

Intellectual Property & Confidentiality

A Researcher's Guide



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Introduction

This Guide is intended to act as a reference for use from time to time during your academic/research life. Its aim is to provide an overview of the key issues relating to Intellectual Property (IP) which are likely to arise during your academic/research career. It explains:

- The nature of IP, how you may create it, and how to protect it;
- How to use IP belonging to others safely;
- How IP can be commercialised; and
- The importance of confidentiality.

Your university, NHS Trust or other research institution and/or its IP commercialisation organisation (or equivalent) will be able to advise you on these topics and this Guide will act as a prompt for you in these relationships.

Remember that this is just a guide and does not cover every aspect of IP nor cover any aspect in great detail nor is it a substitute for you taking your own independent professional advice. It has also to be read in the context of your own institution's published guiding principles, mission and policy.

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Introduction (The Basics)

Intellectual Property (IP) refers to assets which are the ‘property of the mind’, e.g. a story, an image or invention.

When a creation of the mind is produced in a tangible form, say an artistic or literary work, like a script, painting or blueprint, then various IP legal rights (IPRs) are available to prevent others using or copying that IP for defined periods so that you can safely market and trade your text, picture or process. These IPRs attach themselves to your IP.

Reference to IP normally means IP and IPRs therein and those involved in these intellectual products are variously referred to as Creators or Originators or Inventors.

Some IP is automatic (e.g. copyright) but others require registration (e.g. patents). IP can be split into main categories as illustrated in Figure 1 on the next page.

In summary, ‘**intellectual**’ because it is creative, ‘**property**’ because it is an asset which can be transacted like any possession and ‘**rights**’ because recourse to the legal system is possible.

Confidentiality is about the protection of information.

A variety of information is very important to any business or institution. For example, employment details, operational performance data and customer target lists. Much of it will not be generally known and handled privately.

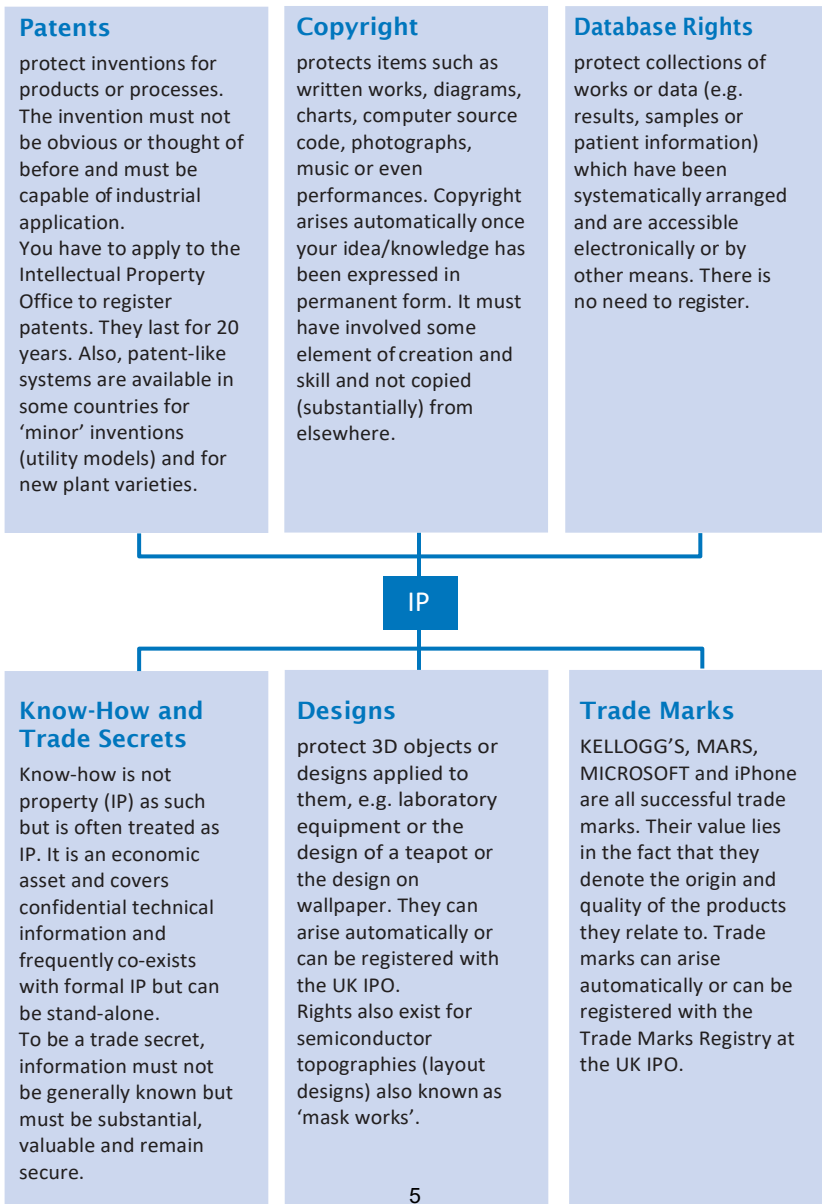
A special type of information is know-how. Know-how is the set of secret, technical knowledge and activities resulting from experience and testing which usually provides competitive advantage and is not readily explained or copied. It is often seen as a way of doing things. Certain types of important know-how will be the most applicable form of information relevant to you in your research role and will require careful handling.

