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Research Contracts

A Researcher's Guide



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Introduction

Research is at the heart of public sector research establishments (PSREs) and is one of the major lynchpins of our universities. Government policy over recent years has given greater prominence to the importance of research but, despite that, government funding is still less than the equivalent funding in the USA and Japan.

Research institutions' own resources are stretched and government funding in its various guises cannot bridge the funding gap alone. Understandably, therefore, research institutions have been extremely proactive in seeking cash and other resources from elsewhere.

More and more companies are outsourcing research and development activities, especially as they become aware that research organisations and universities have an entrepreneurial capability and that many commercially relevant developments are directly underpinned by, or arise from, basic scientific advances, for example, in life sciences.

With some complex research areas it is not just a case of bringing in funding, but also there may be a need to bring in other participants with specialist skills in different research areas. This means that there is increasing demand placed upon researchers to find and compete for research funds, especially if they aspire to maintain and enhance their standing through frequent publications and conference appearances.

All of these give rise to the need for some sort of research contract (agreement). In many ways it is just like a romance:

- Courtship – finding and getting on with your possible research collaborator.
- Engagement – exploring possible contract terms.
- The wedding ceremony – signing the contract.
- Being married – making the collaboration work.

Just like any marriage or partnership commitment, you will go into it with the intention of it being as positive as possible and for it to endure. However with Research Contracts, but unlike marriage, you will want to have a number of such relationships running at any one time of varying durations and you will also want to be planning for the next one(s)!

This Guide aims to give you some general pointers as to the issues, including intellectual property rights, you should be thinking about when considering entering into and/or supervising a Research Contract.

Your research institution's Research Office will be able to advise you on all aspects and assist you in any negotiations. It will be the authorised office for approving any terms and conditions.

Remember that this is just a guide and not a substitute for you taking your own independent professional advice.

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What's in a name?

Whilst you will obviously be familiar with the various categories of research, your industry/commercial partners may not always use the same terminology or see things in exactly the same way. So it is helpful to be clear about the key research categories and the ownership of results and IP arising from each, so as to be able to get to a clear understanding with any party at an early stage of any relationship.

For the purpose of this Guide we have adopted a type of continuum where the categories range from classic blue sky research (called here basic research) through applied research, contract research and to consulting – these are terms or routes used by industry when working with a research institution. It is not an exact continuum though. There are overlaps between terms. As you will see from the question marks in the following grid the applicability of certain criteria will vary from contract to contract.

True consultancy is not research, just the application of existing knowledge. Under a consultancy contract you are not being paid to develop new IP (except copyright in any consultancy report). If you are then it should be a research contract.

Notwithstanding confidentiality issues, a good question to ask is “Will the outcome of any contract result in work of a publishable standard?” If the answer is “yes” then it is likely to be research and, if “no”, then it is likely to be testing or analytical service work or consulting.

The following grid is intended to assist you in classifying your work. It is not definitive but more particularly should aid your thinking about the basic treatment of the results and of IP arising from your research.

Research Contracts Grid

	Basic Research	Strategic Research	Collaborative Research	Applied Research	Contract Research	Consulting*
AGENDA						
Project is to advance research institution's interests	✓	✓	✓	✓	✓	✓
Research is purely to advance knowledge with no specific aim	✓					
Research focuses on specified broad areas with the aim of providing knowledge to help solve known problems		✓				
Project involves active research input from sponsor and research institution		?	✓	?		
Project focuses on acquisition of new knowledge for a specific application				✓	✓	
Project has identified aims and objectives to deliver commercially important results					✓	✓
Sponsor sets agenda for project					✓	✓
FUNDING						
Project funded by research institution/public funding	✓	✓	✓	✓		
Project funded by research institution/public funding and sponsor		?	✓	✓		
Sponsor pays FEC (or equivalent)				✓		
Sponsor pays FEC + profit paid (or equivalent)					✓	✓
RESULTS						
Sponsor to have access to results (possible right to negotiate a licence)	✓	✓	✓			✓
Sponsor to have a licence to use the IP in results				✓		
Sponsor to own IP in results					✓	
Results not to be published					✓	✓
No substantive IP expected to be generated						✓

*This is not research but is included in the table to highlight the differences. "Consulting: A Researcher's Guide" gives further definitions of consulting.

Public Funders

Some of your research will be funded by research grants, often from the UK Research Councils (UK RC) or charitable institutions. They have standard terms and conditions upon which they make their grants, which are non-negotiable. These standard terms and conditions form the basis of the contract. Frequently these funders do not seek rights in the IP created but only impose an obligation on you to disseminate the results. You should always familiarise yourself with the relevant standard terms and conditions and the obligations which they impose.

There is also a wide range of specific types of Research Contract which have specific contract terms applicable to them. They are usually driven by a particular funding body. Let's look at one.

EU Framework Contracts

The European Commission funds a variety of collaborative research projects in the context specific frameworks. The Horizon 2020 programme starts in 2014. The European Commission enters into a contract with all the collaborators. Apart from some specific variations to deal with the nature of the specific research itself and the level of funding being given, this contract has set non-negotiable conditions.

The collaborators then enter into a separate agreement themselves, known as a Consortium Agreement. In this they agree additional terms and can go into more detail on specific issues. These terms cannot contradict anything set out in the contract with the European Commission. There are several specimen Consortium Agreements in circulation which go into great detail as to how these research collaborations are governed, money is dealt with and IP is handled.

Lambert Model Agreements

The Lambert Toolkit can be of assistance to universities, researchers and companies that wish to undertake collaborative research projects with each other.

The toolkit is made up of 5 model research collaboration agreements and 4 model consortium agreements plus supporting material. These can be accessed at www.ipa.gov.uk/whyuse/research/lambert.htm. This Guide will only focus on the model research collaboration agreements.

The different versions of the collaborative research agreements contain variations on who owns and has the right to commercialise and use the IP arising out of the Project (that includes publication of the results). There is a Decision Guide with questions to help you decide which of the 5 model agreements to use.

As the working group that produced them included public bodies, universities and UK companies they should hopefully reflect a reasonable compromise between the various interests of collaborators. They will not necessarily represent the best position from your research institution's point of view. They are, however, a useful starting point if your research institution does not have its own standard agreements.

Research Vehicles

Most research undertaken by research institutions involving third parties will be done using a Research Contract. There are possible other models, though.

Unincorporated Association

This is not a separate legal entity but a body whose members effectively contract on the basis of its constitution – a sort of club. It does not have limited liability and so it is important to set out what each member has agreed to do or not to do.

Partnership

This is a recognised legal structure but all partners are equally liable for each other partner's liabilities. It is not usually very attractive, unless there are foreign entities involved.

Company

IP, research equipment and people (sometimes through secondment) are occasionally put into a company which will undertake the research. This will have limited liability but it does create a separate legal entity.

These sorts of structures are only likely to be considered for very long term collaborative research or where there is a very large number of parties.

Although each Research Contract will be different there will be common themes within them. (The words contract and agreement mean the same). In this Section we look at some of the things which you would expect to be included in most Research Contracts.

Parties

Always make sure it is clear who is entering into the Research Contract. Check the contract is between the right parties. Some institutions have subsidiary companies (acting as managing agents) which deal with Research Contracts and IP Commercialisation but they are not the employers of the researchers nor will they own the IP generated by the researchers.

Always fill out full names and addresses. In the case of a company, include the company's registration number and registered office. These can easily be found on Companies House website www.companieshouse.gov.uk, through the WebCheck facility.

Selecting the wrong collaborator is probably the most common cause of failure of a collaboration. It bears no relation to the quality of the Research Plan or the terms of the collaboration. Selecting a collaborator without having properly checked its strategic fit with your aims, its solvency and its integrity can lead to disappointment. Therefore it is really worthwhile spending the time before signing a contract to check that you have courted the right collaborator. You do not want it all to end in divorce!

Structure

After the "Parties" section there may then be a section called "Background" or "Recitals" which sets out some background to why the parties are entering into the contract and, perhaps, what they hope to achieve.

The Research Contract will then frequently be made up of a formal legal text comprising the main body of the contract, together with various schedules and appendices to it, setting out some of the more practical detail about the Research Project. The schedules or appendices may simply be one document often known as the Research Plan.

Content

The typical content of the main body of a Research Contract is covered in the following Sections.

