottlenecks, facilitating the journey of new discoveries and innovations from the bench to the beside.”

Dr Lloyd Gregory
Academic Partnerships Director
at Health Innovation Manchester; TPA Operational Lead
Meet the Team

**Professor Luke Georghiou**  
Deputy President and Deputy Vice-Chancellor; TPA Principal Investigator

**Professor Nigel Hooper**  
Associate Vice-President for Research; TPA Co-Investigator

**Dr Lloyd Gregory**  
Academic Partnerships Director at Health Innovation Manchester; TPA Operational Lead

**Dr Ania Jolly**  
Strategic Funding Manager

**Dr Alessandro Faroni**  
Translational Research Manager; TPA Programme Manager

**Dr Fiona Foster**  
Translational Research Manager; TPA Programme Manager

**Dr Lijing Lin**  
Bioinformatician

**Iqra Habib**  
Translational Research Support Officer
The Translation Manchester Research Network

Translational research relies on collaborations and multidisciplinary working, but in organisations as large as the University of Manchester, finding the support you need at the right time can sometimes be tricky. We are extremely fortunate that there are a number of groups and organisations that span the University and the Greater Manchester NHS Trusts, which exist to facilitate translational research. In an attempt to bring this infrastructure together into one, easily accessible space, Translation Manchester has created the ‘Translation Manchester Research Network (TMRN)’ as your one-stop shop for all your research support needs. Spanning funding to biobanks, statistics to trial design- there is something for every type and stage of research project.

The following pages detail how each network partner can support researchers and outlines when and how to contact them to utilise their services. We hope this initiative will help direct you to the right people at the right time so we can work together to enable Manchester’s translational research projects to progress towards innovations and treatments that impact healthcare locally, nationally and internationally.

The pathway indicator, at the bottom of each page, shows which stages of the translational pathway the partner is able to support. If you’re interested in joining the network, or think there’s a gap that needs filling, get in touch- we are always looking to add new partners to the network.

We already have major research infrastructure in the BRC and CRF and a multitude of support systems for producing high quality research. We now need a co-ordinated approach to successfully deliver research for patient benefit.

- Professor Graham Lord
Vice-President and Dean of the Faculty of Biology, Medicine and Health at The University of Manchester

When available, click on this icon to access a video presentation to the network partners.
The University of Manchester was one of the first institutions to receive a Wellcome Translational Partnership Award (TPA) back in 2018. The 6 year award amounts to £3.6m of funding to build better links between science, technology and innovation by removing barriers between disciplines and making it easier to take the first translational step. The TPA is delivered through Translation Manchester which launched in February 2019. Our Translational Research Managers (TRMs), Dr Alessandro Faroni manages the TPA award and Translation Manchester. The TRFs support transitional researchers and projects across all stages of the Translational Research Pathway.

We help researchers by:
- Forging new and productive connections between UoM researchers and NHS clinical staff
- Raising awareness and increasing engagement in translational research across UoM and associated Greater Manchester NHS Trusts
- Supporting investigators, enabling them to overcome hurdles and bottlenecks along their translational research journey

At what stage in their research project should a researcher approach you for support?
Researchers who are experiencing a bottleneck or hurdle that is preventing them from progressing their translational research project should approach Translation Manchester for support. This could be anything from needing a connection to clinical staff in the NHS or help finding the right person to collaborate with. Our TRMs also support translational funding applications and access to patient samples and data. Researchers who want to engage in transitional research but need advice on how to do so should also contact our TRMs.

Our TRMs manage two translational funding schemes ‘Projects for Translation (P4T)’ and ‘Access to Expertise (A2E)’. These funding schemes provide pump priming funding to address a specific bottleneck or hurdle within an ongoing transitional research project. The TRMs also manage the Informatics Training Scheme, which provides researchers with an opportunity to gain skills in the areas of health informatics, bioinformatics and biostatistics that can be applied to their translational research projects.

www.translation.manchester.ac.uk
translation@manchester.ac.uk
@Translation_Mcr
Strategic Funding Team

Supports academic colleagues in the production and submission of ambitious, collaborative and multidisciplinary research and fellowship applications.

How do you support researchers in Manchester?
We work closely with our academic community to help members to develop and realise their full funding potential. Our primary goal is to provide a professional service aimed at supporting academic colleagues in the production and submission of ambitious, collaborative and multidisciplinary research and fellowship applications. We also aim to help build capacity and capability on areas of strategy priority for the faculty and this is especially true of translational research where it is often less than straightforward for an investigator to navigate the complexities of pulling the right team together and obtaining the right kind of funding for the right stage of their project. We can help identify funding schemes & opportunities, collaborative partners and support the development of project proposals. We also hold and administer the University's MRC confidence in concept funding which typically equates to ~£1.2m of pump-priming funding for early-stage translational work.

At what stage in their research project should a researcher approach you for support?
It depends on their requirements – but generally the sooner the better. Our Strategic Funding Managers (SFM’s) are happy to discuss initial concepts and ideas, direct people to the most appropriate source of specialist advice (e.g. drug development, Research Design Service, Clinical Research Facilities, ethics etc) and help to project manage subsequent proposal development (subject to capacity). If you have an idea or a proposal you’d like to discuss further please get in touch.

Contact

For more information, please contact
sft@manchester.ac.uk

University staff can see a full list of strategic funding contacts on the Faculty intranet (UoM login required).
Business Engagement Team

Support business engagement partnerships with large corporations, start-ups, charities and public sector organisations

How do you support researchers in Manchester?
We support a range of activities including strategic partnerships, research projects, consultancy, knowledge exchange, sharing facilities, professional development and recruiting talent.

The Business Engagement team aims to bridge the gap between academia and industry by facilitating interactions that will lead to mutual benefit.

At what stage in their research project should a researcher approach you for support?
The Business Engagement Team is always keen to understand the research that is being undertaken at the University as this assists them in identifying potential collaborative opportunities. Please get in touch if you feel that your research or career can be enhanced or progressed through working with industry, if you are about to engage with an industry partner, or if you would like to know about industry/academic collaborative opportunities.

Contact
Business Engagement Manager for Faculty of Biology, Medicine and Health

Chris Hepworth

christopher.hepworth@manchester.ac.uk
07584 640 658

www.bmh.manchester.ac.uk/connect/business/

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4
**Faculty Research Governance**

Supporting researchers undertaking clinical and health related research in the NHS, particularly when applying for Health Research Authority (HRA) ethical or regulatory approvals.

**How do you support researchers in Manchester?**

The Faculty Research Governance Team (RGT) support researchers undertaking clinical and health related research in the NHS, particularly when applying for ethical or regulatory approvals. Acting on behalf of the University as Research Governance Sponsor, we work closely with University and Trust colleagues to provide practical guidance and advice as well as sign-post to other areas of expertise. The aim of all our activities are to ensure that researchers are clear on what they need to do and that they and the University meet the requirements associated with NHS research. We support staff and student researchers except where the research falls under the clinical trial regulations for investigational medicinal products or medical devices. Such clinical trials would fall under the remit of our colleagues in the University's Clinical Trial Team.

**At what stage in their research project should a researcher approach you for support?**

Researchers can seek advice and guidance at any stage during the project however; we find that most researchers benefit from our input at specific stages of their study. The Faculty RGT review and authorise all applications and amendments being submitted for NHS Ethics and/or HRA approval and so most researchers contact the RGT once they have a final draft of their application/amendment. We are also contacted before funding applications are submitted where the funder requires confirmation of sponsorship.

**Translational Stages Supported:**

D1 D2 D3 D4 T1 T2 T3 T4

**Contact**

The Faculty RGT can be contacted via

Fax FBMHethics@manchester.ac.uk

Our webpages provide an overview of our processes and what needs to be considered when setting up a study in the NHS and also links to other key contacts both within and external to the University:

www.staffnet.manchester.ac.uk/bmh/research/ethics-and-regulatory-support/

Our Faculty Research Governance Pack contains key information for researchers setting up a University-sponsored study. The pack is regularly updated and contains current templates, standard answers for IRAS, FAQs etc. Details of how to book onto our regular Research Governance Clinics can also be found here. It can be downloaded from our sponsorship approval webpage.

We have a regular research governance clinic during which researchers can meet with a member of the team to discuss any study-specific issues. Details of how to book onto the clinic can be found in the Faculty Research Governance pack on the website.

Follow us on Twitter for regular updates @FBMH_ethics
Research Impact

Support in developing ‘pathways to impact’ for grant applications, and planning and evaluating activities that lead to impact.

How do you support researchers in Manchester?
Impact is the benefit research has (or has the potential to achieve) for any non-academic audience, be they industrial, governmental or the general public. The cross-university team of Impact Officers support researchers in planning and realising the impact of their research. We can help with the impact sections of grant applications, evaluating impact, gathering evidence of impact, engaging external stakeholders, communicating impact and formulating REF impact cases. We work closely with a range of research support functions across the university and can help to signpost researchers accordingly.

At what stage in their research project should a researcher approach you for support?
We can be approached at any time to discuss the benefits of demonstrating impact from your research and how to achieve this. We can provide the best support if researchers get in touch as soon as they begin to plan a grant application. We can provide examples and detailed feedback on the impact sections of grant applications, but planning for impact often has major implications for the grant as a whole.

Contact

Faculty of Biology, Medicine and Health
School of Biological Sciences
✉️ deborah.bentley@manchester.ac.uk
📞 ext 55465

School of Health Sciences
✉️ denise.davidson@manchester.ac.uk
📞 ext 60528

School of Medical Sciences
✉️ emma.hatton@manchester.ac.uk
📞 ext 57657

Or learn more at our staffnet page:
https://www.staffnet.manchester.ac.uk/bmh/research/assessment/

Faculty of Science and Engineering
✉️ darren.clement@manchester.ac.uk
📞 ext 50330 or 65337
✉️ christopher.roberts-2@manchester.ac.uk
📞 ext 50330 or 65337

Or learn more at our staffnet page

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4
Policy@Manchester
An academic health science and innovation system at the forefront of transforming the health and wellbeing of Greater Manchester’s 2.8 million citizens.

How do you support researchers in Manchester?
Policy@Manchester can identify audiences in the local, regional, and national policy world who may be interested in, or able to make good use of, your evidence. We facilitate correspondence and introductions between researchers and policymakers, and proactively search for opportunities for our researchers to make contributions to government, parliament, and wider policy debates.

At what stage in their research project should a researcher approach you for support?
At any point, but the earlier, the better! We can advise on potential policy impacts from the planning phases onwards, and can arrange for promotions and events that tie-in to final outputs. We can also be included in ‘Pathways To Impact’ sections of grant applications for future projects as a tailored policy support service.

Contact
For general enquiries:
(policy@manchester.ac.uk)

For Faculty specific contacts:

FBMH
Callum Wood
callum.wood@manchester.ac.uk

FSE
Madeleine Smart
madeleine.smart@manchester.ac.uk

Humanities
Megan Lawless
megan.lawless@manchester.ac.uk

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4
Discovery Pathway Advisory Group (DPAG)

Translation of small molecule, biological, and genetic therapeutics as well as devices and diagnostics.

How do you support researchers in Manchester?
DPAG will offer independent and impartial support, advice and assessment to early translational projects and funding applications. Our group contains members with significant experience in translation of small molecule, biological, and genetic therapeutics as well as devices and diagnostics. Its primary purpose is to enhance:

• The implementation of on-going early translational studies.

• The quality of applications for early translational funding to schemes such as the UoM/MRC Confidence in Concept.

• The success of follow-on funding applications and commercial development after proof-of-concept has been obtained.

At what stage in their research project should a researcher approach you for support?
We are happy to engage with staff at any stage in their project.

Contact

sam.butterworth@manchester.ac.uk
The University of Manchester
Christabel Pankhurst Institute for Health Technology Research and Innovation

Building on the University’s research strengths in digital technology and advanced materials, the Institute develops innovative solutions to pressing health and care challenges, fosters new collaborations, improves lives, and catalyses growth in the health innovation business sector.