Some know-how will be so advantageous, detailed and sensitive it could be considered a trade secret and afforded special legal protection. A trade secret can be viewed as a particular class of valuable (confidential) information, such as a chemical formulation, which is intended to be kept secret and known by only a few trusted employees.

Know-how and trade secrets are akin to property in certain respects and so, whilst they are not universally defined as IP, it is not inappropriate to include them as an aspect of IP.

The best way to protect any precious information is to mark it as confidential, limit access to it and, prior to sharing it with others, put in place a written agreement to restrict its circulation or prohibit further disclosure.

Figure 1



And in a little more detail...

Patents

Patents protect inventions which relate to a product and/or a process to make a product. They arise particularly from research & development in the medical, science, technology and engineering fields.

Once a patent has been granted, it effectively offers the owner a 'monopoly' right. This means that only the owner, or someone else with the owner's consent, can use the invention for commercial purposes. An invention will be patentable if: (1) it has not been disclosed publicly anywhere in the world prior to filing the patent application; (2) it is inventive; and (3) it is capable of industrial application, (essentially any commercial, medical or other practical use). Say you have thought of an invention for a new type of tea bag which can be used 50 times without losing any flavour! Useful! If you haven't mentioned it to anyone, it hasn't been done before and clearly it's practical, then a patent sounds possible.

Additionally, some countries have patent-like systems for 'minor' inventions (called utility models), giving protection for up to c10 years; and protection for new plant varieties themselves (known as plant variety rights or plant breeders' rights or plant variety certificates) providing cover for 20-25 years.

If you think your invention is potentially patentable it is essential that the details of the invention are kept secret until the application for the protection is made. Disclosure of the key features of the invention before that will make your application invalid and so may be refused or be open to challenge in the future if granted.

Methods of disclosure may include publishing details of the invention:

- in a journal, book, poster or other publication
- via a website other electronic means
- in an oral presentation
- to someone who is not an employee of your organisation, such as a student, or who is not bound by confidentiality to keep such information secret or any demonstration or promotion in a public place.

Intellectual Property Section 1

Q: How do I know if my invention is already in the public domain?

A: A previous disclosure can include anything from a published patent, document, information contained in a book, article, journal, TV documentary, demonstration or even just common practice. Whilst you cannot expect to find everything, a good starting point is to see if there are any existing patents which relate to your invention. It is easier than ever to find patent information as the format of patents has become increasingly standardised and there are many user-friendly websites that you can search.

If the patent/patent application of interest is published in a foreign language it is possible to check via the Internet or other patent databases to see if an equivalent document has been published in English in another country such as the UK, Europe, USA, Canada or Australia, or as a Patent Cooperation Treaty (PCT) application for example – this is often called “patent equivalent” searching.

If the patent/patent application of interest has only been published in a foreign language, you can either get a machine translation of the text into English, a formal translation of the relevant part of the patent or obtain an English abstract of the patent.

It is a good idea to carry out a patent search before you start a project in order to try and ensure that your idea has not been disclosed in the general or patent literature.

If you are not experienced in patent searching you can obtain advice and assistance from the range of Patent Libraries located throughout the United Kingdom. There is also a wealth of information on-line. Both the UK Intellectual Property Office and the US Patent and Trade Mark Office have on-line services (www.ipo.gov.uk and www.uspto.gov). You can connect directly to esp@cenet giving access to details of many patents worldwide (<http://gb.espacenet.com>) or try Google (www.patents.google.com).

Alternatively, there are firms and consultants based throughout the UK which specialise in patent searching and related services. Most firms of Patent Agents will offer 30-60 minutes of consultation free of charge. If you think you need this help, contact your IP commercialisation organisation for further help.

Patenting Process and Indicative Costs

To obtain patent protection for your invention you will need a patent specification to be written. This describes your invention. This should ideally be carried out by a qualified Patent Attorney to make sure good patent protection is obtained. The specification will describe the invention and define the desired monopoly (in the form of claims). It will usually be initially filed at the UK Intellectual Property Office.

Although the cost of a UK patent application is fewer than £100, the Patent Attorney's time, effort and skill in drafting the patent specification and formulating the claims has to be paid for too. This can typically cost anything from around about £3,000 to £5,000 + depending on the complexity of the technology, the length of the patent specification and the number of claims filed.

This initial patent filing will only provide protection in the UK. To obtain patent protection abroad you will need to file corresponding patent applications to cover all countries that are of commercial importance to you.

A filing through the PCT route, a year after your UK filing, can delay the possibility of filing abroad in most countries at a total cost of around £5,000.

There will be other costs along the patent journey, before the patent is granted (or reduced in scope or rejected) which depend on such things as objections or international searching and translations.