Finding and Winning Financial Support

Whilst there are many sources to which you might look for funding and all have different criteria and processes, there are common steps that you can take which will enhance your chances of success. The following checklist will give you an idea of how to put yourself in a good position.

■ Improving Background Profile

In addition to the reputation that you will have gained in your community by attending and speaking at seminars and conferences and through publishing, ensure that your CV is registered on your institution's sponsored programmes website and databases. This will ensure that organisations undertaking searches of relevant research expertise will identify your research interests and facilities. It is also likely that an active web-based "hunt and match" of your expertise with available research funding can be carried out automatically and generate for you, on your PC/screen, a list of sources to whom you can apply – some systems will even automatically generate and part-populate your application. You will also want to ensure that your interests and scope for Research Contracts are kept up-dated with your business development colleagues, who are responsible for promoting your section and the institution's capabilities to grant agencies, industry and commerce.

■ Active Profiling

A large number of Government agencies and companies (here and abroad) publish calls for research proposals and guidelines for applying to these. It is worth making sure that regular searches are carried out on the websites of those, who you believe, should have interests allied to your research field. Many of these agencies and companies will have active external sponsored research programmes and executives dedicated to external research institution liaison. Indeed many of these international agencies, especially European and US agencies, are required by their constitutions to place a certain amount of outside research on an annual basis. For example, if you go to the NASA Research Opportunities website (<http://nspires.nasaprs.com/external/>), you will find details of proposals and solicitations. Clicking on "NSPIRES help" will lead you to a reference section which provides information on proposal preparation, submission and key contacts. These are very helpful and you could then use the same process/navigation techniques/search words

for other agencies and companies. Of course, your personal contact (networking) at relevant exhibitions, conferences and so on is absolutely vital. If you are not fortunate enough to have funding for lots of opportunities of this nature or are new to networking, then see if colleagues or supervisors can help you by introducing you to contacts or taking you along to appropriate events. Who knows where that blind date might lead?

■ Maximising Your Investment

Your institution will have policies dealing with the costing and pricing of research, IP, conflicts of interest and ethical considerations. These will all be available on your intranet. Whilst your Research Office and Research Administrators will be able to advise you on all of these, it would be beneficial to you to familiarise yourself with the general issues and principles, so that you can interact more pro-actively with your potential sponsors and with your own Research Office. If there are any clinical/regulatory aspects to your research proposal, contact your authorities as soon as possible to get advice and the appropriate licences and approvals. Of course, your institution's authorised person will have to approve all terms and sign all contracts and so early engagement with your Research Administrator and Head of Department on any developing specific opportunity will help the speed and efficiency of the whole exercise.

■ Draft and Discuss Your Research Proposition(s)

Sketch out your Research Plan (work scope and project plan) and, if applying to an agency or company, closely tailor it to that organisation's expertise and facilities. A timetable, IP position and deliverables/outcomes and project management statement will be essential features that ideally should be addressed in the opening statement. This is often an iterative process with funders. Discuss the draft with colleagues and especially with successful grant and contract winners. Refine the proposal in the light of feedback. Try to use as much terminology that will be recognisable to your intended recipient or assessor as possible, rather than your more familiar academic wording. Be open to partnerships within your own institution or from elsewhere if this will complement and enhance your proposition.

■ Market your Proposition

Having identified your target(s) from your active profiling, and before sending any formal proposal, it is best to call or visit your target(s) and discuss your proposal in order to tailor it for the purpose. Meetings/phone calls with Grant Programme Managers for Research Council applications or Research Managers and Directors for industrial funders are essential if the proposal is to get funded. The proposal will probably get amended and refined many times before it is in a state ready for formal submission.

■ Some considerations when marketing

There will be a number of different things to bear in mind when approaching companies, especially their size. For example, in a small company all of the key decision making individuals are likely to work in the same building and so decisions can be shared/made quickly. The chances that the messages sent back to you are as if there is “one corporate voice” will be good. In a large company, it is probably the case that the people who need to be interested in and convinced about commissioning external contracts are geographically distant from each other and that the decision making and communication systems, are in any event, rather compartmentalised. In assessing and approving most external contract research there will be various processes involved, particularly in large companies. For example, there will be Development, Committees, Marketing Committees and Regulatory Committees, all of whom may be consulted. (This often depends upon the nature and size of the proposed contract). In-house Legal Counsel will also be players if dealing with medium or large companies. Therefore it is very important to find an “internal champion” (ideally a number of champions) for your proposal within the target/partner company, since it will face many hurdles/challenges.

Therefore think carefully about the issues that are present in the company and adapt your approach and communication to fit. Develop a headline agreement (sometimes called a Term Sheet or Letter of Intent) with the company as soon as possible to capture the essence of the relationship. Remember though that any such Headline Agreement should be specified as not being legally binding if it is not intended to be. Your proposal may be an extra claim on an internal budget or challenging a company R&D specialist or department. So the importance of being seen as a complement or partner is very important, rather than competing or raising the Not

Invented Here (NIH) spectre. Any Letters of Intent or Heads of Terms need to be signed by an authorised representative both on behalf of your institution and the company with which you are contracting. The authorised representative is likely to be a Director of a Company rather than a Manager.

■ Final steps

Do check the terms and conditions with your line manager and with your institution's relevant authorised office and ensure that it is complete and acceptable in the event that the agency/company with whom you are in contact wants to go ahead with your proposal.

What goes in the Research Contract?

■ Standard Conditions

Any research which is being funded at all by a third party involves the drawing up of a Research Contract. However, much research is supported by one of the seven Research Councils who are the main public investors, in fundamental research in the UK. Each of the Research Councils has its own standard terms and conditions which will apply when its offer of funding is accepted. These will be on its website. You should make sure that you are familiar with the conditions applicable to any grant which you have for your research. The conditions do vary from Research Council to Research Council, but the fundamental principle that these are non-negotiable is the same.

■ In Kind

Not all funding comes in cash: it may come in kind. A sponsor of research may for instance supply some facilities or equipment which can be used in the research (see Section 7 – Facilities). That should be clearly set out in the Research Plan.

■ Costing

You need to cost the research out carefully. There should be plenty of expertise in this regard in your institution. You should make sure that you are familiar with your institution's approach to research costing before you start to discuss the possible costs for a research project with a third party.

Many research institutions are charitable institutions and cannot subsidise purely commercial research. There is also a drive towards sustainability for the UK research base. This means recovering the true cost of any research undertaken. As a consequence the concept of Full Economic Costing (FEC) has been introduced. Historically, the method used to cost a research grant or contract simply identified those costs which the funder had agreed to pay. Under FEC, all costs of the proposed grant/contract must be identified; not just those the funder will actually pay for.

The full economic cost of a research project includes the Directly Incurred and Directly Allocated costs. These are items and services incurred specifically for the Project. For example, Directly Incurred costs include the staff (research assistants), travel, consumables and equipment costs required to undertake the Project. Directly Allocated costs are the costs of resources or services on a Project, where those resources are shared with other activities or projects, for example, the cost of the time which Principal Investigators (PIs) and Co-Investigators (Cols) spend on the Project, estates costs, the Project's use of research institution space (including heat, light, power, maintenance and depreciation of buildings and equipment), and Indirect costs (costs that are not related to any one project or activity but are required to maintain the research institution's infrastructure such as, secretarial and technical support, library, central administration and IT support).

For contract research you would generally expect the funder to pay the full economic cost of the research plus a profit element. For other types of contract you might take into account factors such as the closeness of the research to your normal programme of research, the possibilities of its publication and the ownership of IP.

For contracts with industry and commerce, most likely all the above would apply, plus certain taxes, such as VAT (see below). If the contract has an overseas element you also need to consider the fluctuation of exchange rates.

■ Expenses

If you have to travel, say, to go meeting with the research funder, who pays? Your Research Contract should set out whether any such expenses will be met by the funder. These expenses may be limited to specific expenses, such as travel to meetings with the funder. In those cases you may find that the types of travel, such as standard class rail or economy air fare, may be specified.

■ Payment Schedule

It is important that, having set the funding, you know when it is going to be paid (made available) and that this ties in with your own cash flow commitments for the research. If you have to pay a research assistant before you have received the money from your funder, that involves additional cost to your institution. The timetable should set out when any instalments of the funding are to be paid. If they are not paid on those dates then the funder should have to pay interest in addition to compensate your institution.

