

The research commercialisation office of the University of Oxford, previously called **Isis Innovation**, has been renamed **Oxford University Innovation** 

All documents and other materials will be updated accordingly. In the meantime the remaining content of this Isis Innovation document is still valid.

URLs beginning <u>www.isis-innovation.com/</u>... are automatically redirected to our new domain, <u>www.innovation.ox.ac.uk/</u>...

Phone numbers and email addresses for individual members of staff are unchanged

Email : enquiries@innovation.ox.ac.uk



### Channelling expertise











The University of Oxford's Consulting and Services arm



# Consultancy and Services in the Medical Sciences









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### Introduction

A key part of the University's mission is to achieve wider engagement with society and to demonstrate the positive impact (both economic and societal) of research undertaken in Oxford. In 2000, the University established Oxford University Consulting (OUC), now a division of Isis Innovation Ltd, to support staff that wish to undertake consultancy and departments who wish to make their facilities and expertise available to external organisations. Consulting activity is one of the important means by which staff in the Medical Sciences Division can make available their knowledge and expertise to benefit a wide range of organisations including those in the private and public sectors. Such interactions in turn benefit the University, as staff bring back to their teaching and research the insights, experiences and contacts they have gained as consultants. The relationships developed through consultancy and services complement the activities of the Division's Business Development team and are a recognised part of a broad spectrum of activities that support the research and impact agendas.

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Consultancy work is one of the many important activities that academics may undertake, in addition to their research, that help to bring the benefits of their expertise to the wider community. OUC has a long history of successfully working with staff from the Medical Sciences Division, providing a professional service to support their consultancies for a broad range of organisations across many areas of medicine and medical technology. As we seek to build bridges with industry to further the research agenda, the personal relationships that arise through consultancies help to strengthen these connections and reinforce the benefits to be gained from working together. "

Professor Alastair Buchan, Head Of the Medical Sciences Division



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Over the past five years, OUC has seen an overall increase in the number and diversity of consultancy projects that call upon the advice and expertise of colleagues based in the Medical Sciences Division. In this period, OUC has managed 366 consultancy and service projects across the Division, successfully contracting work for over 250 academic consultants and departmental service providers.

We recognise that researchers from the Medical Sciences Division are motivated to undertake consultancy or provide commercial services for a variety of reasons ranging from the desire to see their expertise applied to new challenges outside the spheres of teaching and research, through to financial benefits and the opportunity to build relationships that may lead to downstream research funding. Whatever the circumstances, we aim to work in partnership with the Division, striving to offer its staff and departments an efficient and effective service that reduces the administrative burden and maximises the time you are able to devote to the technical element of projects.

We are excited about the potential for consultancy and services in the Medical Sciences to contribute to the Divisional strategy as part of its drive to engage with industry and external organisations and to foster productive relationships. We warmly invite both departments and staff to contact us to discuss how OUC can support you to do consultancy and services work."

Andrew Goff, Head of OUC



#### About this brochure

The purpose of this brochure is to highlight some of the academic consulting and services work that has already been undertaken in the Division through OUC and to provide an overview of how we can support both individual researchers and their departments to engage in these positive and beneficial activities.

The brochure is divided into a number of sections to showcase consulting activities across a range of areas (see pp8-15), highlight successful services projects (see pp16-17) and demonstrate the support we provide to the University's technology transfer activities (see pp18-19).

## Working across the Division

There has been a steady increase in the number and diversity of consultancy and service projects supported by OUC for the Medical Sciences Division over the last five years. This reflects both the growth in levels of research performed across the Division and the growth in OUC's operational capabilities. In turn, as OUC's client base has expanded, so the number of opportunities for consultancy has increased. We encourage all staff interested in doing consultancy to register with us so that if an opportunity arises in your particular area of expertise we can contact you to see if you are interested.

Much of OUC's work with Medial Sciences, as with the other divisions, is concerned with providing an efficient service to departments as well as to individual members of staff. In 2012/13, OUC signed 102 contracts that enabled 68 academic consultants – drawn from 25 different departments across the Division – to provide their advice and expertise to a wide range of external organisations. From those deals, about a third of all revenues generated came not from personal consultancy but instead from departmental consultancy and service agreements; revenue that OUC passed directly into departmental cost centres.