When the PCT stage ends, choosing in which countries to file your patent, known as the National Entry Phase, the cost will depend on each country. For worldwide protection (the major international markets), it is likely to cost some £25,000 – £30,000.

There are then annual maintenance costs to pay (which continue to be due until the expiry of the patent).

So, for patent cover in, say, major European countries, the USA and China, the cost, which will have been defrayed over the first 5+ years from your initial filing, is likely to be in the region of £40,000 - £60,000.

Know-How and Trade Secrets

R&D projects and course-work can result in extremely valuable technical information being created. The only way you can really protect your valuable information (if it isn't patented) is through confidentiality.

Know-how is a package of useful, non-patented, practical and secret technical information, resulting from experience.

If information is significant, very sensitive, can be described in detail, has commercial value, isn't generally known and reasonable steps are taken to ensure secrecy, then a trade secret can be asserted without an independent evaluation or registration process and has an infinite lifespan.

Trade Secrets can be used, for example, if a business doesn't want to go through the patenting process, because that involves openly disclosing the details of the invention.

Copyright

Have you ever written a thesis or article, written up an experiment, drawn a diagram or even recorded a presentation you have given on a digital file? All can be protected by copyright.

There is also copyright in music, broadcasts, sound recordings, computer software, artistic works including photographs, films and typographical arrangements of published editions. Copyright does not generally protect against 3D reproduction of items from industrial drawings or plans (e.g. models created from blueprints). They are instead protected by design rights or as registered designs (see Designs section on page 11).

Copyright protects the form in which you express your idea but not the idea itself. For instance, the copyright in the written words of a thesis may belong to one person but the patent over the invention described in the thesis may belong to someone else.

Unlike a patent, there is no need to register copyright in the UK; it arises automatically. All that is required is mainly that the work must be original, i.e. not copied from another source.

There are different periods for copyright, depending on the type of work, e.g. for a written article, copyright would last for the life of the writer plus 70 years.

Q: If I write up an experiment, does the fact that the written piece of work is protected by copyright prevent anyone from using the results or other information contained in it?

A: No. Copyright only protects the manner in which you have expressed yourself i.e. the text, style and layout of the written document. It does not protect your ideas, results or conclusions. Whilst another person would be prevented from copying your write-up word for word or in a manner which was substantially similar to yours, they would not be prevented from using the results or other information. This can instead be protected as confidential information (see Know-How section on page 9) but you need to keep the written work secret.

Q: I have been recently asked by a publisher to waive my moral rights in an article I have written. What does this mean?

A: Moral Rights are personal rights which belong to the author of a piece of work. They are nothing to do with what is right or wrong! Moral Rights include the right of an author to be identified as such. This right has to be specifically asserted to be effective i.e. just write on the work: "Joe Bloggs has asserted his right, under the Copyright, Designs and Patents Act 1988, to be identified as the author of this work."

Other moral rights include the right to object to derogatory treatment of copyright work and the right not to have the work of somebody else falsely attributed to you. These do not have to be asserted. Moral Rights do not exist in computer software or are limited in any work created by an employee. Whilst Moral Rights cannot be transferred, they can be waived. However, there is no reason why you should automatically agree to waive yours. Always check with your supervisor or relevant institution representative.

Q: I have recently compiled a database which holds the location reference numbers for all the cytology samples I have used over the past 6 months. Is this protected by copyright?

A: Yes, if it involved skill in creating it. It may also be protected separately by “Database Right” (see Database Rights section on page 12).

Designs

Designs of or on 3-D objects can be protected by design rights which arise automatically or they can be registered. There are different types – UK registered and unregistered designs, and Community registered and unregistered designs. Community registered and unregistered designs offer protection throughout the EU, not just the UK. Each type is a little different in the criteria required for protection and the level of protection available. A few examples are set out below:

UK Unregistered Design Rights can arise automatically in all or just parts of a design. The design must not have been copied from another source and it must not be commonplace in the relevant design field. For example, a design for some scissors, unless very unusually designed, would likely be commonplace in the field of cutting equipment. There are exceptions; a UK unregistered design right will not protect any kinds of surface decoration (e.g. an engraved design on the scissors). Nor will it protect any design which is dictated by the way it has been made and any design which has been created to fit around or inside another object (e.g. a plug and socket) or to match with another object (e.g. a door panel of a car). Protection of semiconductor topographies is a form of unregistered design right in the UK. UK unregistered design rights will last for the longer of 10 years from when the object was first marketed or 15 years from the date of the actual design document.



UK Registered Designs can be registered with the Design Registry at the UK Intellectual Property Office. The registration process is not as expensive and does not take as long as for patents. UK registered designs can be used to protect more of the design than would be capable of UK unregistered design right protection. Surface decoration e.g. any etching, engraving or decoration on the scissors, can also be protected.

To be registrable, the design must not have been previously disclosed to the public (unless during a 12 month 'grace period' immediately before the application for the design registration). The design must also have 'individual character'. This means that the design must not produce any notion of 'déjà vu'. Designs which are dictated solely by their function e.g. indentations on a plastic container to help with grip, will not be registrable. UK registered designs can last for 25 years.