How do you support researchers in Manchester?
Through our partners, we:

• Build a community of practice around health technology, engaging with companies, care providers, funders, charities, patient groups, and academics from across the spectrum of disciplines.
• Engage with care providers, commissioners, clinicians, patients and businesses to understand health and care needs and opportunities.
• Bring together scientists, engineers, clinicians, patients, and businesses to co-create innovative solutions to real health and care needs.
• Broker new partnerships and collaborations across health and care providers, clinicians, academic researchers and business, and provide access to seed-corn funding.
• Provide comprehensive support across the translational pathway, providing advice on applicability, funding, health economics, regulation, clinical trials, commercialisation, and deployment.

Translational Stages Supported:

D1  D2  D3  D4  T1  T2  T3  T4

At what stage in their research project should a researcher approach you for support?
Any stage.

Contact

panhurst@manchester.ac.uk
https://www.pankhurst.manchester.ac.uk
@UoMPankhurst

The University of Manchester, Oxford Road, Manchester M13 9PL. UNITED KINGDOM

Nicola Telfer
nicola.telfer@manchester.ac.uk
University of Manchester
Innovation Factory

Commercialising the University of Manchester’s innovations and IP to create positive global, social and economic impact.

How do you support researchers in Manchester?
The Innovation Factory works with academic and student inventors to identify research that has the potential to create value. It then translates these into a form where they can be used to benefit society as a whole.

Access to innovations may be created via technology licensing or the formation of new spin-out companies. The Innovation Factory aims to provide a world class service to academic colleagues as well as industry; entrepreneurs; licensees; VC & angel investors and corporate venturing partners.

At what stage in their research project should a researcher approach you for support?
The Innovation Factory uses a stage gate process to effectively capture and rapidly evaluate new inventions coming out of The University of Manchester. This process enables the organisation to focus its resources on those innovations which have the greatest chance of generating future social and economic impact.

Opportunities passing through the system must meet certain requirements before they can pass through a gate. Therefore, by the later stages of the process, the value of the project is fully understood, the IP is protected, the value of the opportunity is defined and a commercialisation plan has been developed.

The project is therefore in a state where it can be presented to a potential investor or licensee.

The process also lets us proactively share opportunities with companies across the globe. The Innovation Factory continues to engage with licensees and spinout companies even after a deal is completed, to maximise the impact that a piece of research will have.

Contact

contact@uominnovationfactory.com
https://uominnovationfactory.com
@putideastowork

University of Manchester, Innovation Factory Limited
Core Technology Facility, 46 Grafton Street,
Manchester M13 9NT. UNITED KINGDOM

Each member of the Innovation Factory’s team has experiences across particular fields. You can contact the most appropriate team member here:

https://uominnovationfactory.com/about/team
+44 (0)161 306 8510

Translational Stages Supported:

D1  D2  D3  D4  T1  T2  T3  T4
Commercial Partnerships, CRUK
We’re dedicated to advancing discoveries to beat cancer

How do you support researchers in Manchester?
Cancer Research UK’s Commercial Partnerships team, a part of the Research and Innovation division of CRUK, develops promising ideas into successful cancer therapeutics, vaccines, diagnostics and enabling technologies. Our deep understanding of both academia and industry enables us to translate research into commercial propositions to deliver patient benefit and commercial value that will support further cancer research.

Protect new ideas - Identify novel assets & protect new inventions using intellectual property rights

Develop - Provide translational support until sufficiently developed to be able to engage venture finance or industry engagement

Engage with industry & investors - Commercialise CRUK funded science by collaboration, licensing or forming new spin-outs

Manage & track - Manage partnerships & collaborations and monitor licenses to ensure our researchers’ ideas are progressed towards patient benefit

Patient Benefit & Societal Impact

At what stage in their research project should a researcher approach you for support?
We are interested to hear from researchers when they have an interesting observation, idea, or data related to cancer research that has not been published or presented. We will then be able to help advance these discoveries to beat cancer via the approaches detailed above.

Contact
Martyn Bottomley, PhD,
Regional Translational Lead (Central),
CRUK Commercial Partnerships
CRUK Manchester Institute,
The University of Manchester, Block 12F18,
Alderley Park, Cheshire SK10 4TG
Martyn.Bottomley@cancer.org.uk
07880 079285
commercial.cancerresearchuk.org

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
ERDF R&I Health Accelerator

The Research and Innovation (R&I) Health Accelerator is an ERDF (European Regional Development Fund) part-funded project delivered by Health Innovation Manchester, The University of Manchester, The University of Manchester Innovation Factory, Manchester City Council and Bionow.

How do you support researchers in Manchester?
The ERDF R&I Health Accelerator links researchers with small and medium-sized enterprises looking for academic support and real-world validation.

At what stage in their research project should a researcher approach you for support?
Researchers should get in touch when they would like to collaborate with SMEs in order to accelerate development and improve commercialisation of innovative healthcare products and services within life sciences.

Contact

Health Innovation Manchester

✉️ Vicky.bertenshaw@healthinnovationmanchester.com
healthinnovationmanchester.com/our-work/
greater-manchester-research-and-innovation-health-accelerator/

📍 CityLabs 1, Nelson Street, Manchester
@HealthInnovMcr

University of Manchester

✉️ radina.ivanova@manchester.ac.uk
✉️ yasmin.hussain-2@manchester.ac.uk

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
Manchester Molecular Pathology Innovation Centre (MMPathIC)

Supporting translation of biomarkers, biomarker-based technologies and novel diagnostics/ lab-based tests, through validation and early economic modelling

How do you support researchers in Manchester?
MMPathIC provides an environment to facilitate the translation of stratified medicine and biomarker research into usable tests that can be implemented within the NHS.

Delivering novel diagnostics and molecular pathology tests to the clinic or market involves a series of steps, forming the development pathway, to establish the analytical accuracy, clinical and cost effectiveness, and clinical utility of a novel marker. MMPathIC works with researchers and companies who are at different steps of this pathway.

The National Institute for Health and Clinical Excellence evaluates medical technologies and diagnostics, and makes recommendations as to whether they should be used in the NHS. A key assessment criterion for a new technology is its value proposition. The value proposition asks whether the new technology does the same thing at a lower cost, or if it is better for the same price. To ensure the greatest likelihood of achieving MMPathIC’s vision of delivering new tests to the clinic, all potential projects are evaluated for their likely value proposition. Within the MMPathIC pipeline approach this is evaluated at the first stages as, without fulfilling this, a new product is unlikely to be adopted by the NHS.

At what stage in their research project should a researcher approach you for support?
MMPathIC offers a clear line of sight from discovery and evaluation of novel biomarkers, through to implementation of diagnostics and related technologies into the NHS. Therefore, researchers should approach MMPathIC at any stage of their research project so to assess where the novel diagnostic or molecular pathology test fits within the development pathway.

Contact

mmpathic@manchester.ac.uk
+44 (0)161 306 5334
@MMPathIC
www.manchester.ac.uk/mmpathic

Mailing list:
http://www.biomarkers.manchester.ac.uk/connect/contact-us/form/

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
Masood Entrepreneurship Centre

The Masood Entrepreneurship Centre (MEC) is one of the UK leaders in practitioner-based, applied enterprise and entrepreneurship education. MEC's activities are available for students, graduates and staff across the University.

Programmes for Researchers include:

- MCEL60091/2 Innovation and Commercialisation of Research (ICR) - a project-based course delivered online in scheduled slots, with taught sessions and individual tutorials, all preparing PhD students to deliver a 5-minute pitch of a commercial opportunity based on their research.

- Researcher to Innovator (R2I) - an interactive boot camp for late PhD, PDRA and early career researchers, providing strategies to take ideas forward and discover new sources of funding. Over 850 PGR's have been through ICR and R2I since 2014

- Workshops - offered on a range of topics.

- Advisor Network and Drop-In Sessions - from experienced entrepreneurial alumni to professional service providers, all are available to give advice on an idea you have for a business start-up and connect you to other groups that can offer expert help.

- Signposting to external programmes and competitions – we have pathways enabling researchers from all academic backgrounds to participate in our national programmes. Funding is available to validate commercially promising ideas and explore the most appropriate routes to market:
  - **Lean Launch Programme** - for researchers at the very start of their commercialisation journey
  - **ICURE (Innovate UK)** - for researchers who need to further validate their ideas.
  - **ASPECT** - a national network for social science innovators looking to commercialise their research.

At what stage in their research project should a researcher approach you for support?

As soon as you recognise a potential commercial or social opportunity for your research, we can equip you with the skills and knowledge to develop it.

Translational Stages Supported:

- **D1**
- **D2**
- **D3**
- **D4**
- **T1**
- **T2**
- **T3**
- **T4**
Medicines Discovery Catapult
Reshaping Drug Discovery Together.

How do you support researchers in Manchester?
At Medicines Discovery Catapult (MDC), we want to fundamentally reshape the UK's drug-discovery industry. It's ambitious, and it's entirely doable.

We're achieving our aim through collaboration with UK drug-discovery organisations. We give them access to industry-leading expertise, cutting-edge technology and superior-quality data. In doing so, we smooth these organisations' paths to success, accelerating their progress exponentially. New drugs advance to clinical trials more rapidly. Patients get life-improving medicines earlier than they otherwise would have.

MDC's enthusiastically holistic approach is what makes us unique within drug discovery. Some of our collaborators may only need our help with one specific aspect of their project. Many, however, will find that we can assist with almost every aspect of it – from sample-sourcing, to biomarker analysis, target engagement to statistical analysis, preclinical imaging to syndicated collaborations.

At what stage in their research project should a researcher approach you for support?
It's never too early to approach us to discuss ideas with commercial potential. We work right across the drug discovery process and can offer a range of different models:

- **Shared risk and reward** We work in risk-share collaborations with partners who gain from our unique help and where we share in the value of the outcome
- **Contracted fee-for-service projects** Where you need managed access to our skills and assets – and cannot get them elsewhere – we can adopt a fee-for-access model
- **Joint grant applications for collaborative R&D funding** We also have a strong network of Venture Capital companies looking for new opportunities that we have helped to de-risk
- **Signposting & connecting** We can help find the right partner, collaborator, advisor or supplier who can deliver what is needed

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**Contact**

- partner@md.catapult.org.uk
- 01625 238734
- md.catapult.org.uk

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Translational Stages Supported:

- D1
- D2
- D3
- D4
- T1
- T2
- T3
- T4
Cell and Gene Therapy Catapult
Commercialisation and translation of advanced therapies.

How do you support researchers in Manchester?
Many companies in the cell and gene therapy industry start in academia, which is why we are actively seeking to work with researchers in the field. We have formed partnerships with many academic institutions across the UK, giving them access to our state-of-the-art development and viral vector laboratories and to our in-house experts. This has included winning grant funding from different sources. If you feel that a research project you are working on addresses an unmet need in the field of cell and gene therapy, we would be interested to hear from you.

We'll work with you to accelerate your projects, helping your cell and gene therapies to be safer, more effective, scalable and affordable. We make it our job to stay at the forefront of the latest innovations in cell and gene therapies, so that we are ready to help, whenever you might need us.

At what stage in their research project should a researcher approach you for support?
We have a range of approaches that can help tackle the challenges you might face in the development of cell and gene therapies. Along with our state-of-the-art facilities, our most unique asset is our expertise in developing a wide range of cell and gene therapies. Awareness of the challenges that your therapy will face from an early stage in its development will allow you to streamline your development pathway and optimise the use of grant funding and time.

Translational Stages Supported:

Contact
You can find out more about our capabilities, read case studies and contact us at

www.ct.catapult.org.uk

or email Dr Lee Dunham

lee.dunham@ct.catapult.org.uk
Geoffrey Jefferson Brain Research Centre (GJBRC)

The GJBRC will discover and develop new treatments and implement optimal care pathways that provide better outcomes and transform the lives of patients.