#### Consultancy

#### Services

Generally speaking, academic consulting can be described as the provision of advice and expertise to a client organisation external to the University in return for financial compensation; it is governed by a legal agreement. This advice and expertise may take many forms, as this brochure highlights, and while the central tenets always remain the same, academic consulting falls into two broad categories:

**Personal Consultancy** involves one or more individuals acting as academic consultants to provide expertise to a client in return for which the academic consultants receive income personally. This work is carried out independently from University activities, with the academic consultants acting in their personal capacity.

**Departmental Consultancy** consists of one or more individuals providing expertise to a client with the consulting fees being paid to the academic consultant's department, where they can be used at the discretion of the department – for example as travel stipends for DPhil students. This work is carried out as part of an individual's University activities with the academic consultant acting on behalf of their department. Services work typically involves providing external client organisations with access to facilities or techniques that are already being provided to internal users, for example, Small Research Facilities. Such services are provided to external clients on a purely commercial basis with the fees being paid through OUC directly to the department. This type of project is covered by a service agreement that is negotiated and contracted by OUC, as distinct from a research or collaboration agreement that would typically be handled by Research Services. (For more on Services, see pp16-17)

This work is carried out as part of an individual's University activities with the academic consultant acting on behalf of their department.





Pharmaceutical and Biotech companies

#### **Typical Projects**

Scientific Advisory Boards Clinical Advisory Boards Technical Advice Problem-Solving Speaker Engagements





#### What the Clients say

Clinical imaging forms a key part of our strategy to support our R&D programmes and we are exploring how to better integrate these approaches to increase success in new drug development, ensuring the delivery of innovative medicines.

Access to expert academic consultants provides a valuable adjunct to our internal knowledge-base. That we can foster substantial relationships with these leading academics is an added benefit and helps to build important networks for future research projects.

Dr Phil Murphy, Senior Director and Head, Global Imaging Unit, GlaxoSmithKline

#### **Experiences**

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I am a consultant for a variety of companies interested in developing therapies for lysosomal storage diseases. Some of these are already very familiar with this specialised area of research – whereas for others it's totally new – so my roles are enjoyably varied. The main satisfaction I get from consulting is in evaluating and developing novel treatments for these rare disorders. In some cases this has also led to research grants to my lab, an additional benefit.

OUC very swiftly put in place the legal framework that allows me to perform my consulting activities. They have also negotiated fees and provide support for all on-going activities. This leaves me free to focus solely on the consulting work.

Professor Fran Platt, Department of Pharmacology



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My consultancy work lies in the field of Alzheimer's disease and dementia, mainly working with developing companies or established pharma, on the development and evaluation of diagnostic tests or new treatments for AD. I have also been advising a company about establishing "memory services" for people with possible or established dementia.

I enjoy being at the cutting edge of new knowledge in the field and having the opportunity to contribute to this. It also brings opportunities to meet up with international colleagues and enhances informal networking.

OUC has dealt successfully with all financial negotiations and has the resources to properly assess the legal aspects of the consultancy contracts, with the added benefit that I am also covered by their liability insurance.

Professor Gordon Wilcock, OPTIMA, Nuffield Department of Clinical Medicine



### Novel Therapeutics

Demands placed on companies continuing to develop new medicines have never been more challenging. The drive to reduce attrition and increase innovation in the face of an increasingly complex regulatory environment means that bio-pharma companies have a strong need for the advice of independent scientists and clinicians with expertise to complement their own capabilities.

Consulting to such companies is widely recognised as making an important contribution to the development of new medicines. By acting as academic consultants, individuals are able to influence and impact beyond the immediate scope of their research activities.

With increased pressures on companies from regulatory bodies and NGOs in relation to transparency around consultancy practice, understanding how best to operate in this space is critical for minimising personal and institutional risk.

Med-Tech Companies Medical Software Developers Integrated Healthcare Companies

#### **Typical Projects**

Technical Advice Independent Testing and Analysis Problem Solving





#### What the Clients say

**EE** Working with academic consultants gives small companies access to a breadth and depth of expertise which would otherwise be unavailable to them.

In engaging with the consultants, we have been able to implement and develop our technology more efficiently and in a much shorter time.

OUC brought a clear process and single pointof-contact to the table, which enabled our consultancies to be arranged in an efficient and timely manner.

Lance Farr, Senior Development Engineer, Acuitas Medical Ltd

# accessing expertise

## Medical Technologies

New advances in medical technology are enabling our understanding of fundamental biology, enhancing the application of therapeutics, guiding the diagnosis of diseases and producing devices that are medical interventions in their own right.