Community Registered Designs follow much the same criteria as for UK registered designs. They will also last for up to 25 years.

Community Unregistered Design Rights arise automatically in the same way as UK unregistered design rights. However, they are slightly different. Community unregistered design rights only last for 3 years. The same criteria are applied as for UK and community registered designs i.e. the design must not have been previously disclosed and must have individual character. Surface decoration can also be protected.

Database Rights

Database Right protects a collection of independent works, data or other materials which have been systematically or methodically arranged. They must also be accessible by electronic or other means. This obviously covers electronic databases, but could in theory cover biological materials collections, for instance.

Like copyright, there is no need to register, however, the protection only lasts for 15 years from when the database was compiled.

Trade Marks

It is difficult to avoid trade marks in day to day life. PEPSI, EASYJET, SHELL, GUINNESS, iPhone, SELFRIDGES, Mini are all examples. Trade marks denote the origin and the quality of the products they relate to. A well-known trade mark is often the most identifiable element of a successful product or service. They will often make a customer prefer one product over another. Selecting the trade mark can therefore be crucial and so protection of it is fundamental. The most successful brands are often those that are completely distinctive, e.g. Coca-Cola.

Trade marks can be registered in the UK and/or throughout the EU and/or in other countries/regions. They can also arise automatically if a mark has been used and has consequently built a reputation. Unregistered trade marks are, however, more difficult to enforce. If you can, it is always better to register.

A registered trade mark needs to be able to distinguish the goods or services of one person from those of another. It must be:

- distinctive, e.g. “MARS” for chocolate bars;
- it must not be descriptive of the goods or services to which it is applied, such as ‘BOOTS’ for shoes; and
- it must not be deceptive or contrary to public morality.

Objections can be raised to a proposed trade mark, by the owner of an existing identical or similar trade mark registered for identical or similar goods or services. Trade marks are registered in different classes, which broadly distinguish different types of goods or services. Once registered protection will initially last for 10 years, following which it can be renewed every 10 years.

Set out below is a summary of the types of IPRs which might typically arise in or be affected by activities within a university or other type of research institution:

Activity	Patents	Know-How	Copyright	Design Rights	Database Rights	Trade Marks
Research Information – preparing and collating results/methods		✓	✓		✓	
Publishing or presenting research, academic or technical papers	✓	✓	✓	✓	✓	✓
Using others' research papers or publications		✓	✓		✓	
Market analysis		✓	✓		✓	✓
Industrial design projects	✓	✓	✓	✓		
Contract research	✓	✓	✓	✓	✓	
Consultancy projects	✓	✓	✓	✓	✓	✓
Receiving important confidential information		✓				
Giving out important confidential information	✓	✓				
Using computer software	✓	✓	✓			✓
Developing computer software	✓	✓	✓			✓
Preparing lecture notes		✓	✓			
Responding to technical queries		✓				

Will I own the IP I create?

Whilst there is a number of situations in which you will either create or contribute to the creation of IP, you may not necessarily own the IP in question.

General Position

As a general rule, an originator usually owns any resultant IP from their work, unless:

- the IP was made in the course of their employment;
- there is an agreement to the contrary;
- any other exception applies (e.g. material use of their institution's facilities).

University employees will usually include academic staff, technicians, research staff, support staff and administrators. The position of Visiting Professors or Honorary Appointments can sometimes be unclear unless detailed arrangements are in place. If you are working within an NHS Trust, it may not always be clear whether a nurse or doctor who creates IP has done so in the course of their employment, particularly if their main role is that of a patient carer. In certain instances, particularly within NHS Trusts, an individual may be a part-time employee or jointly appointed with an external organisation. It is becoming increasingly common for NHS employment contracts to refer specifically to IP. Often people involved may have other activities or be part-time.

If you are a student, you will not normally be classed as an employee unless, in addition to you being registered as a student, you also have a contract of employment with your university/institution e.g. as a research assistant. You will however have a student contract to which you should refer.

Always check in what capacity you and your collaborators are engaged in any project with respect to IP.

IP Policies

Universities or other research institutions have IP policies which are tailored to their particular missions. They may also have different approaches with different types of IP. For example, a university may claim ownership of patentable inventions but not of copyright in certain scholarly materials.

Take time to familiarise yourself with your university/institution IP policy. Your university's Registrar or Trust Manager or equivalent will have copies or it may be on your organisation's intranet.

Originators and Contributors

It is essential in IP law to be certain who was the actual creator of the IP. The person(s) who have made the creative leap are the originator(s). Different specific terms are used for the originator(s) of different types of IP. For instance, in the case of patents they are “inventor(s)” and in the case of literary copyright works they are “author(s)”.

Other individuals may have worked with the originator(s) to develop the original idea or work, but if they have not created anything new in IP terms, then they are not originator(s) but simply contributor(s).

