



Protecting & enhancing your research

Important information on MRC
intellectual property, funding,
industry interactions, drug targets,
diagnostics and reagents

Protecting its intellectual property is a vital part of the Medical Research Council's mission to contribute to national health and wealth

One way to achieve this is by identifying IP created by MRC scientists that has potential commercial value, to protect it through patents or other appropriate means where necessary, and to ensure it is effectively exploited. This has the twin benefits of creating income to reinvest in further research and improving human health.

The MRC allocates a share of its income from the licensing and assignment of its IP directly to inventors and contributors under the Awards to Inventors scheme. Details about the scheme can be found in the MRC Knowledge Base.

MRC Technology

MRC Technology's origins as part of the Medical Research Council started in 1992 and it was set up as an independent company and charity in 2000. It looks after the MRC's intellectual property and technology transfer needs. It now also offers these services to other academic organisations and medical research charities.

MRC Technology has protected many new and innovative ideas, negotiated hundreds of successful licences, generating over £700m for the MRC.

Each MRC scientist is assigned an MRC Technology Business Manager, and they keep in regular contact to maintain awareness of the advances in and direction of your research. They will discuss your work with you and advise whether it has some commercial potential which may lead to an improvement in human health or facilitation of further scientific research.

What is intellectual property?

Intellectual property (IP) is the product of thought, creativity and intellectual effort. Like other types of property it can be bought and sold, and needs protection (where appropriate) and management.

The outcome of academic research is intellectual property (as well as know-how or tangible assets such as materials), and generally, the intellectual property rights (IPR) created are owned by the researcher's employer (the MRC in this case). MRC Technology protects, manages, develops and exploits MRC's IPR on the MRC's behalf.

IP can be protected in order to facilitate investment in further development in four main ways: patents, copyright, designs and trademarks.

The final aim is to license IP (unpatented or patented) to an industrial party with the right expertise and resources to develop it into a product for patient benefit or facilitation of further scientific research.

If you have questions about IP please contact us for more information.



Protecting your work

Achieving its potential

Maximising its impact

If you have any questions about:

Legal agreements

Intellectual property

Technology transfer

Patenting/Copyright

Commercialisation

Distributing reagents

Drug targets

Potential therapeutics

Diagnostic targets

Please talk to your Business Manager

020 7391 2700

info@tech.mrc.ac.uk

Science with commercial potential

If you have any findings, technology (e.g. prototype device) or materials that you think might have commercial application, please tell us as soon as you can. We will assess the opportunity and decide whether to protect it, help you develop it further and/or commercialise it. If we think the research might benefit from further funding, we can also help.

It is vital that you tell us about the research as soon as possible, as it can be difficult to protect work that has already been published.

Several types of technologies can be commercialised without patent protection and we have in the past signed a number of such licences with companies e.g. crystallisation plates generated at the LMB and the NS0 cell line which has been licensed to multiple companies.

Funding for development projects

There are various funding schemes available to help you take your research further towards a commercial and/or therapeutic application.

MRC Technology operates the Development Gap Fund (DGF) on behalf of the MRC. DGF is a pre-seed translational fund available to scientists in MRC units and institutes, which provides funding to conduct translational research in your lab. Projects might include proof of concept studies, target validation, work on aspects of drug discovery such as assay development and tool generation, creation of antibodies, and device or diagnostic prototyping.

We can also provide advice and help with applications for other funding schemes, including MRC's Developmental Pathway Funding Scheme (DPFS), funds managed by charities including the Wellcome Trust and Cancer Research UK, and those managed by other research councils.

Please read the working with industry section before signing any agreements with another organisation or you are approached by a company.

Drug targets and ideas for therapeutics

MRC Technology's Centre for Therapeutics Discovery (CTD) collaborates with academic researchers on small molecule and therapeutic antibody projects.

We have expertise in assay development, high throughput screening (HTS), medicinal chemistry, antibody engineering and affinity maturation.

We keep our collaborators fully up to date and engaged throughout the process and will provide advice, tool compounds and results to advance your research and publications. Please note that there are a number of facilities with which you could potentially work to develop possible drug targets. We will discuss any relevant options with you and if you choose to work with CTD, you will input into the project team throughout the collaboration.

We look for potential drug targets or mouse monoclonal antibodies that might have therapeutic potential. Please visit www.callfortargets.org for more information and contact details.

Potential diagnostics

MRC Technology's Centre for Diagnostics Development (CDD) collaborates with academic researchers to develop and validate new diagnostic tests. If you have a piece of research that you think could be turned into a diagnostic test and you choose to work with us after considering all options available to you, please visit the website for more information and contact details.



callfordiagnostics.org



callfortargets.org

Useful research reagents

The MRC Reagents Catalogue is a collection of monoclonal and polyclonal antibodies generated by MRC researchers. Other research tools include mice, vectors and cell lines generated by MRC researchers. The catalogue enables researchers to make useful tools available to the wider scientific community without having to deal with enquiries directly.