The Division has active research in this area, including specialised centres for medical imaging. The Functional Magnetic Resonance Imaging for the Brain (FMRIB) Centre and the Oxford Centre for Clinical Magnetic Resonance Research (OCMR) have both established themselves as world-leading research centres. For companies operating in this sector, accessing expertise from such centres informs the development of the technologies and their best deployment for the benefit of patients.

#### Experiences

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I have arranged two consultancies through OUC. One was with a multi-national pharma company who wished to have advice on the potential of imaging to provide biomarkers in drug discovery. The other was with a small UK start-up, helping implement their technology for MRI imaging on specific delivery platforms.

It is very interesting to glimpse how industry operates. Clearly, the extra income is never unwelcome either. OUC conducted the bulk of the negotiations and prepared all the paperwork. It is also reassuring to know that appropriate indemnity insurance is in place.

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Professor Peter Jezzard, FMRIB, Nuffield Department of Clinical NeuroSciences

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I have consulted for pharma companies on designing, implementing and conducting clinical trials involving cardiovascular MRI and MR spectroscopy.

Acting as a consultant allows me to interact with major pharma companies, enabling them to test some of their most promising pharmacological tools for treatment of heart disease using the most powerful imaging technique that exists for the heart, thus, hopefully achieving significant progress in the field.

OUC are very experienced and provide a straightforward and reliable service with clear communication and a good rapport with the client. They take the administrative hassle out of doing consultancy work, so one can just concentrate on the enjoyable scientific aspects.







NGOs Biomedical SMEs Not-for-Profit Organisations Pharmaceutical Companies

#### **Typical Projects**

Health Economic Evaluation Simulation and Modelling Ethical Review Evidence Based Medicine Patient Reported Outcomes





#### What the Clients say

Academic consultants provide specialist scientific and medical expertise in a number of key areas of our business. Dr Judit Simon has provided expertise, analysis and reporting on Health Economics which has been invaluable for the progress of a new P1vital project in stratified medicine and the diagnosis and treatment of depression in primary care. OUC provided an efficient service in arranging and extending the consultancy.

Dr Colin T Dourish, Chief Executive Officer, P1Vital

### Healthcare Innovation

In parallel with the developments in new therapeutics and medical technologies, there has been a concomitant growth in the need to demonstrate the value these innovations offer and evaluate the supporting evidence. Whether this is in relation to improved patient care, value for money or therapeutic effect, specialised expertise is required to understand how best to approach these issues and the most appropriate tools to use in any such assessment.

OUC helps different groups in the division that are active in these areas to consult for companies who want to improve their use of evidence based medicine, produce health evaluation assessments, or to use and develop Patient Reported Outcome measures – health questionnaires completed by patients – in relation to their own products. OUC also works closely with Isis Outcomes, a dedicated team within Isis which provides access to PRO measures developed at the University of Oxford and elsewhere.

#### **Experiences**

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I have worked on a variety of consultancy projects guiding pharma companies and the organisations working with them on best practice in selecting, employing, translating, and interpreting data from PRO measures. From an academic perspective it is very rewarding to help facilitate the use of PRO measures in an applied environment. OUC provides an excellent bridge between a third party organisation and myself, ensuring requests for consultancy are clear and well managed in terms of timelines and deliverables. Together with Isis Outcomes, they not only show professional business acumen, but have a good understanding for, and respect of, the subtleties and science behind best practices in PROs. "

Professor Crispin Jenkinson, Health Services Research Unit, Department of Public Health





**FC** I have worked on a consultancy for an SME to develop a health economic assessment model in relation to their proprietary technology. I have greatly enjoyed the close professional relationship I built with the client, becoming part of the 'team', learning about the different priorities in business-related research and seeing the immediate outcome of the work realised in very short timelines.

OUC has been very helpful in organising the administrative side of the consultancy and provided legal and financial advice which greatly reduced my concerns around these issues.

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Dr Judit Simon, Health Economic Research Centre, Department of Public Health 14 Consultancy and Services in the Medical Sciences

#### **Types of Client**

Venture Capital Firms Legal Firms Patent Attorneys

#### **Typical Projects**

Expert Opinion Expert Witness Scientific Opinion on Potential Investment Technical Advice



#### What the Clients say

We needed experts to help us assess the benefits of a disruptive technology and used OUC and its network of academics working as consultants. Engaging academics in the assessment of potential investment opportunities is extremely valuable as they are at the cutting edge of technology and innovation.