■ Cost Variation

You may cost your research meticulously, however over the period of a longer term contract things may change. The cost of research staff, for instance, may increase and this may be outside the control of you and your institution. If your Research Project requires the use of a substantial amount of titanium and the price of titanium on the world market increases substantially, then that could totally undermine your project costings. You should discuss these issues in advance with your funder to try and reach a reasonable compromise. This may be that your institution meets those costs up to a certain percentage increase e.g. 5%, and after that they are met by the third party funder.

There may come a point at which the increase is so high that both participants have to consider whether the research should continue or the contract be terminated. If the contract is terminated for any reason, remember that your institution may have certain expenses to which it has already committed at the date of termination. These need to be addressed (see Section 11 – End of the Contract).

Figure 1 – The Make-Up/Main Elements and the Cost/Price Basis of a Research Contract

Directly Incurred Costs	
<ul style="list-style-type: none"> • Researcher (full employment costs) • Post Grad Student (tuition fees) • Consumables (e.g. chemical reagents, telephone, fax, mail, copying, software and licences) • Dedicated Equipment (including PCs/laptops) • Travel/accommodation • Conferences and Meetings • Fieldwork • Trials • Recruitment 	<p>These costs are the actual costs of securing/engaging the resources to carry out the contract/grant. If the Project extends beyond one year, then inflation and salary increments should be factored into the cost.</p>
Directly Allocated Costs	
<p>Academic Direction/Supervision (PI/ Col time)</p> <p>Indirect Costs – including:</p> <ul style="list-style-type: none"> • Project and Experimental Officers • Technical Support • Secretarial Support • Central Admin • Library <p>Estates Costs</p> <ul style="list-style-type: none"> • Space Costs • Shared equipment/Use of facilities 	<p>These costs represent the allocation of these resources from the institution’s existing complement. Directly Allocated staff time is usually calculated as a percentage of the full cost – i.e. a percentage of a person’s time who will be working on the contract. Indirect and Estates Costs are normally a set rate which is calculated based on the number of FTE (full-time equivalent) staff on the Project.</p>

Premium for taking the contract (known as profit)

- Unique position
- Rare resources/skills
- Reputation

If the institution is a leader in the field or is having to decline other work to accept the contract, it can negotiate its position.

Extra/additional aspects arising from the contract (known as Recognition or Compensation Costs)

- IP (rights to)
- Publications (restrictions upon)

These are the “opportunity costs” that the institution will incur if it is not able to have any rights to IP or results arising from the contract.

■ R&D Tax Relief

Some corporate funders may be collaborating with you on the basis that they will be able to obtain tax relief and allowances for the research. R&D has a specific statutory meaning for the purpose of tax relief, which may not be the same as what you think of as R&D. They may therefore be very keen that the Project definition is worded carefully to ensure that it ties in with the statutory definition of R&D.

They may, in particular, be looking to claim R&D tax relief in relation to some of their costs of employing your institution as a sub-contractor. These reliefs can be particularly attractive for smaller companies. They will, therefore, be particularly concerned to negotiate the wording of the Research Contract to ensure that they get these reliefs.

■ VAT

Any amount paid to your institution for research (whether in cash or in kind) is likely to be subject to VAT. Your Research Contract should therefore provide that you can charge VAT in addition, where it is applicable. This is not usually a problem for your funder as they will often be registered for VAT and can in turn claim it back. If the funder of the research is another “eligible body” for VAT purposes e.g. another university or a Government department, then VAT will not be charged. You should leave it to the finance specialists in your institution to look at these issues.

■ Liability

If someone pays you to do something, they will be more concerned that you are doing it correctly than if you were doing it for free. If you do not perform properly or are late or fail to perform at all, the other party to the contract could sue for damages. They may withhold further payment under the contract and may be entitled to claw back payments already made.

To protect you and your institution, the Research Contract should also include some limitation of liability provisions. The funder may ask for warranties or indemnities. These must be reviewed by the experts in your institution so that you do not expose yourself or your institution to unnecessary liability.

It is common to highlight the novel nature of the research and to say that results cannot be guaranteed and the funder uses such results at its own risk. Liability is often tied into or limited to the amount of funding received by the institution and indirect and consequential loss is excluded.

Limiting liability is complex. There are specific legal rules relating to it. You should make sure that any such provisions are checked by someone who is expert in such rules. Changing one word can sometimes undermine the whole limitation.

Any research programme must have a clear Research Plan at the heart of it, which all participants commit to willingly. All other terms of the arrangement will flow from it, in particular those relating to the management of the Research Project. It is recognised that, as in proposals sent to Research Councils, some studies can be comparatively open-ended, and lack of detail can often be useful in shaping deliverables. However the opposite is true with applied research.

Ideally the Research Plan should be fully developed before the Research Contract is signed up. Sometimes this may not be feasible if there needs to be some collaboration to scope the research. In this case your contract may have to provide that one participant prepares a draft and submits it to the others for review and discussion. The contract can build in a system of iterations for this process for a set time until the Research Plan is either agreed and signed off or until a participant serves notice to terminate the arrangements. If the arrangements are terminated then no participant would have any further liability to any of the others, except usually in relation to confidentiality.

As the Research Plan will almost certainly have been written by somebody different from the person who has written the main legal text it is important that these documents are both looked at carefully to make sure that they do not contradict each other. It is also important that terms which are specifically defined in the main legal text are the same as those used in the Research Plan. If they are not you may find that your contract, as a whole, is ambiguous and that is when disputes can arise.

There is no set content for your Research Plan but as a minimum it should cover:



Work scope – this should be a description of the nature of the research and key obligations for each participant and the field within which the research will be carried out. The field definition can be key in the future when it comes to reviewing ownership of IP. If IP arising out of the Project is to belong to your funder then it is important to have carefully defined the limits of the Project, such as the field within which the research will be carried out.



Objectives – these should be the goals of the Research Project. How will the success of the Research Project be measured, when will the Project be completed and what is the likelihood of it being completed? Some projects build in acceptance tests which have to be met at various stages. In very early stage research this may simply be reference to a certain number of days to be spent by each collaborator or specified members of the research team on the research. For more applied research there maybe some technical goal or end product that will be the objective.



Facilities – what premises, laboratory, specialist equipment and consumables will be needed for the Research Project? Who will supply these and who will own them?



Staff – which staff will be needed, who appoints them, who employs them, have they already been identified? Will any elements of the research be subcontracted to third parties? Who will be the project managers for the respective collaborators?



Timetable – there must be some estimated timetable even if it is recognised that in the nature of research it may have to alter. How far can the timetable be allowed to slip before it is unacceptable? Will the Research Project run for a fixed term or until the objectives are achieved, perhaps with a backstop date?



Cost – there should be some forecasted costing for the Project allowing for some contingency. If part of the cost is a contribution to overheads, be specific about how this has been calculated in case figures have to be reviewed in the future, particularly over the term of a long project. Be clear about when payments will have to be made and make sure that funding for the research is timed to meet the projected cash flow.



Dissemination – how do participants anticipate disseminating the IP?

We shall look at some of these in more detail later.

However hard one tries, the Research Plan will not be perfect. As the Project progresses there may be the need for some changes to be made. Minor changes to the Project may not need the Research Plan to be changed at all and can simply be agreed between the Project Managers. However, there will be changes that will impact on the Research Plan. If the Research Plan might otherwise constrain you, it is possible to include what are known as “change control procedures” to deal with these.

Change control procedures frequently involve one or more participants making a request for a change, setting out the details of it and the impact it will have on the Research Plan, including cost and time. The other participants then have a fixed period to respond. If they accept, then the Research Plan is deemed to have been amended. If they accept that the change is required, but specify that it has different impacts on the Research Plan (whether in terms of cost or time), the initiator of the request has a set time to decide if it wants to go forward, bearing in mind the other changes. If the participants cannot agree upon changes to the Research Plan, then the agreement can either say that the Research Plan does not change or the matter could be resolved through the deadlock procedures (see Section 11 – End of the Contract).