How do you support researchers in Manchester?
The Geoffrey Jefferson Brain Research Centre is a partnership between the Manchester Centre for Clinical Neurosciences (part of the Northern Care Alliance NHS Group), The University of Manchester and the Manchester Academic Health Science Centre.

We combine discovery science and experimental medicine to rapidly translate our research into healthcare benefit. We develop new treatments and interventions to improve outcomes and transform the lives of patients with neurological disease.

The Centre has a specific focus at this time on brain tumours, stroke and dementia and neuroimmunology. Cross cutting themes are imaging, pathology and neurorehabilitation.

At what stage in their research project should a researcher approach you for support?
All stages.

Contact

https://www.ncaresearch.org.uk/geoffrey-jefferson-brain-research-centre/

Centre Directors and manager
✉️ Prof Andrew King andrew.king@manchester.ac.uk
✉️ Prof Stuart Allan stuart.allan@manchester.ac.uk
✉️ Alisha Patel Alisha.Patel@nca.nhs.uk

General inbox
✉️ GJBRC@manchester.ac.uk
Affinity Biomarker Labs

Supports research across Greater Manchester via the provision of central laboratory services and esoteric biomarker analysis.

How do you support researchers in Manchester?
Affinity Biomarker Labs is focused on supporting research across Greater Manchester via the provision of central laboratory services and esoteric biomarker analysis in Greater Manchester. Founded at Imperial College London by clinical Biochemists from King's College London, our new labs in Manchester will focus on the analysis of circulating blood based biomarkers, utilising clinical chemistry, immunoassay, multiplexing, haematology, genomics, proteomics and flow cytometry platforms. Affinity also partners with researchers in the development of novel diagnostics including molecular diagnostics and point of care immunoassays.

At what stage in their research project should a researcher approach you for support?
Affinity welcomes approaches from translational researchers and can support translational funding bids, with early letters of support or joint submissions. Affinity can also support large scale clinical trial sample analysis.

Contact
info@affinitybiomarkerlabs.com
www.affinitybiomarkerlabs.com

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4
The National Measurement Laboratory at LGC

Development and validation of challenging measurements using state of the art analytical platforms combined with a unique understanding of chemical and bio-measurement

How do you support researchers in Manchester?
The development of better diagnostics and therapeutics requires accurate measurements to guarantee product safety and quality, and to ensure patient confidence and safety. These measurements are often challenging due to the complexity of the sample matrix or particular analyte properties, such as ultra-low concentrations or chemical form.

At the NML, we specialise in the development and validation of these challenging measurements. We have one of the most diversely equipped mass spectrometry laboratories in the UK. Our wide range of state of the art analytical platforms and unique understanding of chemical and bio-measurement enable our 80 measurement scientists to offer innovative solutions to complex clinical measurement challenges.

We can develop targeted or un-targeted methodologies for the analysis of elements, species, nanoparticles, organic molecules, proteins, nucleic acids and cells or profiling of your biological samples. We also have the capability to perform elemental and isotopic analysis directly on solid samples using laser ablation (interfering as little as possible with the sample).

Our current research programmes include:

• improving current clinical diagnostics and supporting technology transfer
• supporting the development of future diagnostics, including precision medicine and point of care testing
• improving the safety and efficacy of (bio) pharmaceuticals
• improving the efficacy of advanced therapy medicinal products (ATMPs)

At what stage in their research project should a researcher approach you for support?
As early as possible - our expert team will work with you to understand your needs and propose and deliver innovative measurement solutions in accordance with your project specifications.

Contact

Dr. Thierry Le Goff, Health Science & Innovation
UK National Measurement Laboratory, LGC, Queens Road, Teddington, Middlesex, UK TW11 0LY
+ 44 (0)20 8943 7675 or +44 (0)7387 106 742
Thierry.legoff@lgcgroup.com
Electron Microscopy Core Facility

Core research facility that provides both state of the art instrumentation and experienced staff for high quality biological electron microscopy.

How do you support researchers in Manchester?
The facility is actively involved in a wide range of research topics across the Faculty and in the past few years has contributed to significant number of scientific publications in high profile biological journals, including publications where electron microscopy staff members are authors.

The overall aim is to encourage wider use of the facility and to improve the quality and quantity of EM research data, while providing valuable skills and knowledge for future research. Our services are available to all researchers and students within the Faculty, to members of the University of Manchester and, by arrangement, to outside groups.

At what stage in their research project should a researcher approach you for support?
The earliest stage as possible is a must because of the costs and special procedures involved into specimen preparation and data interpretation.

Contact
Dr Aleksandr Mironov, Senior Experimental Officer
aleksandr.mironov@manchester.ac.uk
+44 (0)161 275 5645
https://www.bmh.manchester.ac.uk/research/facilities/electron-microscopy/
https://app.bmh.manchester.ac.uk/facilities/research/electronmicroscopy/default.aspx

3D structure of WZZ membrane protein complex

Translational Stages Supported:
D1  D2  D3  D4  T1  T2  T3  T4
Genome Editing Unit

Generates genetically modified experimental systems for basic and pre-clinical research, ranging from cultured cells to transgenic mice.

How do you support researchers in Manchester?
The Genome Editing unit supports a range of research activities at the University of Manchester and beyond. We generate genetically modified experimental systems for basic and pre-clinical research, ranging from cultured cells to transgenic mice. Collectively we have years of molecular biology expertise, and can advise on the most appropriate methodologies. In particular we are adept at applying cutting edge CRISPR-Cas9 approaches to directly and precisely change genetic sequences in cells or mice.

We offer a modular service, allowing you to work with us for different aspects of the process, according to your budget and knowhow.

We have an R&D remit, and can collaborate to develop novel applications of these technologies according to your research and translational needs.

We also support grant applications by lending technical expertise, designing strategies and workflows and providing costs.

At what stage in their research project should a researcher approach you for support?
Researchers can seek advice and guidance at any stage. We can offer support at all stages of a research project or translational pipeline, from assisting with grant proposals and costings, helping to design initial assays and build experimental models, to performing functional validation and end point assays. Researchers are encouraged to get in touch at any point to discuss where we can support your projects.

Contact

- genome.editing@manchester.ac.uk
- https://sites.manchester.ac.uk/genome-editing-unit/
- antony.adamson@manchester.ac.uk

Translational Stages Supported:

- D1
- D2
- D3
- D4
- T1
- T2
- T3
- T4
Biomolecular Analysis Core Facility (Biomols)

Biomols is a technical resource which aims to help the development of molecular biophysics projects within the University of Manchester.

How do you support researchers in Manchester?
The Biomolecular analysis is a state-of-the-art resource with a primary focus on protein characterization and protein-ligand interaction analysis using molecular biophysics; in addition the core facility undertakes method development and supports grant applications and publications within the University of Manchester. The facility currently has three dedicated staff members who provide in-depth support throughout scientific projects and help drive forward cutting-edge research using the highly technical instrumentation that is available. This includes methodologies such as surface plasmon resonance and biolayer interferometry with the newest Biacore T200 and Forte-Bio Red-96. We also have nano-biotechnology instrumentation such as QCM-D and N-Lab interferometry with spin-coaters for customizable surfaces. The facility also houses several instruments for the analysis of macromolecular hydrodynamics such as analytical ultracentrifugation and light scattering techniques. The facility works with many projects/groups as well as external companies working on biotherapeutics such as fragment screens, nanobodies and bio-similars.

At what stage in their research project should a researcher approach you for support?
Researchers can access the core facility by emailing Tomas Jowitt (t.jowitt@manchester.ac.uk). This can be at grant-writing stage or later in a project. The facility staff have experience in grant writing and costing of projects and can provide advice on project development and practical implementation. Often getting in touch early helps streamline a project and avoids delays later on. The Facility also offers a protein quality control service which aims to provide invaluable detail on a proteins solution characteristics within 24h of receiving the sample.

Contact

✉️ t.jowitt@manchester.ac.uk

Translational Stages Supported:

D1  D2  D3  D4  T1  T2  T3  T4
Imaging Facilities

Clinical and preclinical imaging for a wide range of disease areas

How do you support researchers in Manchester?
We provide clinical and preclinical imaging for a wide range of disease areas, using PET (preclinical only), MR (preclinical and clinical) and PET-MR (clinical only).

Clinically, we have one of only eight PET-MR scanners in the UK which is located at Manchester University NHS Foundation Trust, 2 MR scanners (located at the Manchester Clinical Research Facility and Wolfson Molecular Imaging Centre (WMIC)) and access to a new 3T MR scanner at Salford Royal NHS Foundation Trust.

For preclinical imaging, at WMIC we have a PET-CT camera, a benchtop 3T MR scanner, bioluminescence imaging capability and a Small Animal Radiation Research Platform (SARRP); at the Stopford Building, we have a 7T MR scanner.

At what stage in their research project should a researcher approach you for support?
Researchers are advised to contact us when a study is being developed, to ensure we can provide methodology and costing support. We also take applications for studies and Clinical Trials to use our scanners.

Contact
Denise Ogden, Senior Business Operations Manager
0161 275 0017
https://sites.manchester.ac.uk/imaging-facilities/
denise.ogden@manchester.ac.uk

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4
Biostatistics Collaboration Unit
Providing statistical input for part-time and short-term posts for which it would otherwise prove difficult to find high quality applicants.

How do you support researchers in Manchester?
Most quantitative research can be enhanced by inclusion of statistical reasoning in the design and interpretation of studies. It is a common requirement of clinical research funding that a statistician is included in the multidisciplinary team. Investigators can apply for part-time and short-term statistical posts from the BCU for which it would otherwise prove difficult to find high quality applicants. A senior academic from the Centre for Biostatistics can advise on the appropriate statistical input required for each project and identify a suitable RA or RF to undertake the work if funded.

At what stage in their research project should a researcher approach you for support?
Preferably before funding is sought, so that statistical time can be costed into the project from the outset. Where we have spare capacity, we will also try to respond positively to more urgent requests for statistical input.

Contact
Matthew Ward, Administrator:
'email: matthew.ward@manchester.ac.uk
'biostatsenquiries@manchester.ac.uk
'Tel: 0161 3067329
' http://research.bmh.manchester.ac.uk/biostatistics/collaborationunit/
Biological Mass Spectrometry Facility (BioMS)

Rapid, flexible and comprehensive proteomics, metabolomics and bioanalytical support (mass spec and ELISA) including experimental design, sample preparation and informatics

How do you support researchers in Manchester?
BioMS provides mass spectrometry support for biological and biomedical researchers. We can provide support on experimental design and how our technologies can support your research with experts available on areas such as sample preparation, instrumental analysis and informatics. The facility has a wide range of equipment and methodologies available for sample preparation from sample disruption through to clean up. We have a highly complementary set of mass spectrometers plus an analytical ELISA system for screening. The facility also has its own informatics suite providing both computing workstations and specialist commercial software applications to enable up to date and easy to access data analysis pipelines. We provide service level support for common applications, post-doc level customised support for specialist applications and straight forward and rapid sample analysis for experienced groups who process their own samples. We have a wide customer base and facilitate connections between users with meetings and direct introductions.

At what stage in their research project should a researcher approach you for support?
You can contact the facility at any stage in your project but the earlier in the process you contact us the more chance we have of helping you to design and cost your experiments and thereby increase your chance of success. We particularly encourage obtaining preliminary datasets and have extensive experience in supporting PhD projects to do so.

Contact
Dr David Knight, BioMS Facility Manager
david.knight@manchester.ac.uk
https://sites.manchester.ac.uk/bioms/
Protein Expression

A fully comprehensive resource for the optimisation and expression of recombinant proteins using a wide range of host cell platforms.

How do you support researchers in Manchester?