Working with such knowledgeable experts was key for making a very informed and fast decision. OUC assisted us very efficiently in arranging the consultancy and we look forward to working with them again.

Dr Laia Crespo, Investment Manager, Ysios Capital

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We needed independent expertise in a technological area for a complex patent case. We were able to get impartial advice and strategic input from an academic who knew the technology and who was able to understand the issues very quickly, the perfect fit for our needs. The collaboration, and the report that came from it, was of great assistance.

The consultancy was hugely useful in our case preparation. The consultant was able to help us navigate through a difficult set of issues and explain subtle technical points that would otherwise have been missed.

OUC set up a contract and formalised the consultancy at very short notice, liaising between us and the consultant. The whole experience was very efficient and professional. I would definitely turn to OUC again. Dr James Wilding, Senior Attorney, Avidity IP





### Expert Witness and Investment

When it comes to legal or patent disputes, expert witnesses play a critical role guiding strategy and informing the decision making process of the parties involved, providing invaluable insight that may help determine a settlement or move to court proceedings. Similarly, when venture capital or other investment firms are evaluating a new opportunity, there is often a need to call on an independent expert to provide a reality check of the scientific foundations on which the opportunity is presented.

OUC is often approached by leading legal firms and venture capitalists with requests to identify an expert. We work with individuals from the Division active in this field to arrange and support them in their expert witness work and encourage other interested academics to get in touch and discuss the practicalities.

Changes that abolished the immunity from liability in negligence which expert witnesses had previously enjoyed under English law mean it is more important than ever for staff at the University acting as expert witnesses to be well protected, contractually and by insurance. OUC provides this to its consultants.

#### Experiences

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OUC looks after two types of consultancy for me: a long-term consultancy for a local biotech firm, and one-off opportunities where OUC either presents new opportunities or manages those that come to me directly. All of these are in the field of biomedicine, and OUC have previously found me diverse consultancy opportunities including working for potential venture investors (performing due diligence on an investment opportunity) and expert witness work helping a law firm compile a scientific case.

Financial rewards can be significant, but consultancy work also enables me to influence development of promising translational medicines and help avoid repeating the mistakes of the past.



invoices. **33** Professor Len Seymour, Department of Oncology

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I have provided independent scientific advice for a firm of patent attorneys in relation to a European Patent Office opposition proceeding. We were looking at scientific papers from my field and critically reviewing the data from the perspective of a patent attorney rather than that of a scientist. I found this shift in thinking very interesting and acting as scientific expert is an experience that I won't forget.

OUC approached me directly, negotiated my contract, regularly checked all was going well, and managed the payment process.

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Dr Helen Fletcher, The Jenner Institute, Nuffield Department of Clinical Medicine







Biopharmaceutical Companies Independent Research Organisations Biotechnology companies Universities

#### **Typical Projects**

Routine Analysis Custom Synthesis Access to Facilities Training







#### What the Clients say



Having access to expensive, state of the art equipment provides us with opportunities to try before we buy. The equipment's suitability for use can be determined before any capital financial outlay. The nature of the contract work meant that

short term use of equipment where financial outlay is not feasible was made possible.

The services have increased characterisation of our products to a more advanced level using cutting edge analytical procedures. This has allowed a deeper understanding in the drug mechanisms of our product thus facilitating our route to product registration and ensuring a safe and efficacious product is manufactured and released.

The Central Proteomics Facility expediently delivered the project in line with the proposed timeline. They also provided flexibility in periods where the volume of analysis varied. Communication was very good at short notice, which was particularly important to us as analysis projects were on tight deadlines.

James Hutchings, Development Scientist, Allergy Therapeutics

#### **Experiences**

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I run the Central Proteomics Facility, where we provide a core facility offering mass spectrometry and proteomics techniques. We work with a diverse range of scientists from external companies on a wide range of biochemical and biomedical problems. This diversity, combined with the rapid technological developments in mass spectrometry based proteomics, continues to make the work challenging and interesting.

We've always taken on projects from external academic and commercial researchers but OUC have promoted our services outside the university and managed the communication, contractual and payment details for us. For us, this has generated a valuable additional income stream and we've found it to be a hasslefree process."