Researchers often do not like being constrained by timetables. After all, it can be difficult to say how long a piece of research will take. You might never achieve your final objectives. This does not mean that the timetable for the Project should be ignored. In fact any funder of the Project will probably be interested in setting it out in some detail. Commencement Dates and End Dates can be crucial to deciding which IP belongs to whom (see Section 9 – Intellectual Property).

Commencement Date

Each Project should have a start date. This may simply be the date that the Research Contract is signed. Research Contracts are sometimes signed in advance of the research commencing. In that case the contract will specify a commencement date, even though the date of the contract will be the date it is actually signed.

Although it is not advisable, sometimes the research does start before the contract is signed up. You should try to avoid this if you think it could in any way leave you a hostage to fortune and in any event keep the time taken to sign brief. The other participant or participants may feel they want to renegotiate some terms and you may find that you are not in a position to say no. If, however, the research does start before the contract is signed then you should make sure that the actual date when the research started is the date set out in the contract as the commencement date. The date of the contract will be the later date when the contract is signed. Contracts must not be back-dated.

End Date

The contract should also have an end date. This may be a fixed point in time. Sometimes it is tied to the occurrence of a specific event e.g. the completion of the research. Think carefully about what will work in practice as the best date for the contract to end. This may tie into when the funding for the research runs out or the ending of a contract for any fixed term research staff. Remember that the research will probably include the writing of reports, including a final report. The contract term should therefore cover all that report writing as well. It may also be the date the contract is terminated (see Section 11 – End of the Contract).

Stages/Milestone Dates

Between the beginning and the end of the contract there will be other key dates included in the timetable. These again may be fixed points in time, such as when payment is made. Sometimes they will be key points in the Project, such as the identification of genes with particular characteristics. These stages or milestone dates may trigger payments or reviews of the Project. If the Project is not progressing as well as anticipated then there may be rights to terminate the contract or to extend the timetable. In the nature of research, unavoidable problems may arise which undermine or delay the research. The contract should include provisions which allow the participants to address the problems when they arise.

The Research Project should always have a lead investigator (Principal Investigator) but there will be many other people involved. In the case of collaborative research this may involve people from other institutions or companies. If two institutions are collaborating to deliver research to a funder then one of them will have to take the lead in terms of responsibility.

The Research Plan should set out the details of the staff required and the amounts that will be paid to fund them. Where individuals need to be brought in on fixed term contracts then you should be alert to what will happen if the Research Contract ends before that individual's fixed term contract. You may need to factor in redundancy costs for such individuals.

Intellectual Property

In the Research Contract you will no doubt be making certain statements about IP (see Section 9 – Intellectual Property). So it is important that each party to the Research Contract has appropriate contracts in place with its own research staff to ensure that it controls IP created by them. Where a member of the research staff is an employee of your institution then IP created by them will generally belong to your institution as their employer. However, some research institutions have IP policies which vary that position. You should therefore check your own IP policy and make sure that specific gaps are covered by contracts with the individual concerned.

Some members of the research staff may not in fact be employees e.g. students. Again your institution should have a contract in place to ensure that it does control the IP created by that student in the course of the Research Project. The same would apply to any sub-contract staff. This would happen where, for instance, a university is undertaking a clinical trial for a pharmaceuticals company in conjunction with an NHS Trust.

Secondment

As part of Collaborative Research Contracts it may be that some staff are seconded from one collaborator to another. The terms of that secondment should be in the Research Contract or it may be easier to deal with them in a separate Secondment Agreement. This needs to reflect some of the terms

of the employment of such an employee, such as hours of work and holidays. It also needs to deal with how the seconder will be reimbursed, if at all, for the cost of the employee, covering not just salary but matters such as tax, National Insurance and pension payments. Both parties to the Secondment Agreement need to decide how disciplinary, insurance and health and safety issues will be dealt with.

Where one collaborator is working in a field, with which it is not familiar, it may be that its staff will need some training from another participant. This may happen particularly where one participant has know-how but needs to give the other some instruction on how to use it.

Key Employees

It may be that some members of the research staff are identified as being key to the Project. This may, for instance, include the Principal Investigator. What happens if that member of staff leaves? If they were not key to the Project then it would be sufficient simply to include procedures for the recruitment of another equivalently qualified individual. The Research Contract might give the other collaborator(s) a veto over the appointment.

Where the individual is key, though, it may be that the research could not proceed without them. The other collaborator(s) may want the option to terminate the Research Contract. Alternatively, it may be that there is an option to move the Research Contract to the organisation to which the key individual has moved. This can sometimes happen where a key researcher moves from one university to another and collaborators want the Research Project to move with him or her. With academic moves there is likely to be a reasonable period of notice of the move, but there should be an obligation on the relevant employer to notify the other collaborator(s) as soon as possible of the move.

Similar principles may apply if a collaborator thinks that any of the research staff is unsuitable. You may want provisions to deal with a request for such member of staff to be removed and with the appointment of a suitable replacement.

Poaching

It is not uncommon in Research Contracts to include a provision restricting collaborators poaching other collaborators' staff who have been involved with the Research Project. Such a restriction often continues after the Research Project has been completed for about 6 to 12 months or for a similar period after that particular employee has stopped working on the Research Project.

Competing Projects

Some funders of projects will want to have a say in whether people involved with their Research Project are allowed to carry out other competing research at the same time. These sorts of restriction can be particularly difficult for research institutions. A research institution can probably never commit absolutely not to be involved in competing research; because it has so many projects going on internally, it could probably never police it.

Example

The University of Opportunity has been engaged to carry out some contract research on certain materials and their viability for use in the nuclear environment for the Japanese Nuclear Company (JNC). Professor Quark will be the Principal Investigator. JNC wants the University of Opportunity to agree not to carry out any other research in the nuclear field for any of JNC's competitors for the period of the Research Contract and for 2 years afterwards.

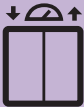


The University of Opportunity agrees that Professor Quark will not (whilst the Professor is employed by the University) carry out research on these particular materials' viability in the nuclear environment for any of JNC's competitors (who will be listed in the contract) for the period of the research under the contract.

Any such restrictions are likely to be unenforceable anyway if they extend beyond the period of research itself under the Research Contract.

Part of the contribution made to the Research Contract by a participant may be in terms of premises or equipment. As well as making that clear in the Research Contract, if such premises or equipment are to be used by anyone other than their owner then the basis of their use needs to be clearly defined.

Premises

It may be that researchers from one organisation use the laboratories of another. This should be detailed either in the Research Contract itself or in a separate document. The other participant should either be given a licence to occupy those laboratories or simply access rights. Such provisions need to be phrased carefully so as not to give any property rights away. Some issues which should be covered are:

	<p>Which parts of the premises can be used (including rights of access to communal parts).</p>
	<p>What rights people have to use telephones, computers, photocopiers and on what basis, both in relation to payment and proper use. Many organisations have internet policies or copyright policies that they will want the visitors to adhere to.</p>
	<p>Are there any health and safety rules which the visitors need to be aware of and comply with?</p>

Research collaborators may also want to have rights of access to other collaborators' premises from time to time to see how work is being carried out or to check relevant records. The Research Contract should specify the times of day that visits can occur and any notice that needs to be given. It should also be clear that any obligations of confidentiality apply to information gleaned during such visits. It may be that during any such visit the visitor must be accompanied by a representative of the owner of the premises.

Equipment

Equipment may be leased or loaned to another participant. In sponsored Research Contracts, the equipment may belong to the funder, who will loan it to the research institution. The research institution may then be allowed to buy the equipment at the end of the Research Project for a nominal or heavily depreciated sum. If so, this should be set out clearly in the contract.

The Research Contract needs to make it clear who is responsible for maintaining the equipment during the Research Contract. Where the research institution is given possession of the research equipment, it will probably say it is responsible for any damage to the equipment, except for fair wear and tear. It should therefore be clear who is responsible for insuring the equipment, for how much and against what risks. It may sometimes be easier for the research institution to take on that responsibility and include it on its general insurance policy. Whoever insures, the other participant may need to be named as having an interest on the insurance policy.

Every Project will take its own twists and turns during its course and so it needs to be monitored. For sponsored research or contract research the funder will be particularly interested to be kept abreast of what is happening under the Research Contract. For collaborative research all participants will need to keep up to speed with progress (or lack of it) so that they can work together efficiently.