- Cloning and protein expression pipeline.
- Four expression platforms: E.Coli, Pichia, Insect cells (Sf9 and High 5 cells) and mammalian (suspension HEK293 and CHO cells).
- High purity purification for structural studies (NMR & X-Ray crystallography).
- Extensive troubleshooting experience (wide range of affinity/solubility tags, expression hosts, chaperones, co-expression, soluble vs re-folding strategies).
- Protein complex formation using the Insect cell MultiBac system.
- Mammalian-like glycosylation using insect cells (Sweet Bac).
- Particular expertise in the expression/secretion of ECM proteins, glycoproteins and HTS enzymes for academia (CRUK) and Biotech.
- Insect cell Virus Like Particle (VLP) production.
- Multi promoter vectors for expression across a range of host cells.
- Automated AKTA purification systems.

At what stage in their research project should a researcher approach you for support?

We are available at all stages of a project and are highly experienced in troubleshooting protein expression issues that may snag a project and delay publications/grant submissions. Ideally however we can make a more significant impact by being approached early at the grant application stage. Construct design and the choice of expression system to ensure correct folding and post translational modifications (PTMs) are critical to the success of a project.

Contact

Edward.a.mckenzie@manchester.ac.uk
0161 305 5617
http://www.mib.ac.uk/research/facilities/proteinexpression/
MIB Mass Spectrometry facility
Accurate mass service samples

How do you support researchers in Manchester?
I provide and assist researchers with any mass spectrometry needs: from identifying possible methods through to analysis and data interpretation. I have access to a wide range of instrumentation and technologies including high throughput UPLC, Ion-mobility-spectrometry, and intact protein analysis. We have a wealth of mass spectrometry based methods and instruments to study a range of biological systems, ranging from small molecules to large protein complexes.

We use mass spec for a wide range of applications:
- Native protein analyses
- Whole protein mass & post-translational modifications
- Metabolomics
- Small molecule identification
- Confirm and analyse purity of sample mixtures
- Unknown sample identification
- Quantification

The following mass spec instrument types are available:
- Ion-mobility, LCMS or flow injection QTOF
- Nano Electrospray Ionisation
- MALDI

Chromatography / Analytical Facility
We have a range of analytical instruments available to separate and analyse biological and chemical compounds for qualitative and quantitative purposes. We provide the following equipment for the analysis and preparation of small molecules:
- Range of HPLC instruments with different capabilities, both analytical and preparative
- Chiral HPLC screening service
- Walk-up FTIR for analysis of small molecules
- Liquid chromatography mass spec
- Gas chromatography mass spec including automated head space and liquid analysis

At what stage in their research project should a researcher approach you for support?
As with all analytical techniques, it is best if researchers take into account sample requirements during the initial planning stages of a project, specifically with regard to sample preparation and compatibility, however unexpected requirements always appear and so I always welcome queries at any stage of a project.

Contact
Reynard.spiess@manchester.ac.uk
0161 306 5157

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4
Biomolecular Electron Paramagnetic Resonance (EPR) Facility

Study of radical/metal-containing biomolecules such as cofactors, metallo-proteins and radical enzymes

EPR interfaced to MiniLite Laser (355 and 532 nm) for time-resolved EPR (photo-induced catalytic reactions; enzymes and inorganic mimics)

Characterization of reactive oxygenic/nitrogenic species (ROS/RNS) using spin-trap/spin-probe

How do you support researchers in Manchester?
The Biomolecular EPR facility housed in Manchester Institute of Biotechnology (MIB) supports researchers from MIB, University of Manchester and visitors/collaborators from outside The University of Manchester to conduct EPR experiments and analysis, typically on biological samples. In principle, this technique could be used for any materials, which is EPR active (contains unpaired electron). In consultation with the principal investigator and the researcher, the facility helps to design the suitable experiments to answer the unresolved problems in their research of interest. For long-term projects, the facility provides training, including hands-on training on the spectrometer and on appropriate analysis tools for Ph. D., and PDRA. It also supports the researchers in submitting research articles and grant applications. Currently, the MIB EPR facility has resources to perform cw-EPR, time-resolved EPR, and pulsed-EPR including distance measurements between spin-labelled centres and metalloenzymes.

At what stage in their research project should a researcher approach you for support?
It is recommended to approach the facility manager to discuss the proposed research works before submitting the grant application or requesting funding. This is necessary, because the costs associated with certain experiments (cw-EPR; £250-300/day) are high compared to pulsed-EPR (£300/5 days – round the clock). This allows the PI to provide accurate costing structure when submitting the grant application. Having said this, the researcher could approach the facility manager, whenever they need support from the facility either at the start/middle/end of a project. As the facility is interested in collaboration, it will support the researcher in all possible ways to secure the funding.

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4

Contact
muralidharan.shanmugam@manchester.ac.uk
0161-306-5168
http://www.mib.ac.uk/research/facilities/epr/
Manchester Protein Structure Facility (MPSF)

The MPSF provides a complete structural biology service, taking you from purified protein to crystal structure.

How do you support researchers in Manchester?
The MPSF supports a wide range of academics from across the University and beyond. High resolution X-ray crystal structures provide a unique insight into structure function that can help to rationalise solution studies. Detailed active site information can prove pivotal in structure-based drug design pathways accelerating progression from lead compound to drug.

The MPSF benefits from state-of-the-art liquid handling robotics coupled with regular access to Diamond Light Source. The facility operates a complete structure determination pipeline so academics can focus on their research whilst still benefitting from the insights an X-ray crystal structure can provide.

At what stage in their research project should a researcher approach you for support?
Researchers should contact the MPSF as soon as possible in their workflow to maximise the prospect of a successful outcome. Early engagement will ensure appropriate choices are made to facilitate subsequent X-ray crystal structure determination.

Contact
Dr. Colin Levy, Manchester Institute of Biotechnology
+44 (0)161 275 5090
c.levy@manchester.ac.uk
http://www.mib.ac.uk/research/facilities/proteinstructure/

Structural basis of kynurenine 3-monooxygenase inhibition. DOI (DOI:10.1038/nature12039)

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4
Manchester Biomolecular NMR Facility

Nuclear magnetic resonance spectroscopy instrumentation for structural biology, metabolomics and drug discovery.

How do you support researchers in Manchester?
The Manchester Biomolecular NMR Facility supports a wide range of academics from throughout the North of England, as well as a number of biotech companies. Nuclear magnetic resonance is an atomic resolution spectroscopy. Every chemical compound has an NMR spectrum that is a fingerprint, defined by its covalent structure and conformation. This applies to biological macromolecules as well as to small molecules. On this basis, it can be used for the analysis of complex mixtures (e.g. in metabolomics or biotransformations), detection of lead compound binding to target proteins and fragment-based screening (in drug discovery), biomolecular QC and binding site mapping on proteins. In addition, the effects of conditions and small molecules on protein structure and dynamics can be studied. Protein NMR has been used in the facility for de-novo structure determination, measuring dynamics in enzyme catalysis and investigating the effects of excipients on protein aggregation in biopharmaceuticals.

At what stage in their research project should a researcher approach you for support?
NMR can provide useful information at many stages in a project, once a target system has been identified. Preliminary data can be collected prior to funding applications. For protein-specific applications, construct design and assay conditions are critical, and the Facility Manager should be consulted for advice. Users can be trained to use the instruments themselves, or the experiments can be run as a service.

Contact

matthew.cliff@manchester.ac.uk
0161 306 5179
http://www.mib.ac.uk/research/facilities/nmr/
Bioimaging Facility

Providing access to cutting-edge light microscopy and AFM with advice on protocol development, system training, image acquisition and data analysis.

How do you support researchers in Manchester?
The Bioimaging Facility currently houses a range of high end imaging systems including confocals (point scanning and spinning disc), in vivo multiphoton, gSTED super-resolution, deconvolution and long term timelapse microscopes as well as a number of atomic force microscopes (AFMs).

The microscopes are capable of imaging samples ranging from whole animals down to individual molecules. Samples can be fixed or live with multiple fluorescent labels and software is available to model and quantify expression patterns in the data sets. A slidescanning service is also available - up to 250 histological or fluorescently labelled slides can be digitised in a single run.

Atomic force microscopy provides 3D surface data with sub-nanometre resolution in the Z axis in both dry and fluid conditions. Examples include cryo-sections from biopsies, dental surfaces, biomaterials, cultured cells/tissues, and extracted proteins. AFM can also extract nanomechanical information from a sample as well as probe electrochemical parameters (eg. surface potential).

At what stage in their research project should a researcher approach you for support?
Potential users are encouraged to contact the Facility at the beginning of their project to discuss their requirements including sample preparation, scope of the experiment and costing implications.

Please note that the Facility does not run any of the microscopes as a service, rather users are given full system training and 6 full time Facility staff are available throughout the project for advice on experimental design, sample preparation, image acquisition and support with image processing and data analysis.

Contact

Light Microscopy – Dr Peter March or Dr Dave Spiller
✉️ peter.march@manchester.ac.uk
✉️ david.spiller@manchester.ac.uk
🌐 https://www.bmh.manchester.ac.uk/research/facilities/bioimaging/

AFM – Dr Nigel Hodson
✉️ nigel.hodson@manchester.ac.uk

Translational Stages Supported:

- D1
- D2
- D3
- D4
- T1
- T2
- T3
- T4
Manchester Centre for Genomic Medicine

Supporting genetic and genomic research, from the discovery of genes that result in rare disorders to the application of polygenic risks that are relevant to more common disorders.

How do you support researchers in Manchester?
Research in Genomic Medicine encompasses many areas from the discovery of genes that result in rare disorders to the application of polygenic risks that are relevant to more common disorders including breast cancer. Our team are happy to discuss any project that involves genomics and clinical care including pharmacogenetics, biomarker discover, technical issues regarding genomic testing, clinical trials of personalised medicines and diagnostics.

At what stage in their research project should a researcher approach you for support?
The earlier the better will facilitate discussion as to how our team can help or signpost an investigator to the relevant support.

Contact

Prof Bill Newman
Manchester Centre for Genomic Medicine
St Mary’s Hospital Medicine
william.newman@manchester.ac.uk
https://www.mangen.co.uk/

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
**Stoller Biomarker Discovery Centre**

Clinical proteomic biomarker discovery, validation and verification in the largest facility of its type in Europe.

**How do you support researchers in Manchester?**
The Stoller Biomarker Discovery Centre (SBDC) is part of The University of Manchester and is funded by the Medical Research Council, a philanthropic donation from the Stoller Charitable Trust, and developed in partnership with SCIEX. With 15 high-end mass spectrometers, the Centre is the biggest clinical proteomics facility in the world.

At SBDC, our researchers help to industrialise the process of identifying biomarkers and aid in the translation of biomarkers into the clinical lab. We aim to find protein markers in the blood that could be used to stop patients being given treatments which won't improve their condition. These markers will be developed to ensure doctors can prescribe the right treatment for the right patient as early as possible.

We also find new targets for drugs in specific diseases, such as chronic myeloid leukaemia and markers for the earlier detection of ovarian cancer – crucial in starting early treatment to save lives. Work to identify new biomarkers for diseases such as arthritis, cardiovascular, Alzheimer’s and psoriasis is also being advanced.

Academics and clinicians can access infrastructure at SBDC for cutting edge technologies and methodological expertise to further biomarker discovery or biomarker/ diagnostic development projects.

**At what stage in their research project should a researcher approach you for support?**
Researchers should approach the Centre at any stage in their research project as co-localisation of SBDC with MMPathIC creates an ecosystem for biomarker research, with access to an end-to-end pipeline from discovery through to clinical translation.

**Contact**

- tony.whetton@manchester.ac.uk
- @SBioDC
- www.manchester.ac.uk/sbdc

**Translational Stages Supported:**

- **D1**
- **D2**
- **D3**
- **D4**
- **T1**
- **T2**
- **T3**
- **T4**
Centre for Health Informatics

Supporting research by providing world-leading expertise in digital and data driven technologies for health, including app development, advanced data analysis and secure data environments.