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Dr Benjamin Thomas, CPF, Sir William Dunn School of Pathology

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I manage the Oxford Protein Production Facility based at the Research Complex in Harwell. We have been involved with both training/consultancy and provision of protein production services for two different SMEs in the biotech sector. Interacting with scientists in the biotech industry sector may lead to collaborative research in the future.

OUC has provided a first point of contact, handled negotiations and generally facilitated the process of setting up the services we can offer, including checking and advising on intellectual property.

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Dr Ray Owens, OPPF, Division of Structural Biology



### Facilities and Services

The Medical Sciences Division boasts an outstanding array of services and facilities across its departments, spanning a huge range of technology areas and potential applications. Such services and facilities primarily support research and teaching activities within the Division and across the University.

Further impact and benefits for the Department, Division and University can be extracted from these resources by providing services to external companies through commercial service contracts. In addition to the range of services and specialist equipment within the Division that may not be available from other sources, external organisations reap additional benefits from the expertise of the teams that run the equipment, facility or service, frequently active researchers working at the cutting edge of their fields.

OUC arranges service contracts with external organisations ranging from independent research organisations in southern Europe, through universities in Africa, to biopharmaceutical companies in the UK. The departments benefit from an additional income stream and contribute to the wider impact agenda by maximising the use of the equipment and facilities

Spin-out Companies Software Start-ups Technology Licensees

#### **Typical Projects**

Health Economics Scientific, Technical and Clinical Advice

Strategic Support





#### What the Clients say

Academics provide reliable consultancy in a systematic and objective manner and their expertise ensures their advice is credible and reliable. We received expert advice on constructing a health economic assessment of our medical device which was fundamental to assess its cost-effectiveness. OUC ensured the timely identification of an academic who matched our needs and made sure that all required contracts and non-disclosure agreements were in place.

#### Dr Michalis Papadakis, CEO and Founder, Brainomix Limited

Brainomix is developing software which implements a clinical scoring methodology for detecting and assessing signs of early infarction on computated tomography (CT) scans from patients with acute ischemic stroke and was started-up through the Isis Software Incubator in February 2013.

# accessing expertise

### Supporting Technology Transfer

The Technology Transfer group within Isis works closely with researchers at the University to identify, evaluate and commercialise intellectual property that is generated through research activities.

There are a number of routes for commercialising new ideas including licensing to development partners, spinning-out a company around the intellectual property or, for some software-based ideas, starting-up a new company through the Isis Software Incubator.

With any new venture, integrating or developing new technologies presents its own set of special challenges and Isis, the University and its researchers have a vested interest in seeing its partners succeed, so that the technology can have the maximum impact beyond the boundaries of the University. Therefore, in OUC, we work very closely with our colleagues in the Technology Transfer team to arrange consultancies to advise technology licensees and to support new spin-outs and software start-up companies.



#### **Experiences**

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I am one of the scientific founders of a spin-out company called Oxford Vacmedix, which develops technology that arose from my research at Oxford for generating prophylactic and therapeutic vaccines against microorganisms and tumours.

OUC played a key role in arranging and negotiating an appropriate consultancy which worked for all parties involved.

OUC worked closely with the team who set up the spin-out to ensure the whole process ran smoothly and efficiently. That the project manager from OUC had in-depth understanding of the related technology was beneficial and enhanced the overall experience.

Dr Shisong Jiang, Department of Oncology

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Through OUC I worked with Brainomix (see facing page). I provided guidance on the development of an economic model that synthesised information on costs and health outcomes and determined whether the implementation of this new algorithm in our health care system represented good value for money.

From a professional perspective, being involved in consultancy work provides a good opportunity to closely understand project development in the private sector. From a personal perspective, consultancy fees help with family income. Always welcome, particularly with a child at home.

As an academic researcher, it can be quite overwhelming to deal with payment and administration issues on your own. OUC negotiated a fair payment, prepared contracts, issued invoices to the client and ensured I was getting paid.

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Dr Oliver Rivero-Arias, Senior Researcher, Health Economics Research Centre, Department of Public Health



### CONSULTANCY EXPERTISE GOVERN **EXCELLENCE** POLIC ENGAGEMENT **INTERNATIONAL MEDICAL SCIEN** DEMIC WORLD THERAPEUTICS BENEFIT HEALTHCARE SOCIET GLOBAL 'EGY ADVICE



#### Contact details for OUC

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To register as a consultant with OUC please go to www.isis-innovation.com/consulting/university/register.html