Why is it important to distinguish between originator(s) and contributor(s)? Well, for instance, in the case of patents, only the originator(s) of the invention are named as inventors on the patent. Any reward sharing, from successful business applications of the IP under an IP policy, is often only applicable to the originator(s) and not to the contributor(s), though originators can arrange to share any financial benefits they receive with collaborators.

Collaborative/Funded Work

If you are working with or for an industrial sponsor or a different university/institution, check the terms of the funding arrangements e.g. of the grant, the contract or the collaboration agreement. This is likely to specify who will own the IP created.

Group Work

Consider whether you have produced work on your own or whether anyone else has been involved in its creation. It can be more difficult to establish ownership if a number of other staff/students has been involved in the same project.

If you write a paper in conjunction with at least one other author, copyright in that paper will be jointly owned, if your contribution is not distinct. Similarly, if you develop a patentable invention jointly within a research team, that invention may also be jointly owned. You will almost certainly need to obtain the consent of any joint owners if you intend to do anything with that IP.

Consider individuals who may have created IP from another research institution or any other external organisation. IP contributed may either be owned by the individual or that individual's research institution or connected organisation. Check any other university/institution IP policies. Consider any individuals who may have created IP but then left your team to go elsewhere. They may have taken IP with them if it belonged to them.

Consultants

Consider whether any external consultants have contributed to the development of the materials. Consultants are not classed as employees. IP created by a consultant is likely to be owned by that consultant even if they have been paid to do the work, unless stated otherwise in the individual consultancy agreement. This is particularly relevant in any NHS Trust environment. A Trust may often appoint medical clinicians. The clinician may not be an employee of the Trust and therefore IP may belong to the clinician or their employer.

Why don't I own the IP which I create?

At the start of a project you may be asked to sign an acknowledgement which states that any IP you may create during the project shall be owned by your university/institution. This, and any other situations, where your university/institution may claim ownership to the IP, is done for a reason. If an invention is made which is capable of commercialisation, it is very unlikely that either you created the invention alone or you would have the funding or resources to patent the invention and take it through to commercialisation (see Section 6 – Commercialisation). IP commercialisation and similar organisations are there to help with this role. If all the IP is in one place, it makes it a lot easier to file applications and deal commercially with the invention. Universities, in particular, will often operate some form of policy so that you can share in the rewards of the commercialisation. Contact your IP commercialisation organisation for further details.





This table summarises some of the different factors which may be used to determine who owns the IP.

Are you a member of staff?	Are you a student?	What type of IP have you created?	How and with whom did you create the IP?	Where did you create the IP?
Academic staff? Academic-related staff? Non-academic staff? Research staff? Patient carer? Jointly appointed?	Undergraduate? Postgraduate? Employed? Sponsored?	Copyright materials, e.g. teaching materials, articles or source code? Inventions?	Created on your own? With a group? With your supervisor? With external funding? Open licence or with an external party?	At a previous employer's? Using your employer's facilities e.g. laboratory equipment, computers?

What can I do to help protect any IP which I create?

Patents

Some practical tips to help protect your inventions, including how to register a patent are set out below:

Practical tips	
	If you come up with a new invention, is it patentable (see Section 1)? Consider whether your invention has been previously disclosed – e.g. look at existing patents, key word searches. Use the internet, in particular esp@cenet.
	<p>Keep both originals and copies of all notes, reports, drawings, lab books etc. relating to the invention in a secure place. You should try to record as much detail as possible. Ensure all originals and copies are dated and are sufficiently detailed (and clear!) to identify the invention and how it works. Get your supervisor to sign and date laboratory notebooks on a regular basis.</p> <p>Keep the invention confidential (see Section 4 for practical tips on confidentiality). If you need to disclose any information, you should first speak to your supervisor.</p>
	If, having done your initial searches/investigations you still think your idea is patentable, let your supervisor know and contact your IP commercialisation organisation to set up a meeting.
	If it is decided to go ahead, a patent application can be drawn up, usually with the help of a patent agent, and filed at the UK IPO. Once filed, you can indicate on any relevant marketing literature, publications or products “Patent applied for, No. [NUMBER]”. Do not do this before you have filed, as it is illegal to do so.



The UK IPO will perform a preliminary examination and search of the application to ensure the invention is new. The Intellectual Property Office would then send out a detailed search report and the application will be filed. However a full examination is then required during which the Intellectual Property Office will decide whether the application can be granted. This is a long, painstaking process which can take 2 to 3 years (longer if you extend to cover countries beyond the UK).



Patent granted. You can use “Patent granted, No: [NUMBER] [2020] [UK]” on any relevant literature, publications or products.

Copyright

There are no special formalities required to protect copyright work in the UK. This is not always the case in other countries. The good thing about copyright is that it arises automatically and it is free! However, as there is no register to refer to, this sometimes makes it difficult to prove ownership. Some practical tips to help overcome this and protect copyright are set out below:

Practical tips



Keep all originals of your copyright work such as notes, drafts, sketches, drawings, videos etc. in a secure place.