How do you support researchers in Manchester?
The Centre for Health Informatics is multi-disciplinary by design and encourages diversity and collaboration to enhance research outputs. We use a team science model, supporting reward and recognition of input and impact across researchers, technical and professional staff. Capacity building, education and training are deeply embedded in our approach, with pastoral and skill development highly supported through seminars series, journal clubs, topic-based networks and access to leaders in their fields. We also recognise the importance of demonstrating impact, and encourage and support external communications and publicity through multi-media platforms.

At what stage in their research project should a researcher approach you for support?
As early as possible! We are always very interested to hear from potential new collaborators – our health informatics group is, by design trans/multi/inter-disciplinary (incl. clinicians; GP, statisticians, computer scientists, software engineers, information managers...) and is keen to explore opportunities.

Translational Stages Supported:

Contact

To get in touch, contact

✉️ ruth.norris@manchester.ac.uk
Research Project Managers’ Network

Supporting and building capacity and capability of Research Project Managers in Greater Manchester.

How do you support researchers in Manchester?
The Research Project Managers’ Network (RPMN) was set up in 2013 to provide peer support to research programme and project managers working in health and social care in both NHS and university settings. The network meets twice a year and offers training sessions to its members which enable us to build capacity and capability by developing existing staff within Manchester. Researchers are able to benefit from the wealth of experience our network members have and we offer advice, training and support often within their respective organisations. The RPMN forum can also be used to troubleshoot any questions that arise.

At what stage in their research project should a researcher approach you for support?
The RPMN offers peer support and shares a wealth of experience with its members. Network members can contact one of the co-chairs and ask questions or seek advice from the whole network – this has been very successful in the past and we ensure the learning generated is shared across the network so others can benefit. RPMN members and researchers can approach us for support at any time before, during or after their project.

Contact

charlotte.stockton-powdrell@manchester.ac.uk
@ResearchPMN_NW

Translational Stages Supported:

D1  D2  D3  D4  T1  T2  T3  T4
Cancer Research Project Manager Network (Cancer RPMN)

Integrating research management expertise into academic teams to deliver world leading cancer research.

How do you support researchers in Manchester?
This network aims to embrace the ethos of Team Science, to embed project management roles into collaborative research teams and to encourage researchers to recruit into support roles that meet their needs. By utilising existing experience and influence, we encourage and empower individuals to change perceptions and expectations of the project management role in order to enhance cancer research delivery.

Project Managers (PMs) use their professional skills and experience to support the whole project lifecycle, from contributing to clinical study design and grant writing, through assisting with literature reviews and paper writing, to delivering on reports for funders & ethics. PMs also perform ‘traditional’ project management tasks to ensure delivery against targets, budgets and timelines. The exact role of a PM will depend on the needs of the academic or research group and the strengths and interests of the PM, and they are increasingly regarded as being integral to the research team.

The network offers peer support, mentoring, training and development to PMs working in the field of oncology as well as offering advice to researchers who are interested in recruiting a PM to their team.

At what stage in their research project should a researcher approach you for support?
Project Managers support research across the translational pipeline.

We encourage researchers who think they would benefit from a PM in their team to contact us to discuss what these roles can offer. We can assist with job descriptions and will offer training and ongoing support to all new PMs working in cancer research.

Contact

Emma Thorpe
emma.thorpe@nhs.net

Kate Vaughan
kate.vaughan@manchester.ac.uk

Rebecca Elliott
rebecca.m.elliott@manchester.ac.uk

Translational Stages Supported:

D1  D2  D3  D4  T1  T2  T3  T4
Advanced Materials in Medicine (AMM)

AMM builds on the University of Manchester’s international leadership in developing new health innovations with advanced materials, by creating an environment conducive to innovation, building capacity and fostering investment, with the aim to meet currently unmet clinical needs.

How do you support researchers in Manchester?
We create an environment conducive to innovation by:

• Promoting multidisciplinary collaborations to bring new interdisciplinary approaches to further improve understanding, diagnosis, treatment, and prevention of diseases and drive the development of innovative healthcare technologies.

• Linking and representing the academic community engaged in the field of bioengineering with advanced materials across the Faculties.

• Identifying missed opportunities for collaborations and providing the bridge between the physical sciences and engineering, and the biomedical research communities.

• Forging cross-sectoral links with industry and clinics.

We build capacity by:

• Identifying and encouraging academic champions in collaborative research to share best practice and enabling a culture change.

• We foster investment by:

• Sustaining an Advanced Materials in Medicine brand, raising further UoM bioengineering profile and reputation on an international scale.

• Generating opportunities for investment and growth through increased research income in particular Flagship programmes, and partnership with industry.

At what stage in their research project should a researcher approach you for support?

D1 - basic research
D2 – strategic research
D3 – concept development
D4 – technical feasibility

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4

Contact

amm@manchester.ac.uk
amm.manchester.ac.uk
@AMM_UoM
nicola.telfer@manchester.ac.uk
Manchester Institute for Collaborative Research on Ageing (MICRA)

Multidisciplinary and collaborative research into fundamental questions about ageing.

How do you support researchers in Manchester?
We support researchers by providing:

- Assistance with finding potential collaborators within the University
- Assistance finding and accessing potential non-academic stakeholders, including support to secure statements of support, identifying potential dissemination and impact avenues, and support for recruitment of older people and older people's groups for research projects
- Assistance with text for grant applications regarding culture, impact and dissemination
- Assistance with finding peer reviewers and non-academic reviewers for grant proposals
- MICRA seminars or events to showcase your research
- Collaborate with researchers to produce materials such as information sheets or key findings sheets, project pages on the web, news stories, tweets, and dissemination via our regular newsletter to 2,000+ stakeholders
- Support for research groups in ageing research through assistance with connecting researchers together and providing some administrative support such as room bookings

- MICRA can be formally costed into research bids for administration, dissemination and impact work

We also offer an annual seedcorn funding programme for cross-disciplinary ageing research, which has had notable success in follow-on research programmes and outputs.

At what stage in their research project should a researcher approach you for support?
Researchers can approach MICRA at any point in their project (before, during and after).

We invite all involved in ageing research at the University of Manchester (current, past, or potentially in the future) to become Affiliate Members of MICRA (see website for more details).

Contact
We encourage researchers at any stage in their careers to connect with us

✉️ micra@manchester.ac.uk

For further information about the team, the Institute's aims as well as details of current and past research projects, visit our website:

🌐 www.micra.manchester.ac.uk

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
iMATCH (Innovate Manchester Advanced Therapy Centre Hub)

iMATCH is transforming the delivery of Advanced Therapeutic Medicinal Products (ATMP) to make them as routine to deliver as non-ATMP drugs.

How do you support researchers in Manchester?
iMATCH is an IUK funded programme that has several work packages stemming from an end to end approach to ATMP delivery. The University of Manchester is one of our 12 partners. The funding currently supports researchers to enable them to:

• Explore ways of maximizing patient access to ATMPs.
• Integrate sample collection for ATMPs within existing infrastructure.
• Optimise the extraction of cellular components which are suitable for scaled-up processing.
• Ensure safe delivery of ATMPs through education, communication and dissemination.

Along with our coordinating body, The Cell and Gene Catapult, we have hosted events at The University of Manchester to bring together and engage researchers across several disciplines under the ATMP umbrella, with the key aim to raise awareness of activity and researchers discuss relevant bottlenecks and provide support to engage and link up expertise to drive further innovative approaches.

At what stage in their research project should a researcher approach you for support?
iMATCH has a direct focus on the clinical delivery of ATMPs and thus can provide support across patient focussed research. Researchers can also get in touch at the bench to clinical transition stage (D4) to access guidance and direction, both from within iMATCH and the surrounding ATTC network and the interconnected landscape within the Advanced Therapies field.

Contact

the-christie.imatch.trial@nhs.net
https://www.theattcnetwork.co.uk/centres/imatch
@iMATCH_ATTC
v.sheard@nhs.net
07824109148

Translational Stages Supported:

D1  D2  D3  D4  T1  T2  T3  T4
National Cancer Imaging Translational Accelerator (NCITA)

NCITA is a CRUK-funded national imaging network, aiming to accelerate the standardisation and clinical translation of cancer imaging biomarkers to improve diagnosis and healthcare outcomes for patients.

How do you support researchers in Manchester?
NCITA is a multi-institutional consortium of imaging centres of excellence across the UK, of which The University of Manchester is a member. NCITA is composed of three cross-institutional units which work in synergy to provide an integrated pipeline for the development of quality assured cancer imaging biomarkers for clinical use.

The Imaging Clinical Trials Unit supports and coordinates studies, where the research question focuses on imaging, or imaging is required to determine the primary end point. The QA/QC Unit aims to provide robust validation, standardisation, quality assurance and quality control methods for the development of imaging biomarkers from first-in-human studies to achieving multi-site reproducibility assessment. The Image Repository Unit is building an image repository for secure storage and sharing of imaging biomarker trial data between trial sites in multicentre clinical trials, as well as data processing and analysis using novel machine learning and AI tools.

Researchers at The University of Manchester are members of all three units and will be involved in one of NCITA’s exemplar projects, investigating the feasibility of multi-centre oxygen-enhanced MRI for adaptive radiotherapy planning. This project will be directly supported by NCITA’s infrastructure.

At what stage in their research project should a researcher approach you for support?
Please submit an expression of interest as early as possible in the study development, preferably before the funding is sought.

Contact

ncita.general@ucl.ac.uk
https://ncita.org.uk
@imaging_cancer
penny.cristinacce@manchester.ac.uk
damien.mchugh@manchester.ac.uk

Translational Stages Supported:

D1  D2  D3  D4  T1  T2  T3  T4
Integrated Diagnostics for Early Detection of Liver Disease (ID LIVER)

Led by The University of Manchester and Manchester University NHS Foundation Trust, ID LIVER is a research and innovation project looking at how we can identify liver disease in patients much earlier than is currently the case.

How do you support researchers in Manchester?
ID LIVER is an Innovate UK-funded consortium which brings together university researchers, NHS experts and industry partners to help patients with liver disease receive earlier, more accurate, and potentially life-saving diagnoses.

We will use artificial intelligence and machine learning approaches to see if we can spot patterns that indicate early liver disease and patients destined for progressive liver disease and hepatocellular carcinoma (liver cancer). By integrating clinical data with artificial intelligence and data science, people at risk of progressive liver disease who would previously attend hospital for diagnosis, often too late for preventative or curative treatment, will now be identified earlier by hospital-led screening in their local community.

At what stage in their research project should a researcher approach you for support?
We are happy discuss the project with anyone who would like to know more about ID LIVER and explore any potential opportunities for collaboration.

Contact

ID-LIVER@manchester.ac.uk
@ID_LIVER
oliver.street@manchester.ac.uk
Autism@Manchester

Bringing together academics, clinicians and members of the autistic community.

How do you support researchers in Manchester?
Autism@Manchester was founded in 2014 and seeks to create an environment that encourages communication and collaboration between researchers and the autism community. As autism affects so many different aspects of life, this approach is particularly important because researchers need to work both across disciplines and with the autistic community to produce effective research with real meaning and impact for autistic people.

Our key aims are to bring academics, clinicians and other practitioners together with members of the autistic community to:

- Share knowledge and understanding around autism research.
- Collaborate on the selection, design and conduct of research.

To achieve these aims, we have developed several initiatives that support autism researchers by:

- Ensuring research addresses community priorities.
- Improving research design and feasibility.
- Strengthening grant impact cases.
- Forming collaborations with researchers and the autistic community.
- Increasing opportunities for supervision of Masters and PhD students.
- Increasing Patient and Public Involvement (PPI) skills.