Project Manager

Each participant should appoint a Project Manager to be the focal point for managing the Research Project for it. Such person must obviously be suitably qualified and experienced but need not be one of the key scientists involved in the research. In fact, where available personnel permit, it can be advantageous to have someone, who is slightly divorced from the research itself, undertaking the management.

In the Research Contract there should be some indication of the amount of time each Project Manager will commit to the Project. This may be by reference to the number of full time days or as percentage of his or her working time or by more general statements such as “such hours as are reasonably required for the purposes of the Project”. Your institution needs to be clear as to whether its Project Manager is to give this Research Project priority over his or her other work.

It should be the Project Manager’s duty to keep records of what he or she does in relation to the Project and of those things which his or her appointor does. These records should be available for other parties to the Research Contract to inspect. They will obviously provide key evidence in relation to who has done what and whether what they have done accords with their respective obligations under the Research Contract.

The Project Manager must take responsibility for the day-to-day management of the Project. They should not have the power to change the key points of the Research Plan but they should have authority to make slight changes in relation to other minor issues. This may be, for instance, taking supplies of consumables from a different supplier, where quality is not compromised. Clearly there must be some financial constraints on the Project Manager’s ability to change things, but they should have flexibility within agreed limits.

Where the Project Manager believes changes are needed but they are outside his or her level of authority, there must be a mechanism to revert back to each of the parties at a higher level. This can be done through the equivalent of an escalation procedure (see Section 11 – End of the Contract).

Project Managers should act as the conduit for information, materials and documents from their side to other participants. Project Managers should keep records of what is disclosed and what is received. This helps if, for instance, queries are raised in relation to the confidentiality obligations of or to the other participants. It can also assist in making the distinction in relation to IP which was introduced by one of the other participants and IP which was created as part of the Project (see Section 9 – Intellectual Property).

Each participant should commit not to change their Project Manager unless it is not otherwise practicable to keep the same person. Continuity will be the key to the Research Project progressing smoothly and quickly. Bringing in a new Project Manager only means that they have to get up to speed with the Project and build relationships with the other participants. Some people like to appoint a deputy Project Manager so that if they are forced to change their Project Manager they have an understudy ready to step into their shoes.

Obviously if a Project Manager is ill or leaves then the Research Contract needs to address what would happen. They will often be treated as if they were a key member of Research Staff so that their employer can nominate a stand in acceptable to the others. It is not unusual to allow the others a right of veto over the new Project Manager provided they are acting reasonably in doing so.

Reports

You will probably be obliged to keep written or electronic records of your progress on the Research Project and any results and observations (see “Intellectual Property and Confidentiality – A Researcher’s Guide”).

It is also good practice to underpin research integrity, so that you can validate the research process, if it is ever challenged.

Example

Dr Sam Williams, a research associate, was accused of falsifying data reported in a manuscript submitted to the Journal of Glucose Metabolism for publication. The research involved coronary blood flow in diabetic rats. The investigation into the matter decided that on the evidence, including the laboratory notebooks kept in relation to the research, there were errors caused by sloppiness but that there had been no scientific misconduct.

More formal reports are also likely to be required at intervals, probably tying in with formal review meetings between the participants. The Research Contract should set out the format of these and say who is responsible for producing them. They should probably include details of all discoveries, inventions and improvements made since the last report and recommendations for the future progress of the Project. If they are to be circulated in advance of meetings, then it is useful to include in the timetable the dates by which they should be circulated and who will collate and distribute them. These reports are to keep track of a Project and ensure that it remains on schedule. It means that, if it is not, action can be taken quickly to remedy the position.

A final written report is usually required within a certain period of the last milestone date of the Project. It is not unusual for some part of the funding or other payment to be withheld until such report is delivered to and, sometimes, reviewed by the funder.

As well as scheduled reporting, the participants should be obliged to notify the others if there is a problem, which means the objectives of the Research Project are unlikely to be achieved or if something occurs which will cause a material delay to the Project or significant increased costs. Similarly, if any participant becomes aware of something a third party is doing, such as another research institution, which will affect the success of the Project, they should notify the others. This may be a paper being published on research in the same area, which in fact you might even want to cross-reference.

Meetings

Whilst e-mails and telephone calls can address a lot it is always useful for parties to a Research Contract to meet to discuss how things are progressing. These meetings may be needed at various levels depending upon the nature of the Project:

- you or your institution may want to hold strategic meetings every 3 or 6 months to review progress against the Research Plan and to decide upon any changes;
- Project Managers will need to meet together more frequently, probably at least once a month;
- there may also be a call for meetings between scientists from each side to be scheduled, if you are working separately. Again, these should probably be at least once a month. As there may be some overlap of personnel with the Project Managers they may be on the same day. Even if scientists are working together constantly on the same Project, regular meetings such as these are useful, where they can step back from the Project or review it more formally.

Meetings should be scheduled in people's diaries at least 3 to 6 months ahead. Be clear about how the rolling programme of meetings will be scheduled and what the minimum period of notice for a meeting will be.

The Research Contract should cover where the meetings are to be held or how the decision will be made as to where they are to be held. It may be that the meetings will alternate between the participants' premises. They may be on neutral territory, which is easily accessible for everyone. If the research is taking place in one particular laboratory, it can be advantageous to hold meetings at the same premises. If collaborators are in different countries it may be that some or all of the meetings will be by telephone or video conference (although face to face meetings should be encouraged).

Minutes should be kept of all meetings. These may be in a brief or bullet point format for those dealing with more day-to-day matters but for the strategic meetings minutes should be more detailed. It is usual for the Project Manager to take these minutes.

Voting

From time to time key decisions will have to be taken in relation to a Project. It will always be necessary to tailor the voting on various issues to deal with the individual requirements of the collaboration. Different considerations may apply in a 50/50 collaboration where participants will have equal voting rights than where participants' contributions are unequal.

Where one participant is making a significantly greater contribution than the others, that participant may want the final say on matters to be decided, either through a casting vote or weighted voting rights e.g. where it gets two votes against the other participants' one vote. It may also sometimes say in the Research Contract that certain decisions e.g. to terminate the research, cannot be taken unless the main contributor agrees.

Particularly in the case of collaborative research, there will be certain matters which the collaborators regard as central to protecting the value of their investment. It is not uncommon to see these matters requiring consent of all collaborators, even if that can essentially give one participant a right of veto. This arises quite frequently in European Framework Consortium Agreements, where all participants often have to consent before a new collaborator can join the Research Project.

Intellectual Property is frequently at the core of many research institution's Research Contracts. IP is often one of the inputs to the research and the outputs too will inevitably comprise some IP. It is therefore important that you are clear about the status of the different types of IP and about what rights you and others have to use it.

You will hear various terminology bandied about such as background intellectual property, background information, pre-existing knowledge, existing intellectual property, foreground intellectual property, arising intellectual property, project results and knowledge. The important point to note is that, whilst you can have some familiarity with what these terms are likely to mean, you should always look at the definition given to them in the Research Contract to understand exactly what they do mean in your particular case. The same phrase e.g. background intellectual property, can vary in its meaning from contract to contract.

It is useful to divide the information and IP of the participants in the research (including that created during the research) into three categories – see Figure 2.