Record the date you created the copyright work: a good way to do this is put the work in an envelope, post it to yourself or somebody independent, such as a solicitor, and leave the envelope unopened. The postal stamp can be used to demonstrate the date before which it had been created.



Place a copyright notice (for example, ©J.Bloggs 2020 or ©University of Knowledge 2020) on the piece of work which will act as a useful reminder to anyone using the work that copyright exists and that action may be taken.







Try inserting some irrelevant but intentional mistakes or anomalies in your work (e.g. a repeated line of source code, or an unusual spelling mistake). This can be a good way of illustrating that someone has copied your work if their work also includes the same mistake or anomaly. Use watermarks.



Protection of work on the internet is more tricky as it is extremely difficult to police the internet effectively. Therefore, don't publish anything on the internet that you or your university/institution would not wish to be copied. Perhaps just publish excerpts, and leave people to come back to you for the main work.






Designs

Some practical tips to help protect your designs are set out below:

Practical tips	
	Keep all originals of your design drawings, sketches, samples, models and prototypes.
	Keep all these materials in a secure location.
	Record all dates of creation and the dates when you may have disclosed the design, e.g. at a trade fair or in any publication.
	Contact your supervisor and/or IP commercialisation organisation who can help decide what type of protection is suitable and whether or not to apply for registration.




Database Rights

Some practical tips to help protect your database rights are set out below:

Practical tips	
	Keep all your notes, records of telephone conversations and meetings, e-mails, contact details and other correspondence which you used to collect and compile the information contained in your database.
	Keep all your working drafts and original copies of your database in a secure place. If stored electronically ensure it is password protected.
	<p>Record the date when you created the final database: again, a good way to do this is to put the work in an envelope unopened.</p> <p>Alternatively, if stored electronically, e-mail the database to yourself or somebody independent, such as a solicitor. The postal stamp or the date of the e-mail can be used to demonstrate the date before which it was created.</p>
	Place a copyright notice (for example, © J Bloggs 2020 or © University of Knowledge 2020) at the bottom of the database.
	Insert some intentional but irrelevant mistakes or anomalies in the database.

Trade Marks

Some practical tips to help protect your trade marks are set out below:

Practical tips	
	Consider in which countries you would want to protect your trade mark – i.e. where would the products or services be sold or used?
	Have a look on the Trade Marks section of the UK IPO website (www.ipo.gov.uk). Click on 'Trademarks' and then 'Online TM Services' then 'Find Trade Marks' then 'By mark text or image'. You can then have a look to see if there are any similar or identical trade marks already registered.
	The same website contains details on how to register a trade mark. Contact your IP commercialisation organisation – they may be able to put you in contact with a Trade Mark Agent to help with the process.
TM	Use the TM symbol when your trade mark is unregistered.
	Use the ® symbol when the trade mark is registered. DO NOT do this before it is registered. It can be a criminal offence to do so!

Could your work or other information or results be useful to someone else if they ever got hold of it? Could any of your work be potentially patentable or registrable as a design? If the answer to any of these questions is yes, it is important to consider confidentiality. Confidentiality is the best way to protect your information and know-how.

The ‘someone else’ could be an individual from a company, a member of another research group or someone from another institution or even a friend or relative. The information may include chemical formulae, information from laboratory notebooks, experimental techniques, information concerning the programming of equipment or source code. It may be personal or commercially sensitive information such as customer lists or results from market research. These are just a few examples.

It does not matter how informal a conversation or meeting may seem. You must always consider the nature of the information you are disclosing and whether, in the circumstances, it is appropriate to disclose. Let’s look at a few examples.

James has developed the source code for a new computer program. If someone else is able to access the source code they may well be able to write a program to undertake the same task but using different code. This could then be used or developed further into a product which could be extremely lucrative. The source code is therefore highly-confidential information and would need to be protected from disclosure.

Mary has invented, in conjunction with her team, a novel technique for protein analysis. This invention is potentially patentable. One of the criteria for the grant of a patent is that the invention must be new and must not have been previously disclosed to the public. If any information relating to the invention is disclosed before filing a patent application, this would completely stop a patent from being granted in most countries.

Janice has been working on a summer project. The project has been funded by an industrial sponsor – Inventive Concepts plc. At the beginning of the project Janice was asked to sign an acknowledgement to say that she understood and agreed to comply with the terms of the R&D Agreement between the university and Inventive Concepts plc. She signed. One of the terms contained in the R&D Agreement stated that any information generated during the project must be kept strictly confidential and not disclosed to anyone else who was not directly involved in the project. Janice must therefore keep the relevant information confidential.

Chris has a consultancy contract with Security Finance Limited relating to work on cryptography. The consultancy contract contains a confidentiality clause. Chris needs to be careful not to disclose any of the confidential information which Security Finance Limited supplies, when carrying out other work.

Alex has been able to read a thesis from Alex's university which is subject to restricted access because of a confidentiality agreement with Future Research Ltd. Alex wants to use some of the information from it as part of some other research. If Alex wants to publish the results of the new research and this includes information from the restricted access thesis, Alex will need consent from Future Research Ltd. If Alex quotes from the thesis, consent from the owner of the copyright in the thesis may also be needed.