Translational Stages Supported:

- Improving science communication skills.
- Facilitating wide dissemination and publicity of research.
- Hosting seminars or events to showcase research.
- Increasing study sample sizes.
- Identifying translational opportunities.
- Increasing awareness of autism research outside your usual field.
- Access to resources.

At what stage in their research project should a researcher approach you for support?
We support researchers at all stages. However, benefit is maximal when researchers link in with Autism@Manchester from the start of their project (i.e. idea generation) and continue throughout the study and beyond.

Contact

- Dr Emma Gowen (Chair)
  emma.gowen@manchester.ac.uk
- @AutismAtMCR
- autism at manchester
Bionow

Bionow is a not-for-profit membership organisation supporting the growing biomedical, pharma and life sciences sectors across the North of England.

How do you support researchers in Manchester?
Bionow facilitate the relationships and create the links, initiating opportunities for knowledge exchange and collaboration between Academia and Industry interested in new and developing technologies. Bionow does this by bringing people together at our exciting conferences and events across the North, being an advocate for the North, and providing comprehensive member benefits that strengthen the competitiveness of the North’s innovative life science sector.

Bionow conferences and events deliver high quality presentations from thought leaders in the industry, as well as exhibitions and informal networking across Northern England. Researchers can play an active role in Bionow events by attending as a delegate, speaker or presenting a poster.

We are also here to make those important introductions and make collaborations happen.

At what stage in their research project should a researcher approach you for support?
We can be approached at any time.

Contact

info@bionow.co.uk
www.bionow.co.uk
@bionow
Dr Stella James
stella.james@bionow.co.uk
07545 207896
Manchester University NHS Foundation Trust (MFT) Biobank

Supplies samples of human tissue, blood, body fluids and processed derivatives for use in ethical biomedical research.

How do you support researchers in Manchester?
The MFT Biobank is a not-for-profit service established to increase the availability and use of human biomaterials for research within academic institutions, NHS Trusts and private industry. Located on the MFT Oxford Road site, we supply samples of human tissue, blood, body fluids and processed derivatives for use in ethical biomedical research.

There is an open access policy for researchers who are expected to use the tissue responsibly. We are licensed by the Human Tissue Authority and have approval from the National Research Ethics Service to operate as a Research Tissue Bank.

The Biobank is fully equipped for biomaterial collection, processing and storage:

- Frozen Storage at -80C with 24hr temperature monitoring and alarm system
- All processes managed by dedicated Laboratory Information Management System (LIMS)

We currently hold biomaterials from the following disease areas:

- Gynaecological disease (including benign, malignant and control samples).
- Bowel disease (including cancer, ulcerative colitis and Crohn's disease).
- Head and neck, kidney, liver and prostate cancer.

At what stage in their research project should a researcher approach you for support?
As early as possible. Ideally during the grant writing stage but we can still come in and offer support mid-project.

Contact

Jay Brown (Biobank Manager)
0161 7011890
jay.brown@mft.nhs.uk
https://research.cmft.nhs.uk/facilities-services/biobank-and-pathology/biobank

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
The Manchester Cancer Research Centre (MCRC) Biobank

Supplies samples of human tissue, blood, body fluids and processed derivatives for use in ethical biomedical research.

How do you support researchers in Manchester?
The MCRC Biobank collects cancer samples from five collaborating NHS Trusts across the region. These are:

- The Christie NHS Foundation Trust (CFT)
- Salford Royal NHS Foundation Trust (SRFT)
- University Hospital of South Manchester NHS Foundation Trust (UHSM)
- Pennine Acute Hospitals NHS Foundation Trust (PAT)
- Manchester University Foundation Trust
- Manchester Royal Infirmary
- Wythenshawe Hospital

By targeting collections to areas of specialisation, the Biobank will be able to build a comprehensive bank of samples to facilitate future research into all types of cancer.

At what stage in their research project should a researcher approach you for support?
As early as possible but we offer support at all stages of a project.

Contact
MCRC researchers who wish to use samples from the Biobank should make an expression of interest to the MCRC Biobank Business Manager

- jane.rogan@christie.nhs.uk
- the-christie.biobank@nhs.net
- +44 (0) 161 918 2110
- https://www.mcrc.manchester.ac.uk/research/mcrc-biobank/about-the-mcrc-biobank/

Translational Stages Supported:

| D1 | D2 | D3 | D4 | T1 | T2 | T3 | T4 |
The ManARTS Biobank

A repository of biological samples and detailed clinical information from patients with a range of respiratory conditions and patients with allergies and control samples from Healthy Volunteers.

How do you support researchers in Manchester?

The ManARTS (Manchester Allergy, Respiratory and Thoracic Surgery) Biobank comprises of a repository of biological samples and detailed clinical information from patients with a range of different diseases, including asthma, cough, interstitial lung disease (ILD), fungal lung disease, cystic fibrosis and patients with allergies. We also collect control samples from Healthy Volunteers.

The biobank was established to facilitate high quality translational research in respiratory medicine and allergies.

Most patients recruited to ManARTS Biobank are asked to donate biological samples (such as blood/saliva, urine, sputum) for the tissue bank. We are also able to collect bronchoalveolar lavage (BAL) and bronchial biopsy samples and lung tissue from patients undergoing lung resection. We collect accompanying clinical information from case notes, as many patients have already undergone lots of investigations within the NHS clinic.

This research resource is used most commonly by the researchers at Manchester University NHS Foundation Trust and the University of Manchester. However, researchers from other academic institutions and from the pharmaceutical industry are able to apply to ManARTS Biobank to request permission to perform research using the data and samples in the biobank. Applications to the tissue bank for researchers to access samples and data for research are considered by our steering committee.

At what stage in their research project should a researcher approach you for support?

As early as possible but we offer support at all stages of a project.

Contact

Helen Francis, Biobank Manager.
0161 291 2847
helen.c.francis@manchester.ac.uk

Translational Stages Supported:

- D1
- D2
- D3
- D4
- T1
- T2
- T3
- T4
Salford Biorepository

Supplies samples of human tissue, blood, body fluids and processed derivatives for use in ethical biomedical research.

How do you support researchers in Manchester?
Salford Biorepository Facility is located in purpose built laboratories in the Clinical Sciences Building at Salford Royal Hospital. It provides a professional sample handling and storage service to support the clinical research activities within Salford Royal and across the Northern Care Alliance (NCA).

The team provides support and advice to clinicians and researchers to facilitate the collection of human research samples for clinical and academic studies, and helps ensure continued compliance with the regulatory requirements. The facility operates within Medicines and Healthcare Products Regulatory Agency (MHRA) and Human Tissue Authority (HTA) guidelines.

The vast majority of samples that are processed and stored are blood or blood derived products (e.g. serum, plasma, DNA). The facility currently stores over 65,000 samples, which have been generously provided by over 4000 donors. It supports over 50 clinical research projects and has provided training to over 75 research staff. Samples can be tracked electronically with barcode laboratory information management software and are held in frozen storage at -75C with both 24 hour switchboard alarm monitoring and 24 hour wireless alarm and temperature monitoring.

Salford Biorepository also facilitates the collection and storage of material held as part of the NCA Research Collection (NCARC). This is a generic research tissue bank, hosted by NCA Research and Innovation, with ethical permission to collect any sample types from consenting patients for unspecified future biomedical research. This facilitates important research with commercial and academic partners who require access to high quality annotated samples.

At what stage in their research project should a researcher approach you for support?
As early as possible but we offer support at all stages of a project.

Contact

Dr Rob Oliver, Laboratory Lead
0161 206 3204
rob.oliver@manchester.ac.uk

Julie Oxton, Biorepository Manager
0161 206 5415
julie.oxton@manchester.ac.uk

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
Brain Bank
Providing brain tissue samples to researchers.

How do you support researchers in Manchester?
Manchester Brain Bank (MBB) is a research tissue bank based in the Biomedical Facility at Salford Royal Hospital. We supply human brain tissue for use in research projects. The ethical approval of MBB allows researchers to apply for use of tissue without the need for them to apply for their own ethical approval.

MBB is primarily a neurodegenerative disease brain bank and, thus, can provide fixed or frozen brain tissue to researchers working in that particular area of research. However, there are plans to expand the remit of MBB and we hope to begin collecting brain donations from individuals with brain tumours, stroke and traumatic brain injury in the near future.

MBB has supplied over 22,000 samples for research since 2009 and this number continues to grow! We have forged close links with researchers at University of Manchester, Manchester Metropolitan University and Salford University and we'd like to continue to support as many researchers in Manchester as we can.

At what stage in their research project should a researcher approach you for support?
If researchers wish to use human brain tissue from MBB in their proposed research project, we ask for them to contact us as early as possible.

The process to apply for tissue from MBB is as follows:
The applicant completes a tissue request form and returns the form to MBB for scrutiny and possible amendment before it is sent to the MBB management committee for comment and approval.
• Once the tissue request is approved, the applicant completes a material transfer agreement. No tissue can be released from MBB without a completed and fully signed material transfer agreement.
• After all essential paperwork is completed, a purchase order will be required for the cost of the request. These costs will be agreed with the requestor beforehand.
• Once a purchase order is received, MBB can begin to collate the tissue required for the request.

Contact
Dr Andrew Robinson, Brain Bank Manager.
0161 206 2580
andrew.c.robinson@manchester.ac.uk
Manchester Brain Tumour Biorepository and Brain Tumour North West (BTNW)

This tissue and blood resources enable studies to advance our understanding of tumour development. Anonymised clinical annotations and neuroimaging data are also available.

How do you support researchers in Manchester?
The Brain Tumour Biorepository in Manchester is located at the Geoffrey Jefferson Brain Research Centre on Salford Royal site and it is part of the North Care Alliance Research Collection.
The BTNW bank is held at Lancashire Teaching Hospitals, Preston.
The Walton Research Tissue bank is held at the Walton Centre for Neurology and Neurosurgery, Liverpool.

Access to tissue from these repositories is made by submission of a short application form which outlines the project and tissue requirements. The application is subject to review by a panel comprising senior clinicians and academics.

Tariffs for tissue processing and supply are applied.

At what stage in their research project should a researcher approach you for support?
Researchers who wish to apply for human brain tumour tissue and blood should contact us as early as possible to discuss tissue availability and costs.

Contact
Manchester
Professor Federico Roncaroli
✉ federico.roncaroli@manchester.ac.uk
✉ federico.roncaroli@srf.t.nhs.uk

University Central Lancashire
Professor Tim Dawson
✉ Timothy.Dawson@lthtr.nhs.uk
Mrs Kate Ashton
✉ katherine.ashton@lthtr.nhs.uk

Liverpool
Dr Nitka Rathi
✉ Nitika.rathi@thewaltoncentre.nhs.uk
Mr Khaja Syed
✉ khaja.syed@thewaltoncentre.nhs.uk

https://www.nca.research.org.uk/support-research/ncarc-information-for-researchers/
http://www.btnw.org.uk/
https://www.bmh.manchester.ac.uk/research/domains/neuroscience-mental-health/neurooncology/
ComplexWounds@Manchester Biobank (CWB@Manchester)

Offers collection and storage of complex wound samples including tissue, fluid, blood and healthy tissue biopsies for investigation of wound healing.

How do you support researchers in Manchester?
The ComplexWounds@Manchester Biobank offers a not-for-profit service to researchers within the University of Manchester, other academic institutions, NHS Trusts and private industries. CWB@Manchester aims to provide researchers with access to samples from patients with a variety of complex wound aetiologies including:

- Pressure ulcers
- Diabetic foot ulcers
- Venous & Arterial leg ulcers
- Complex traumatic wounds
- Iatrogenic wounds due to surgical complications
- Wounds secondary to infection
- Acute and chronic burn wounds
- Healthy surgical wounds

Ethical approval has been granted for collection of the following types of samples from patients with complex wounds:

- Tissue normally discarded during surgery or dressing changes
- Wound fluid (taken as swabs)
- Blood samples
- Wound or healthy tissue biopsies

In addition to offering wound samples for biomedical researchers, the CWB@Manchester team collect routine anonymised clinical data related to the wound and patient demographics for analysis and comparison to clinical phenotype.