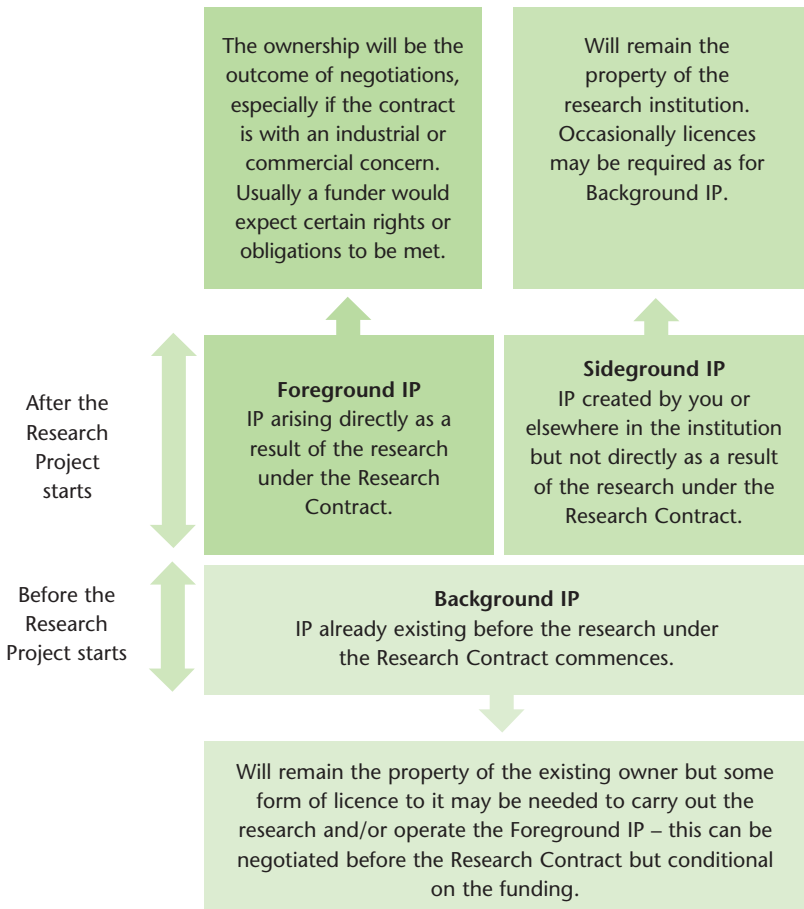
■ Background

This is information or IP which a participant has at the commencement date of the Research Project. On behalf of your institution you will have to make decisions about which of that information or IP you are going to make available for use in the Project. In the case of research institutions, it is often better if they can delineate a specific list of information or IP which they are bringing to the party. This avoids, for instance, IP created elsewhere within the institution being inadvertently drawn into a Project. Where there is IP, however, which is absolutely key to a Project, such as a specific patent or patent application, then that should be listed in the Research Contract. In the case of some Research Contracts, you may find that you have specifically to opt out certain information and IP, rather than opting in. In this Guide we call the information and IP existing at the commencement date, which is to be contributed to the Project, Background IP.

■ Foreground

Various results will come out of the work carried out under the Project. In this Guide, we call such results and the IP in them, Foreground IP. Sometimes the distinction is made between *the results* (which may comprise some information which is not proprietary) and *the IP in the results*.

Figure 2 – Intellectual Property in respect of elements of Research Contracts



■ Sideground

This is information and IP created on or after the commencement date of the contract but outside the Project. This is to ensure that, for instance, work being done elsewhere within your institution is not inadvertently swept up as Foreground IP. In this Guide, we call this Sideground IP, but frequently in contracts you will see it bundled in with the definition of Background IP.

Where you have several Research Contracts with one organisation, either running back to back or side by side, it is important that you know which IP was created under which Research Contract and therefore which category it falls into. It frequently happens that even in contracts between the same organisations that terminology is different and the rules applying to that IP will be different from contract to contract.

You will probably have various Research Contracts ongoing with different organisations. It is even more important here to be absolutely clear which IP was generated under which contract and therefore the rules which apply to it. The necessary record-keeping may seem tedious at times but it is important in the long run. You do not want to be in the middle of a fight between such organisations about who has what rights over which IP.

Ownership

You would expect a Research Contract to be clear about who owns the relevant Background IP, Sideground IP and Foreground IP. Research Contracts generally say that each participant owns its own Background IP and Sideground IP. Ownership of the Foreground IP will vary from contract to contract. In the case of contract research, for instance, it is usually the funder who will own the Foreground IP. In other cases participants frequently retain ownership of the Foreground IP which they create.

Where research is funded by UK Government funded bodies the usual approach is that the Foreground IP should be owned by the research provider. Some instances where this may not be appropriate are:

- *National Security* – the IP's sensitivity means it needs to be owned by Government and kept under tight control
- *Dissemination of Information* – IP ownership is necessary to ensure complete disclosure, where the work has particular public implications e.g. public health
- *Aggregation of Work* – it makes sense to draw IP created by the work of various parties together for better commercialisation
- *Standards or Regulatory Work* – funded work is supporting standards or regulatory responsibilities which should not be the monopoly of one supplier
- *Research Provider Resources* – the research provider has insufficient resources to commercialise effectively

In the context of collaborative Research Contracts, where the participants are working together on the research, it may be that some IP is actually created jointly. This truly has to be joint creation for it to be jointly owned IP. If, say, A writes the first paragraph of a report and B writes the second paragraph, you will not have joint IP in the report. A will own the copyright in the first paragraph and B will own the copyright in the second paragraph. They will each need rights from the other to use the paragraph written by the other.

You should always try to avoid including provisions in any agreement which say that participants will own IP jointly as it is highly problematic. Bar cases where it is genuinely unavoidable, if you can, agree that one participant will own any jointly created IP and the other will have a licence to use it so that it has the same practical rights as the owner, it will tend to simplify things slightly. However, whenever there is jointly owned IP you should always write certain provisions into your contract.

JOINT IP PROVISIONS

- **Transfer** – whether a participant can transfer its ownership of its share of the IP without the agreement of the other(s);
- **Licensing** – whether a participant can license the IP without the agreement of the other(s);
- **Registration** – how you will deal with decisions relating to the filing, registration and maintenance of any registrable IP (including payment of renewal fees);
- **Infringement** – how you will deal with any infringement claims relating to the IP.

If any Foreground IP which your research institution has created is to belong to another participant in the Research, then you might want to be able to claw back that IP if that other participant is not commercialising it or has not commercialised it within a specified period.

Licences/Access Rights

Research Contracts should set out whether the participants will have the right to see results generated by the others. These are often called 'access rights'. They do not give you the right to use those results in any way but simply a right to review them. Having reviewed them you might decide that you would like a licence to use them. Any such access rights will no doubt be governed by confidentiality provisions.

Participants may need a licence to use the Background IP of others to carry out the research. They may also need a licence to use the Background IP of others to enable them to commercialise their own Foreground IP. Where you have retained ownership of your Foreground IP it may be that the other participants are to be given a licence to use that Foreground IP.

Remember that even if it is buried in the Research Contract, the licence is still a licence and so needs to be thought about carefully. You should discuss it with your IP commercialisation organisation.

It is often difficult at the time you are entering into a Research Contract to know exactly what IP will come out of it. It is therefore even more difficult to try and envisage what the terms of any possible licence might be. You may therefore simply say in your contract that the other participants may negotiate with you for a licence at the time when they know what the Foreground IP is. If they are given such a right then their right to exercise that option to take a licence should be limited in time, otherwise you will be prevented from negotiating commercially with others.

You might in a Research Contract agree up front that the others can have a non-exclusive licence of your Foreground IP but that will mean that you will not have the right to grant anyone else an exclusive licence, which may undermine your ability to commercialise that Foreground IP in the future.

Any provision which gives the others an option to negotiate a licence with you in the future is an 'agreement to agree'. Under the law of England and Wales that is unenforceable. You will therefore often see provisions that require you to 'negotiate in good faith'. The Research Contract will sometimes set out the framework of the type of terms you would expect to see in any such licence. There may even be a right to refer any points on which you cannot agree to a third party to decide upon. None of these provisions works perfectly in all cases and people do accept that you are trying to frame the contract when you do not know exactly what the IP will be. The more blue skies the research is then the more relaxed people are likely to be about these provisions.

It may be that any ownership of Foreground IP or licence to use Foreground IP is useless on its own because the Foreground IP needs some Background IP to be able to use it. In this case it is usual to grant a non-exclusive licence of the Background IP simply for the purposes of using and commercialising the Foreground IP. It will vary from case to case as to whether a royalty is payable for such a licence, but your institution will probably want some reward. It will very much depend upon the funding which has been given to your research institution for the Research Contract by the other participant.

Third Party IP

It is a common misconception that it is alright to use the IP of a third party for research purposes without having a licence. This is not correct. Research institutions have often 'got away with it' because the owner of the IP which is being used has taken a view that the work being done is not close to the market and does not compete with it in any way. That does not take away from the fact that in using such IP your research institution and you could be infringing IP and could be taken to court.

Making a patented product or using a patented process would usually infringe the patent. It will not though if it is for experimental purposes relating to the subject matter of the invention. This means you can do all this if you are carrying out research to modify or improve the patented invention. You cannot use it for research on an unrelated subject matter without a licence.