Undoubtedly, there will be situations where disclosure cannot be avoided. In these circumstances you will want to ensure that the person to whom you disclose the information not only keeps it secret but also does not use it improperly. If you show someone confidential information for one project, your agreement should stop them using the information for another project.

To whom can I disclose information?

At law employees have duties of confidentiality to their employer. If you are an employee it is therefore not a problem as such to share your employer's confidential information with colleagues who are employed by the same employer. Remember – students, visiting academics, secondees and consultants will not necessarily be employees. Accordingly, if confidential information is to be disclosed to any of them it is always better to try and have a form of written confidentiality agreement in place. In the case of students, this may form part of their student contract.

What should I do to protect the information?

You may have heard references made to a 'CDA' or 'NDA'. These are abbreviations for "Confidential Disclosure Agreement" or "Non-Disclosure Agreement". If you have to disclose important information always try and put a written agreement of confidentiality in place. The best thing to do is contact your Research Office or IP commercialisation organisation or your supervisor who will no doubt have a sample confidentiality agreement for you to use and will be able to help with putting it in place. Remember you are probably not authorised to sign a confidentiality agreement for your institution.

These agreements are all to be taken very seriously. Any information and discussion covered by them must be treated in confidence and not disclosed to anyone else, except as set out in the agreement. If there is any breach of any agreement, the other party may be entitled to seek financial and other compensation (damages) not only from your employer but possibly from you personally. This is obviously a very serious matter. In an environment like a university or NHS Trust it is difficult to supervise closely compliance with all the agreements that have been signed. There is also, of course, a natural desire to publish and discuss work openly, which may on occasions give rise to individuals not realising the importance or the extent of any agreements that have already been signed. Extra care therefore needs to be taken.

Can I present at a conference?

If you disclose the key information about your invention or design whether at a conference or elsewhere, it can stop you getting IP protection. You may, however, be able to make some general statements without disclosing your invention. Discuss this in advance with your IP commercialisation organisation.

So, if you are about to publish at a conference or elsewhere, speak to your IP commercialisation organisation as early as possible. They will look to file an application for a patent before publication, if the subject material has good business prospects.

You can publish openly once a patent application has been filed. However, there can be some advantage in waiting a little longer before publishing, in case any claims of your patent are not accepted when they are examined as part of the patent registration process. These rejected aspects of your application would then only ever be protected by confidentiality.

What else can I do to protect the information?

Practical tips



Consider whether confidential or sensitive information is accessible by other students or staff. Be careful about leaving information visible on desk tops. If necessary keep information in locked cabinets or use password security for electronic storage.



Keep a record of what has been disclosed during any meeting/conversation. If a batch of information is to be passed over, create a list of the information and, if possible, get the recipient to sign the list by way of acknowledgement.



Create some minutes or written record of conversations. This does not have to be overly formal. Something in bullet point form will suffice. A copy of this record can then be sent to the recipient.

**Top
Secret!**

If information is confidential then it never does any harm to mark it as such. It has the additional benefit of putting the recipient on notice of the confidentiality of the information and hopefully reminding them to treat it carefully. Don't be afraid to tell the recipient you expect them to treat it carefully.



Never disclose more information than is necessary. If an individual or company has refused to enter into a CDA, instead of disclosing specific details relating to an invention – just refer to the advantages the invention would offer the recipient. Whet their appetite. Hopefully they will then become interested to find out more and enter into a CDA.

Confidentiality Checklist

- With whom am I meeting or speaking?
- Are they members of my team, my research organisation or employed by my employer?
- What information am I sharing?
- Is this information sensitive or otherwise valuable – could it be misused by the recipient?
- Is this information potentially patentable or registrable as a design?
- Am I or is my employer under any obligation of confidentiality not to disclose this information?
- Have I asked the other person to sign a CDA?
- Have I marked any of the information as “Confidential” or “Trade Secret”?
- Have I taken notes of the meeting/conversation from which it can be seen what I have disclosed and what has been said?

Remember – if in doubt, always speak to your supervisor, authoriser or IP commercialisation organisation.

Q: When should I be careful when using IP belonging to others? A: Always!

In the previous sections we have concentrated on what IP is and when and how you are likely to create it. Don't forget that other people, including fellow academics or colleagues you may be working with, may also have IP. Others' IP can be extremely useful, but you must bear in mind what you can and cannot do with it.

Let's take patents and copyright as an example. If you make a product or use a process which has been patented by another person or company, you may infringe the patent rights of that other person or company. Similarly, if you copy or share by copying, e.g. online, or adapt a piece of work which is protected by copyright of another person or company, you may infringe that person's or company's copyright. This is very serious because, if you are infringing, the owner of the IP may get an injunction to stop you using the IP anymore and/or may sue you and/or your employer for damages.