Routine samples are stored frozen at -80C within the MFT Biobank on the MFT Oxford Road site (licensed by the Human Tissue Authority with approval from the National Research Ethics Service to operate as a Research Tissue Bank). See MFT Biobank entry for details.

We strongly encourage contacting the CWB@Manchester team early on in the project design to discuss feasibility, cost and timescales for tailored prospective sample collection requests.

At what stage in their research project should a researcher approach you for support?
As early as possible to ensure timely and appropriate specimen collection. However, we are also able to offer support at all stages.

Contact

Lawrie Rogerson-Wynne, Senior Clinical Trials Coordinator
Burns & Plastics & Trauma and Orthopaedic
lawrie.rogerson@mft.nhs.uk
0161 291 4850
Manchester Renal Biobank at the Manchester Institute of Nephrology and Transplantation

The bank stores tissues from patients, both adults and children who have had a renal biopsy. Prospective collections are also possible.

How do you support researchers in Manchester?
We collect tissues to support research activities in adults and children on preserving native kidney function; re-providing limited kidney function through dialysis and understanding the pathophysiology of reperfusion injury and rejection in kidney transplants.

At what stage in their research project should a researcher approach you for support?
As early as possible in order for suitable patients to be identified prospectively. We are happy to establish new collaborations with academics interested in nephrology and seeking tissues for their research.

Contact

Dr Patrick Hamilton
✉️ Patrick.hamilton@mft.nhs.uk

Dr Durga Kanigicherla
✉️ durga.kanigicherla@mft.nhs.uk

Prof Rachel Lennon
✉️ Rachel.lennon@manchester.ac.uk
NIHR BioResource Centre Manchester

NIHR BioResource is a nationwide platform providing access to consented volunteers for recall to research studies, along with a biobank of samples paired with genetics, health and lifestyle data.

How do you support researchers in Manchester?
The NIHR Manchester BioResource Centre is one of thirteen BioResource Centres across England. Each centre coordinates the recruitment of volunteers in their local area and is supported by the NIHR Biomedical Resource Centres (BRC) and Clinical Research Facilities (CRF).

The BioResource cohorts cover three main areas: common diseases, rare diseases and healthy population.

Volunteers provide a small blood sample and health and lifestyle information, which is stored in the NIHR BioResource national database which researchers can subsequently use to find potential study participants.

As well as common disease and healthy populations, Manchester Centre for Genomic Medicine, based at Manchester University NHS Foundation Trust (MFT), is a large rare disease centre. It recruits volunteers across a number of rare disease areas, including infection and immunity, neuroscience, rare cancers and cardiovascular disease.

The Manchester centre also leads the NIHR Immune Mediated Inflammatory Diseases (IMID) BioResource. We recruit UK patients with IMID conditions, including rheumatoid arthritis, psoriasis and connective tissue diseases such as lupus.

At what stage in their research project should a researcher approach you for support?
Anyone interested in accessing the NIHR BioResource are welcome to contact us at any point to discuss your needs. To ensure we have sufficient samples or patients recruited in the disease area of interest we would advise contacting us early in your planning.

Contact
For the IMID common disease BioResource please contact

IMID@Manchester.ac.uk
or the IMID BioResource Project Manager Fiona Stirling.

Fiona.stirling@manchester.ac.uk

For the Rare Disease BioResource contact Laura Crowther

Laura.crowther@mft.nhs.uk

https://www.manchesterbrc.nihr.ac.uk/how-we-do-it/nihr-bioresource-centre-manchester/

https://bioresource.nihr.ac.uk/using-our-bioresource/our-cohorts/rare-diseases/

@IMIDBioResource

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
Manchester Clinical Trials Unit

Our expertise:
We aim to collaborate and conduct high-quality clinical research that leads to individual and societal benefit.

Our team of 55 staff have expertise in the design, management, analysis and delivery of multi-centre trials. These studies influence positive developments in clinical practice.

Manchester CTU (formerly MAHSC-CTU) is registered by the UK Clinical Research Collaboration (UKCRC) and receives funding from NIHR, CRUK, The University of Manchester and Health Innovation Manchester.

We are currently managing a portfolio of 39 trials, totalling £18m of grant funding.

What is a CTU?
Clinical trials units (CTU) are specialised biomedical research units that design, centrally coordinate and analyse clinical trials and other studies. We will work with you to develop your application and trial design, and can provide support on: study design; statistics and methodology; protocol development; trial management; data management (using our Electronic Data Capture Database); quality and regulatory assurance.

At what stage in their research project should a researcher approach you for support?
We recommend that you contact us at the earliest stage of formulating your study design to start discussions. This should also be at least 12 weeks in advance of your grant submission deadline. This allows us to provide appropriate advice, liaise with the study sponsor, and develop an accurate resource plan and costing of our work.

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4

Contact

If you have any initial enquiries regarding a collaboration with us, please email our Director, Professor Kevin O’Brien,

kevin.o'brien@manchester.ac.uk
The University of Manchester
Clinical Trial Sponsorship

Regulated research activity and high risk studies.

How do you support researchers in Manchester?
We offer broad and in-depth expertise in guiding the translation of research and navigating regulatory requirements including sponsoring clinical trials (ATIMPs and re-purposing drugs, devices and other complex and high-risk interventions).

We support regulated research activity, including drug trials, medical device trials (including implantable, diagnostic testing, and software/algorithms), analysis of samples linked to trials, human tissue (research and application) and other high risk studies. We have experience of working with both non-commercial and commercial funders as well as pharma companies involved in the supply of medicinal products or devices. In addition as sponsor we have experience of working with a number of UKCRC clinical trials units or CROs involved in the management of the University’s sponsored trials.

Past Examples
The University has sponsored a number of clinical trials including translational studies of first-in-human advanced therapies (MPSIII and DMD) and medical device trials (the nerve conduit trial and uses of software as medical devices (RAPID). Currently, the University is in the process of setting-up the first use of graphene in a medical device trial and other gene therapy trials. More info can be found on the team’s website.

Translational Stages Supported:
- D1
- D2
- D3
- D4
- T1
- T2
- T3
- T4

Contact
Dr Mohammed Zubair
Research Governance, Ethics and Integrity Manager
clinicaltrials@manchester.ac.uk
0161 275 2725 OR 0161 275 2167
https://staffnet.manchester.ac.uk/rbe/ethics-integrity/
clinical-trials/

At what stage in their research project should a researcher approach you for support?
So that we can provide the correct guidance, please contact us before you submit any application for funding.
Develop and test behavioural and digital interventions to improve patient safety.

How do you support researchers in Manchester?
The MFT Innovation Team (MIT) provides support to any member of staff working across the MFT to help them to develop and adopt solutions that improve patient care, efficiency or cost-effectiveness. These services may be of particular benefit to those working on research and innovation projects.

The process of developing an innovation can be complex and lengthy. An unmet need must be identified and validated and the size of the market must be assessed. The impact that an innovation could have and the cost of achieving the desired outcomes must be fully analysed so that appropriate funds and resources can be acquired and assigned to the project. External developers are often needed to help drive the innovation forward, so it is vital that adequate protection is in place when engaging in such activity.

MIT helps NHS staff to navigate this complex process. The team is adept at helping to determine the best route for your project; identifying appropriate internal and external resources that can help to achieve your goals.

Additionally, MIT delivers a range of other innovation-related activity, such as helping to protect intellectual property through patents, trade marks and copyright, and training and education sessions.

At what stage in their research project should a researcher approach you for support?
MIT can assist you at any stage of the innovation pathway.

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
Rare Diseases, Manchester University NHS Foundation Trust

Linking rare diseases clinicians and commercially funded studies and locating potential sources of funding for research into rare diseases.

How do you support researchers in Manchester?
Manchester University NHS Foundation Trust (MFT) has recently appointed a Rare Diseases Project Manager who will support researchers by signposting their rare disease cohorts to external stakeholders to create opportunities to grow rare diseases research. The Rare Diseases Project manager facilitates conversations with external stakeholders and also links researchers to other supporting teams within our Manchester network. They will also circulate information on funding streams relevant to rare diseases research, and support the funding application process alongside the hospital research and innovation managers at MFT.

At what stage in their research project should a researcher approach you for support? At the beginning of the project or research proposal, or at any stage, relating to rare diseases. The sooner the better!

Contact
Stephanie Yau, Rare Diseases Project Manager
stephanie.li@mft.nhs.uk
0161 276 5931

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4
Diagnostics and Technology Accelerator (DiTA)

Supports evidence (clinical, analytical, economic) generation for commercially supplied IVDs and medtech, including sample and data provision.

How do you support researchers in Manchester?
Manchester University NHS Foundation Trust (MFT) Diagnostics and Technology Accelerator (DiTA) initiative is made up of a diverse multidisciplinary team of clinicians and methodologists, directed by Dr Tim Felton, consultant in intensive care and respiratory medicine, and led by operations manager Dr Annie Yarwood, to catalyse the generation of evidence for commercially supplied in vitro diagnostics and medical technology. It is an exciting opportunity to bring together patients, clinicians, researchers, commissioners and industry to generate the research evidence required to fast-track new devices and technologies into clinical practice. For clinicians and researchers, DiTA offers the opportunity to evaluate the latest IVD and technology innovations, leading to early adoption of those which are shown to potentially transform patient care, and real world research impact through contributing to industry-related projects.

At what stage in their research project should a researcher approach you for support?
Researchers are welcome to get in touch at any point in their own development pathway, or for a scoping discussion to explore opportunities.

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4

Contact
Fill in the enquiry form on our website

https://research.cmft.nhs.uk/partnering/dita
dita@mft.nhs.uk
annie.yarwood@mft.nhs.uk
NIHR Manchester Biomedical Research Centre (BRC)

Supporting the translation of lab-based discoveries into new clinical interventions.

How do you support researchers in Manchester?
The NIHR Manchester Biomedical Research Centre (BRC) drives forward basic science discovery from the first translational gap into proof of concept. The BRC team works with other researchers working across the experimental medicine field to collaborate, signpost to relevant clinical specialists to share expertise and drive new research ideas and areas forward.

Our biomarkers platform theme brings together expertise and facilities in genomics, proteomics, clinical imaging, biostatistics and implementation within an integrated research infrastructure. This helps BRC researchers to access facilities, expertise and equipment essential for an efficient biomarker research ecosystem.

Our Rapid Translational Incubator theme signposts researchers to appropriate support when setting up and running trials and studies in GM. We run networking events and webinars to discuss solutions to common problems in a supportive peer network.

At what stage in their research project should a researcher approach you for support?
Ideally, the BRC would be keen to hear from researchers as soon as possible to enable us to appropriately input into projects/study design and support researchers to take ideas forward, but we are happy to work with anyone at any stage in the translational pipeline.

The NIHR Manchester BRC: ‘driving health improvements and lasting change for all through creative, inclusive and pro-active research that identified and bridges gaps between new discoveries and individualised care’

Contact

Lisa Miles – BRC Operations Manager
+44(0) 161 701 2669
lisa.miles@mft.nhs.uk
www.manchesterbrc.nihr.ac.uk/
@ManchesterBRC

Translational Stages Supported:

D1  D2  D3  D4  T1  T2  T3  T4
NIHR Manchester Clinical Research Facility

Delivers early phase studies in adults and children across all therapeutic areas and all cancer types.

How do you support researchers in Manchester?
We deliver early phase studies in adults and children across all therapeutic areas and all cancer types.

Manchester CRF comprises four dedicated experimental medicine research units across Greater Manchester, hosting cutting-edge technology. Our hospital locations at The Christie NHS Foundation Trust, Manchester Royal Infirmary (MRI), Royal Manchester Children’s Hospital (RMCH) and Wythenshawe Hospital mean we can appropriately manage patient safety and deliver high intensity studies.