There has been an issue as to whether trials and tests to satisfy regulatory authorities are "experimental" uses or whether they fall outside of this. Whilst not absolutely clear, in the UK the general interpretation of the law is that they would not be covered. So clinical trials do not benefit from the exemption. This is not the case in some other countries, such as Germany.

There is also an exemption where the patent is used privately and for purposes which are not commercial. Even the argument that the use is not commercial in the context of a research institution is not easy to sustain. It is difficult to say the use is private, except possibly if you do it on your own for your own use. ("Private" does not mean "secret" or "confidential".) You should generally not rely on this exemption.

There is also an "experimental purposes" exemption and an exemption for use done "privately and for purposes which are not commercial" for registered designs. Similar sorts of warnings will apply.

There are exemptions for the use of other types of IP. It is only an infringement of copyright to copy a substantial part of a copyright work. This is all about quality rather than quantity. It is not an infringement of certain copyright works to copy them for non-commercial purposes if accompanied by sufficient acknowledgement, unless it is impossible for reasons of practicality or otherwise. "Non-commercial" activities include using copyright work for private study (such as educational courses or in connection with a hobby). However it is not clear what constitutes "non-commercial" research but the clear aim of the provision is to avoid infringement of copyright for commercial gain or economic advantage. It is also fair dealing to use a copyright work for the purposes of criticism or review, but only after the work has been made available to the public and there must be sufficient acknowledgement.

Publication of research is vital to most researchers. In academia, in particular, it helps build careers and can be critical to obtaining funding for further research. Publication in peer-reviewed journals validates the research.

Full Disclosure

As a researcher you need to ensure the accuracy of the results which you publish. Negative and positive results should both be made publicly available. The Research Contract should make it clear that a collaborator cannot suppress the publication of results. You should also specify the source of any funding and the other collaborators, so that any possible conflicts of interest are made clear.

Informed Consent

If your research has involved research on individuals (or their biological material) and those individuals are potentially identifiable from your publication of the research results, then informed consent must be obtained for such publication. This procedure will have been the subject of prior review by an Ethics Committee in many cases.

Confidentiality

It may be that a Confidentiality Agreement has been entered into to enable you to discuss the possible research before the Research Contract is agreed. Make sure that the interaction between that Confidentiality Agreement and the confidentiality provisions in the Research Contract has been properly considered. You need to make sure that the information disclosed under the Confidentiality Agreement remains protected when the Research Contract has been signed.

Publication of research results can undermine the registrability of certain IP; patents and designs. So funders of research will frequently want some control over the publication of research results. If your institution is looking to commercialise the research results, it too will want some control over the publication by the other participants. It is common to find confidentiality obligations in Research Contracts. These obligations usually apply to all participants. Issues applicable to any confidentiality arrangement will apply here as well.

If your research institution is a public body it is likely to have some obligation to disseminate the results of research which it carries out. This does not necessarily have to be through formal publication in a recognised journal. If the work is that of university students then they may need to be able to disclose or to refer to their work in order to gain their degree or to get a job.

The way these conflicting interests are usually dealt with is to agree that your research funder can see what is to be published or otherwise disclosed before it is made available to others. They are then given a specified period to object to any such publication or other disclosure. Those objections can only relate to delaying publication or disclosure until a patent application has been filed or publication or disclosure for a specified longer period if the research results in question can only be protected through confidentiality as “trade secrets”.

The UKRC’s Policy on Open Access is that peer-reviewed research papers should be published in journals that, in relation to the final published version of the paper:

- provide immediate Gold access to it using the Creative Commons’ Attribution Licence, and Green access by allowing immediate deposit in repositories without restriction on re-use; or
- consent to its deposit in any repository (without restriction on non-commercial re-use) within 6 months of on-line publication in STEM disciplines and within 12 months of on-line publication in arts, humanities and social sciences.

(see “Academic Materials and Publishing – A Researcher’s Guide”)

Where the disclosure is for the purpose of examination or assessment of a student then the Research Contract will usually permit such disclosure as long as the person to whom the disclosure is made (usually an external examiner) is subject to appropriate obligations of confidentiality. It is usually agreed that any student thesis containing confidential information will be retained in the university’s library in the “restricted access” section where those having access will be subject to appropriate obligations of confidentiality.

If you publish research results in a journal or similar, the publisher of the journal will want you to enter into a contract with them. This contract may transfer all IP in the article to the publisher or license that IP to the publisher. Be careful. Any such contract needs to exclude IP set out in the article which is part of the research results, such as diagrams, photographs or questionnaires, so that all the publisher has is a non-exclusive licence for the purposes only of publishing the article itself. Those items should be marked as having been reproduced “by permission of” your institution.

Freedom of Information

The Freedom of Information Act 2000 applies to “public authorities”, which includes universities receiving public funds and the Research Councils. This Act can require the disclosure of research results by your institution. The results are generally exempt from disclosure in the following situations:

- they are intended for future publication
- disclosure would be likely to prejudice commercial interests
- they are personal data
- they were provided in confidence to your institution.

Your institution may still have a duty to release the results where the public interest in disclosing it outweighs the public interest in maintaining the exemption in question. Even research which is undertaken on a contract basis, though covered by confidentiality clauses, is unlikely to attract exemption permanently, except to the extent that the research results amount to “trade secrets”.

Consultancy

To the extent that the research results comprise know how, it may be that the other participant(s) need assistance from you or your co-researchers to be able to understand or to use the know how as part of a licensing arrangement. It may be that this assistance from you could be supplied on a consultancy basis.

Disputes/Deadlock

While no collaborator wants to anticipate conflicts or termination of a collaboration before it is created, these provisions can be extremely important in safeguarding your institution's and your interests. It can be useful to have mechanisms in the Research Contract for settling disputes or to avoid deadlocks which can cause the alliance to break down. This is your pre-nuptial agreement.

What happens if you cannot agree with your collaborators? Deadlock can arise either in a 50/50 collaboration where the collaborators take opposing views or where a collaborator has exercised a right of veto.

How should you cater for such a deadlock or any other type of dispute? There is no easy solution. There is a number of ways of approaching this situation; all relatively unattractive from a commercial perspective:

Dealing with Deadlock

Casting vote Giving a collaborator a casting vote will unlock deadlock but it will do so by giving one collaborator an advantage which negates the concept of joint control and is, therefore, not usually acceptable. One possible way to mitigate this effect in a 50/50 collaboration is for the casting vote to be on a rotating basis between the collaborators, but that can just delay the exercise of the advantage.

Arbitration/Expert Referring matters in dispute to an agreed expert or arbitrator will unlock deadlock. The expert or arbitrator may be appointed by agreement of the parties or by an independent body, such as the President of the Institute of Arbitrators. Leaving matters to be decided by third parties in this way is usually inappropriate for strategic decisions. The arbitrator will generally not have sufficient knowledge of your operation and it will only be a short term solution which is unlikely to resolve more basic differences in approach between the collaborators. It may work well for technical issues e.g. whether to patent.

Cooling off period – the collaborators, usually in the form of the Project Managers, having recognised and failed to reach agreement on a deadlock matter are obliged to recognise it as such and then meet again a number of days later to see if their views have changed upon reflection.

Escalation – the same process applies but rather than the Project Managers meeting again the question is referred through a hierarchy of higher and higher officers within each of the collaborators where a different or less emotive perspective may apply. Sometimes Project Managers are embarrassed if matters have to be referred to their superiors and so this can focus attention on finding a solution.

All these mechanisms are generally artificial and mechanistic. Whilst they may be useful as a means of encouraging the participants to consider matters in a more sensible light the escalation route is probably the most sensible option.

Dispute mechanisms are sometimes left silent. This is on the basis that the threat of going to court with the costs and expense of litigation is quite a powerful driver to “bang heads together” to resolve matters.

The ultimate and final deadlock/dispute resolution is through the exit of one or more collaborators or through termination of the Research Contract.

Exit/Termination

An important consideration when establishing a collaboration is in fact when and how it is intended it will come to an end. One important consideration is whether the research collaboration can only exist because of the expertise or assets of those particular participants.

Each collaboration will have a natural lifespan. In the case of specific project collaborations this may be as simple as stating that once the specific research has been completed, the Research Agreement will end. For more complex projects where they do not have a single specific and time-limited goal the situation is rather more complex and there are several outcomes which may have to be taken into account. It is important to remember that the Project is not just the research itself but also the writing up of any reports, possibly the dissemination of results, and the making of any final payments: any period in the Research Contract needs to make this clear.