Reagents are commercialised via partnerships with several major reagents companies including Cedarlane Labs, Millipore and eBioscience. The MRC Reagents Catalogue generates approximately £250,000 per year for the MRC, which funds further research. Income generated is potentially eligible for the MRC Awards to Inventors scheme (for reagents created from 1 April 2012 onwards).

If you have a research reagent or tool that you think would be useful to others, please contact Antonia Chatzopoulou. Alternatively, visit our website to download a reagent notification form.

mrctechnology.org/reagents

Antonia.Chatzopoulou
@tech.mrc.ac.uk

Working with industry

You should speak to your MRC Technology Business Manager before talking about your research with other organisations

You might want to interact with industry for a number of reasons:

Confidentiality or non-disclosure agreements

If you want to discuss unpublished work or ideas with people outside your organisation, it is sensible to put a Confidentiality or Non-Disclosure Agreement (CDA or NDA) in place beforehand. This restricts the way in which the information shared is used, prevents dissemination, and maintains the option to protect it in the future.

Material transfer agreements or material use licences

If you want to use a research material owned by a company, you will usually receive a Material Transfer Agreement (MTA) or Material Use Licence (MUL), which sets out who owns the research material and any subsequent materials and data generated using it.

These types of agreement can only be signed by a designated MRC or MRC Technology employee since they must be carefully checked to make sure that they will not adversely impact your and MRC's ability to carry on with research, publish, and ultimately improve human health. Please contact your MRC Technology Business Manager or your Unit Administrator if you want to access materials from a company.

Please note that you will also receive an MTA if you want to access material from another academic lab. If another academic lab wants access to your materials, they must sign an MTA before you send the materials out. These agreements are generally dealt with by your Unit Administrator, or if your unit is based in Oxford or Cambridge, by the respective Centres.

Consultancy agreements

You may be approached by a company that wants you to provide consultancy services for them. This is effectively a private agreement between you and the company, but it must be approved by your Unit Director.

There are a number of factors to consider when consulting for a company and if this is something that you are interested in, please contact your Business Manager or Unit Administrator in the first instance.

Collaborative agreements

You may also want to undertake a collaborative project with industry. We can help negotiate a suitable agreement that will ensure adequate funding is in place, outline the project plan and the contribution/role of each party to the project, define who will own the results generated, agree equitable distribution of any potential future income arising, and define what the final outcome of the study would be.

The agreement will also safeguard your ability to publish the results of such a study and protect the MRC from any potential liabilities.

PT20 iron oxide phosphate binder for the treatment of hyperphosphatemia

Licensed to Phosphate Therapeutics Ltd

A group led by Jonathan Powell at MRC Human Nutrition Research invented an iron oxide formulation, PT20, as a treatment for hyperphosphatemia (high serum phosphate) caused by kidney disease.

Current hyperphosphatemia treatments suffer from at least one of the following problems: limited therapeutic dosing range, low specificity, high pill loading, gastrointestinal side effects, calcaemia, or toxicity. PT20 was developed to exhibit high specificity and efficacy with an extremely safe and low side-effect profile. In human trials PT20 showed superior clinical efficacy compared to calcium acetate (the current most effective phosphate binder).

Patents were filed in 2007 to protect the platform technology underpinning PT20 (mineral oxy-hydroxide materials), and in 2008 to protect specific compositions for phosphate binding applications.

The development of both the platform technology and the PT20 composition was funded by MRC Development Gap Fund awards. In 2012 PT20 was licensed to Phosphate Therapeutics Ltd, a subsidiary of Shield Therapeutics, and is currently in late-stage clinical development.

Cytosponge™ A diagnostic test for Barratt's oesophagus

Licensed to Covidien

Cytosponge™ is a mass screening tool for early detection of Barrett's oesophagus and other benign oesophageal conditions, invented and developed by Rebecca Fitzgerald at the MRC Cancer Cell Unit.

370,000 people are estimated to develop Barrett's oesophagus annually in the UK, 10% subsequently developing oesophageal cancer, the sixth most common cause of death from cancer in the UK.

The current diagnosis involves endoscopy, a procedure that is invasive, costly and risky. The Cytosponge™ consists of a sponge like material and a diagnostic biomarker. It has distinct advantages over the current technology, being simple, non-invasive, there is no need for a hospital visit, and it is much cheaper.

Development was funded by an MRC Development Gap Fund award to Rebecca Fitzgerald. The technology and associated know-how are protected by three patents – licensed to Covidien in 2013.

Covidien is an established company with a track record in taking diagnostic products and devices to market. Other organisations involved in the development of the technology were: MRC Cancer Cell Unit, Cambridge University, Addenbrookes NHS Trust, Medical Research Council, Cancer Research UK and MRC Technology.