With a diverse Greater Manchester population of 2.8M our research partners benefit from the large potential for recruitment.

We deliver complex, high quality experimental medicine studies to time and target and drive faster translation from bench to bedside. Our experienced research staff, including world-leading researchers can advise on all aspects of study design and delivery.

Twenty four hour, seven day-a-week inpatient and outpatient services are available.

Partnering with us gives you access to:
- Inpatient and Outpatient Facilities
- Imaging Facilities
- Specialist Equipment and Trained Staff

We believe that collaboration with industry, universities, hospitals and others plays an essential role in improving care for the patients we serve through research.

Contact

rsm-mcrf@mft.nhs.uk

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
NIHR Greater Manchester Patient Safety Translational Research Centre

Develop and test behavioural and digital interventions to improve patient safety.

How do you support researchers in Manchester?
We support researchers by developing and testing behavioural and digital interventions to improve patient safety before they are used more widely.

Our research and projects focus on a “product” and “pipeline” pathway. Product refers to behavioural and digital interventions to improve patient safety primarily addressing primary care and transitions within and across health and social care settings, both within community care and in hospitals. Pipeline is the embedded involvement and engagement and patient and public involvement approaches to co-design that we use to work in partnership with members of the public, patients, healthcare professionals, policy-makers and commissioners to maximise the opportunities for our products to be used at the next translational stage and in practice. This addresses two of the three Greater Manchester PSTRC core aims on research excellence and a learning health system pipeline. Our third key aim relates to capacity building - focusing on researchers, PhD students, staff, patients/carers and members of the public. We work in partnership with other NIHR infrastructure as well as health and social care providers and Health Innovation Manchester.

At what stage in their research project should a researcher approach you for support?
Researchers can approach us for support and advice at any stage. However, given our focus on the first translational gap, on identifying, developing and testing new approaches and on involvement and engagement, it would be perhaps most relevant to do so at the start of a project or before requesting funding from a funder.

Contact
For general enquiries:
email: gmpstrc@manchester.ac.uk
link: http://www.patientsafety.manchester.ac.uk/

Translational Stages Supported:
D1 T1 D2 D3 D4 T1 T2 T3 T4

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NIHR Research Design Service North West

Supporting researchers who are applying to a national (or international) funding body in open, peer-reviewed competition to undertake applied health or social care research.

How do you support researchers in Manchester?
We will support anyone applying to a national (or international) funding body in open, peer-reviewed competition to undertake applied health or social care research.

At what stage in their research project should a researcher approach you for support?
The earlier the better! We will work from the earliest ideas to help researchers to build a team that includes all necessary disciplines, including patients, the public, scientists, clinicians and methodologists. We will also review rejected applications, or those with conditional funding approvals, to help researchers to improve them.

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4

Contact
Follow the ‘Request advice’ tab from
https://www.rds-nw.nihr.ac.uk/
NIHR Clinical Research Network

The NIHR Greater Manchester Clinical Research Network (GM CRN) is the delivery arm of research in NHS and social care settings; supporting high-quality research to advance knowledge and improve local healthcare.

How do you support researchers in Manchester?
Through our free-of-charge study support service, we help academic researchers and the life-sciences industry plan, set up and deliver high-quality research in the NHS and wider health and social care environment, including: medical; diagnostic; pharmaceutical; bio-tech; med-tech; Contract Research Organisation and academia

Through working with us, you will have the opportunity to access:
• A diverse population of 3 million people through our Patient and Public Involvement and Engagement projects
• 30 specialties, with a clinical expert in each therapeutic area from the very outset of your clinical trial
• Expert advice on funding opportunities, cost attribution for grants, and commercial costing and contracting
• New sites and investigators, across health and social care settings
• Expert knowledge in delivering research based on proven experience, including feasibility assessments and recruitment plans
• Strong links with the life sciences industry and SMEs, enabling investigator initiated studies
• Full performance monitoring support, including a proven escalation and resolution route, to ensure your study recruits within the allocated time and to target

At what stage in their research project should a researcher approach you for support?
Engage with us as early as possible to enable access to the full cycle of the study support service, allowing us to actively engage, facilitate and drive the success of your study

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4

Contact

researchsupport.crngm@nihr.ac.uk
https://local.nihr.ac.uk/lcrn/greater-manchester/
@NIHRCRN_gman
+44 (0)161 701 5600

Visit our Industry Route Map of the support available through the Clinical Research Network Study Support Service:
https://industryroutemap.netlify.com/story_html5.html?lms=1
Health Innovation Manchester

An academic health science and innovation system at the forefront of transforming the health and wellbeing of Greater Manchester's 2.8 million citizens.

How do you support researchers in Manchester?
As an academic health science and innovation system, Health Innovation Manchester is responsible for accelerating proven innovation into Greater Manchester’s health and social care services at pace and scale. Health Innovation Manchester was formed in October 2017 by bringing together the former Academic Health Science Network and Academic Health Science Centre under one single umbrella, which also represents Greater Manchester’s wider research and innovation system.

In Greater Manchester, we have the unique ability to deliver innovation into front-line care at pace and scale thanks to our £6bn devolved health and social care system, unrivalled digital assets and ambitions, exceptional academic and research capability and thriving industry partnerships.

HInM has a thriving programme of research activities across the six domains of research excellence: cancer, cardiovascular disease, inflammation and repair, women and children, mental health, and neuroscience, underpinned by the cross-cutting themes: precision health, digital health and applied health research. HInM is now working across GM’s main research partners to focus activity to address the health and social care priorities of GM, as well as to secure further funding and advance translational research delivery into the frontline. This activity is being further supported through the development of strategic partnerships with the University of Salford, University of Bolton, Manchester Metropolitan University, and The University of Manchester.

At what stage in their research project should a researcher approach you for support?
We work with researchers within the six research domains to develop projects at the D3 to T2 stages of the translational pathway. However, HInM has a pivotal role in bringing forward a constant flow of targeted innovations and putting them through an effective but streamlined evaluation process, so they are adopted at pace and scale across Greater Manchester and beyond.

Contact

healthinnovationmanchester.com

cath.barrow@healthinnovationmanchester.com

jonathan.massey@healthinnovationmanchester.com

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
The Innovation Nexus

Do you have an innovation which could benefit the NHS?

How do you support researchers in Manchester?
The Health Innovation Manchester team of advisors brings together expertise across all aspects of working with the NHS, from trials, evaluation and market needs analysis to procurement and adoption. If you have an innovative product, service or technology that you believe has the potential to benefit the NHS, our team will be delighted to hear about your innovation and will provide bespoke advice on the steps you should be taking to progress your innovation and engage with the NHS.

At what stage in their research project should a researcher approach you for support?
We recommend getting in touch with us early, even if you feel your innovation isn’t ready yet, and we can provide you with the right advice and insight for progressing it towards implementation in the NHS.

Contact

in@healthinnovationmanchester.com
https://healthinnovationmanchester.com/the-innovation-nexus/

Translational Stages Supported:
D1 D2 D3 D4 T1 T2 T3 T4
VOCAL

Advise on and deliver patient and public involvement and engagement across Greater Manchester, nationally and internationally.

How do you support researchers in Manchester?
Vocal is a specialist unit advising on and delivering patient and public involvement and engagement across Greater Manchester, nationally and internationally. We are financially independent and not for profit, hosted by Manchester University NHS Foundation Trust in partnership with The University of Manchester.

We can provide support to researchers in terms of

• Developing and supporting researchers to develop patient and public involvement and engagement strategies and plans for their research
• Advice on grant applications in relation to patient and public involvement and engagement
• Providing training, support and mentorship for researchers on involving and engaging patients and the public with their research
• Designing and delivering patient and public involvement and engagement for research including facilitating access to research advisory panels and groups (dependent on research funder)
• Evaluation of their patient and public involvement and engagement work

At what stage in their research project should a researcher approach you for support?
Ideally, as early on in a research project as possible, although support is available at all stages of projects if required.

Contact
Vocal

The Nowgen Centre,
Manchester University Hospital’s NHS Foundation Trust,
29 Grafton Street,
Manchester,
M13 9WU

0161 276 6614
info@wearevocal.org
https://www.wearevocal.org/
@letsgetvocal

Translational Stages Supported:

D1 D2 D3 D4 T1 T2 T3 T4
The Translation Manchester team have started to bring together this network of support, but we need your input to help it grow. If you run, or know of, a group or facility, which supports translational research, contact us to get involved: translation@manchester.ac.uk
One significant hurdle to translation is the sheer number of TLAs (Three Letter Acronyms) we use in daily conversation! Here is a list of the ones we use in the network, to clear things up...

**A2E** Access to Expertise

**ATMP** Advanced Therapy Medicinal Product

**BE** Business Engagement

**BRC** Biomedical Research Centre

**CFT** Christie NHS Foundation Trust

**CHI** Centre for Health Informatics

**CRF** Clinical Research Facility

**CRUK** Cancer Research UK

**CTU** Clinical Trials Unit

**DiTA** Diagnostics and Technology Accelerator

**FBMH** Faculty of Biology, Medicine and Health

**FH** Faculty of Humanities

**FRGT** Faculty Research Governance Team

**FSE** Faculty of Science and Engineering

**GM** Greater Manchester

**GMP** Good Manufacturing Practice

**HInM** Health Innovation Manchester

**HRA** Health Research Authority

**HRIM** Hospital Research and Innovation Manager

**HTA** Human Tissue Authority

**IMP** Investigational Medicinal Product

**IMPD** Investigational Medicinal Product Dossier

**IVD** In Vitro Diagnostic

**LIMS** Laboratory Information Management System

**ManARTS** Manchester Allergy, Respiratory and Thoracic Surgery

**MAHSC** Manchester Academic Health Science Centre

**MCRC** Manchester Cancer Research Centre

**MFT** Manchester University NHS Foundation Trust

**MHRA** Medicines and Healthcare Products Regulatory Agency

**MIB** Manchester Institute of Biotechnology

**MICRA** Manchester Institute for Collaborative Research on Ageing

**MIMIT** Manchester: Improving Medicine with Innovation and Technology

**MMPathIC** Manchester Molecular Pathology Innovation Centre

**MRC** Medicines Research Council
One significant hurdle to translation is the sheer number of TLAs (Three Letter Acronyms) we use in daily conversation! Here is a list of the ones we use in the network, to clear things up...

MRI Manchester Royal Infirmary
MRI Magnetic Resonance Imaging
NHS National Health Service
NICE National Institute for Health and Clinical Excellence
NIHR National Institute for Health Research
P4T Projects for Translation
PAT Pennine Acute Hospitals NHS Foundation Trust
PI Principle Investigator
QMS Quality Management System
RDS Research Design Service
R&D Research and Development
R&I Research and Innovation
REF Research Excellence Framework
RMCH Royal Manchester Children’s Hospital
RPMN Research Programme Managers’ Network
RS&I Research Strategy and Innovation
SBDC Stoller Biomarker Discovery Centre
SFM Strategic Funding Manager
SFT Strategic Funding Team
SOP Standard Operating Procedure
SRFT Salford Royal NHS Foundation Trust
TPA Translational Partnership Award
TRM Translational Research Manager
UHSM University Hospital of South Manchester NHS Foundation Trust
UKCRC UK Clinical Research Collaboration
UoM The University of Manchester
UMIP The University of Manchester Intellectual Property
To find out more about how the Translation Manchester Research Network and how our Translational Research Managers can support you:

**CONTACT US**

[www.translation.manchester.ac.uk/translational-research](http://www.translation.manchester.ac.uk/translational-research)

[translation@manchester.ac.uk](mailto:translation@manchester.ac.uk)

[@Translation_Mcr](https://twitter.com/Translation_Mcr)

[Translation Manchester Channel](https://www.youtube.com/TranslationManchester)