There may come a point in the Project where any collaborator can withdraw by serving notice on the others. Whether this should end the whole Project will vary from case to case. You also need to consider how long a period of notice is appropriate to wind down the Project or find a substitute collaborator.

The position is complex as the situation can arise not only at a future date, when the Project is considered to have achieved its long term objectives, but also at any point during its term if circumstances arise which may trigger termination.

Possible Triggers for Termination

	insolvency of a participant.
	change of control of a participant – no collaborator wants to find that their co-collaborator has been taken over by their competitor and that they are tied into continuing research with them.
	material breach of the Research Contract – it can be worth specifying any known events that would be a material breach for the sake of clarity, such as failing to obtain patient consent for clinical research.
	your collaborator challenging the validity of your IP – having had the opportunity to test out IP during the Project some collaborators do start to look at ways to use it at lesser cost.
	departure of a key member of the research staff.

Simply suing for damages for breach however can sometimes be a more effective remedy as at least the Project can continue, which may be feasible if the collaborator in breach is merely a funder of the research.

Linked Agreements

If there are linked agreements, such as secondment agreements, these will need to be terminable at the same time as the main Research Contract.

Consequences

Whether the Research Contract runs its natural course or terminates early there are certain consequences of the contract coming to an end, which will need to be considered. They will vary slightly depending upon the reason for the contract coming to an end.

If the contract does not run its full course you will need to provide for the supply of final reports post-termination. There may also need to be some payment of expenses to which your institution has committed (such as staff contracts) which cannot be terminated immediately.

If a collaborator is removed or withdraws you will need provisions to appoint substitute collaborators. These provisions will be similar to those for replacing key individuals within the research team. Often all collaborators need to approve any new or replacement collaborator.

It will be important to preserve the confidentiality of certain information after the end of the contract and this should be specified. It may extend to the destruction, deletion or return of assets, documents and information to their owners.

Some of the licences to use IP may need to continue beyond the end of the contract. These can be certain licences to use Background IP and any licences of Foreground IP. In addition collaborators may need to be granted ongoing access rights to results and other information. This will apply in particular where a collaborator is removed or withdraws but their IP is still needed to complete the Project.

If the contract is terminated because of the “default” of one collaborator there may be rights included for the “non-defaulting” collaborator(s) either to buy out the Project assets from the defaulting collaborator, which may just be IP, at a preferential price or alternatively having the right to require the defaulting collaborator to buy the non-defaulting collaborators’ Project assets at a full and fair value. Clearly these rights need to be granted at the option of the non-defaulting collaborator(s) if they are to be meaningful.

There has been a lot of debate in recent years about research integrity and how to prevent misconduct. This will all be entwined with your own institution's policy or policies on conflicts of interest and ethics. The UK Research Integrity Office is an advisory body which helps to direct researchers, organisations and the public to regulatory bodies when where no overall regulation applies. It publishes various documents including a Code of Practice for Research, which contains a Recommended Checklist for Researchers, a one-page, non-technical checklist for the key points of good practice in research.. It also has a free of charge advisory service. The NHS has its own Research Governance Framework for instance. In the USA they have the Office of Research Integrity, part of the US Department of Health and Human Services.

Any research misconduct strikes at the heart of what a research institution is all about and undermines the public confidence in research and researchers. Some research funders insist on research institutions having a policy in place to cover these issues before funding is granted. Research misconduct may sometimes constitute a criminal offence e.g. conspiracy to defraud.

Some areas of research have particular legislation which will apply specifically to them such as genetic modification, research on human tissue, experimentation using animals. You may have to have licences or follow certain protocols. As a researcher you must ensure that you are familiar with any of these which is applicable to you and that you and also your colleagues are complying.

You should consider whether your research gives rise to any conflicts of interest. Might the interests of the funder conflict with the interests of your institution. This might be because the funder supports policies that your institution would not condone. It may be because the funder would want to control publication of results if they were adverse to its interests.

The majority of a university's or PSRE's research should further the institution's objectives and not simply be undertaken because of the cash rewards that come with it.

You may have interests in one or more commercial entities, such as a spin-out company. If you, or people whom you supervise, are involved in research for such commercial entities you need to be sure that your institution has properly authorised and sanctioned that research and that the commercial entity is paying an appropriate amount for it. If, say, a student is involved in research then it should be appropriate to their education and not just be being done because of your personal financial interest in that research. Delegation of your supervisory responsibilities can also give rise to problems.

Research integrity is clearly an important issue to be taken seriously in all your contractual and supervisory relationships.

Department for Business, Innovation and Skills (www.bis.gov.uk)

Department of Health (www.dh.gov.uk)

UK Research Integrity Office (www.ukrio.org)

Office of Research Integrity (www.ori.dhhs.gov)

Partnerships for Research and Innovation: a guide to better practice;
in association with Auril, DTI, EPSRC, HEFCE and Universities UK
(www.tsoshop.co.uk)

Lambert Model Agreements (www.ipo.gov.uk/whyuse/research/lambert.htm)

TRAC (Transparent Approach to Costing) Guidance
(www.jcpsg.ac.uk/guidance)

Committee on Publication Ethics (<http://publicationethics.org>)

Web Resources on Publication and Research Ethics (www.wame.org)

Research Contracts Checklist

TYPES	Types of Research	<ul style="list-style-type: none">■ Identify the type of research by reference to the agenda, funding and use/ownership of results■ Use the Lambert Decision Guide to help with the answer■ Are there public funder terms/conditions?
FUNDING	Finding and Winning Financial Support	<ul style="list-style-type: none">■ Network through conferences■ Register your CV on your institution's sponsored programme database■ Search relevant websites for research proposals■ Be aware of your institution's policy issues and any special regulations■ Sketch out and tailor your research plan in accessible language■ Consider the target sponsor's issues and adapt accordingly
	Contract Issues	<ul style="list-style-type: none">■ Be familiar with grant terms and conditions■ Identify funding in cash and in kind■ Know how research is costed■ Which expenses are to be met?■ Tie up the payment schedule with cash flow■ Agree contingency plans for variations■ Is the sponsor claiming R&D tax relief?■ Check if VAT is chargeable■ Limit your liabilities
RESEARCH PLAN	Research Plan	<ul style="list-style-type: none">■ Develop Research Plan before contract is signed■ Make sure the contract terms and Research Plan do not contradict■ Cover work scope, objectives, resources, timetable, cost and dissemination■ Plan for possible changes■ Agree dates for the start and end of Project (include report writing)■ Set up milestone dates to measure key points

RESOURCES	People & Facilities	<ul style="list-style-type: none"> ■ Have IP contracts for non-employees ■ Have contracts to cover any secondments ■ Identify key people and implications if they leave ■ Review any no staff poaching terms ■ Review restrictions on competing research ■ Identify the premises and other facilities needed ■ Is equipment owned, leased or loaned? ■ Check insurance is in place
MONITORING	Project Management	<ul style="list-style-type: none"> ■ Appoint a Project Manager as focal point ■ Establish Project Manager's role and responsibilities ■ Keep written records of progress on research ■ Prepare interim and final reports ■ Have regular face to face meetings
RESULTS	IP/Results	<ul style="list-style-type: none"> ■ Identify IP you bring to the Project ■ Identify the results from the Project ■ Be clear where ownership of IP lies ■ Avoid joint ownership ■ Who has access rights? ■ Are licences being granted? ■ Consider clawback for uncommercialised IP ■ Are licences of others' IP needed?
DISSEMINATION	Publication	<ul style="list-style-type: none"> ■ Do not suppress results ■ Obtain all necessary consents ■ Balance confidentiality and publishing ■ Be aware of statutory obligations to disclose information ■ Is consultancy needed to transfer know-how?
END	Disputes/Exit	<ul style="list-style-type: none"> ■ How deadlock/disputes will be dealt with? ■ What might trigger termination? ■ Do linked agreements need to end? ■ Specify the consequences of termination
INTEGRITY	Research Integrity	<ul style="list-style-type: none"> ■ Be familiar with regulatory framework ■ Disclose and clear conflicts ■ Does the research further institution's objectives?