There are, however, exceptions, which may allow you to do limited things without infringing the rights of the owner. Examples are set out below:

Patents: *Permitted Actions*

You can make a patented product or use a patented process for research purposes providing it is a research area on the subject matter or the patent. This means you can also do this to modify or improve the invention to which the patent relates.

You should and can use patents as a source of information. Much of the information in patents is never published anywhere else and will often contain sufficient detail in the text and illustrations so that you, as experts, can understand how to recreate the invention.

You may want to look through the patents simply for inspiration to prevent you starting to do research on something that has already been done. You can search to see what other research has been carried on in the same sort of field as yours and in addition what progress has been made, on which you might be able to build.

Always check whether the patent in question has been allowed to lapse. In this case you can use the invention freely.

Patents: *Not Permitted Actions*

You cannot make a patented product or use a patented process for any commercial purpose unless you have the consent to do so from the owner of the patent, nor can you do so for research purposes if the research area does not relate to the subject matter of the patent.

If you are in any way unsure whether the work you are involved in may infringe an existing patent, have a look on the Intellectual Property Office website to see if there appear to be any related patents in existence or have a word with your supervisor who may be able to look into obtaining more detailed searches for you.

Copyright

It is only an infringement of copyright to copy, exhibit or use a piece of work without the consent of the owner of the copyright. If you are photocopying or digitising a journal article or book chapter, it is possible that your university/institution may already have obtained the consent from the copyright owner through its subscription to a blanket licence through the Copyright Licensing Agency (CLA) or perhaps another collecting society. This is also common practice within libraries. Have a look to see if there are any notices next to the photocopier relating to this. If you are unsure, contact either the university librarian or your relevant CLA representative for copyright clearance.

In certain cases you can copy copyrighted work. Usually it cannot be a substantial part though. Be careful with this – there are no hard and fast rules on how much constitutes a substantial part. Substantial is about the quality (importance) of the part copied, not the quantity. There are also allowances for use of limited sections of work where they are being copied for the purposes of instruction within a university. Again, have a look to see if there are any notices next to the photocopier which may contain some guidelines.

You can also use a piece of a copyright work for non-commercial purposes if you are using it for research or private study or for the purposes of criticism and review. You must clearly acknowledge any reference to the work in question.

Copyright

Whilst there are other situations in which it may be possible to use a copyright work without infringement, these are more limited in use and practical application. If you are unsure, it is always best to contact your library (or other relevant representative) for further guidance.

Unless you have obtained the copyright owner's consent or your use falls into any of the categories above, you risk infringing copyright if you copy the work or permit another person to copy the work.

It is important to remember that in any single web page there can be dozens of different copyrights. If you want to print out a web page, or copy and paste anything from a web page the same rules will apply. Check the copyright notice on the web page, it may be that the copyright owner has already offered consent. If the copying is not specifically covered in the page's own notice then you should obtain specific permission – this can be done by e-mail. If in doubt, always refer to your internet policy information or contact your relevant representative.

Q: I was recently provided with a number of tissue samples from an outside company for my project. I also received a document referred to as an 'MTA' with the samples. What should I do?

A: MTAs are Materials Transfer Agreements. This agreement is likely to contain a number of restrictions on what you can and cannot do with the samples, how you must deal with the results and whether, for example, you must return any back to the company. It is important to read through the terms carefully and speak to your supervisor and/or your IP commercialisation organisation. They will let you know whether it is appropriate and who is authorised to sign it. You must remember that when any kind of materials are provided to you it is possible they may contain confidential information or they may even be protected by a patent. By using materials which are protected by a patent in a manner which the owner has not permitted you may risk infringement. Some MTAs may even try to take ownership of IP created by you.

What is commercialisation? Commercialisation is where property is used or disposed of in return for payment, whether in cash, in kind or in any other form.

In the same way as a house can be bought and sold, IP can also be sold or transferred to another owner. This is referred to as an **assignment**.

IP can also be **licensed**. This is similar to a 'lease' of a flat. The IP owner permits someone else (the "Licensee") to use the IP (or part of it) for a specified purpose in return for payment. If the IP has been used to make a particular product, payment will often be made in the form of a "royalty". The royalty may be a percentage cut of the price the product has been sold for by the Licensee.

The table below illustrates some main points to remember:

<p>An assignment transfers ownership.</p> <p>Once assigned, the original owner will lose their rights to the IP. If the original owner continues to use the IP after assignment, they may risk infringing the rights of the new owner.</p> <p>You can assign ownership of part of copyright e.g. English language rights.</p>	<p>The owner of the IP remains the same.</p> <p>The licence can be limited in time.</p> <p>The licence can also be limited in scope:</p> <p>An Exclusive licence means that the owner can only permit one licensee to use the IP and cannot license that same IP to anyone else nor use the IP itself.</p> <p>A Sole licence means the same as an Exclusive licence except that the owner of the IP can use the IP itself.</p> <p>A Non-Exclusive licence means that the owner of the IP can license to more than one licensee.</p> <p>The manner in which the IP should be used and the field/research area in which it can be used can be defined and limited.</p>

Here are some examples of when a licence or an assignment of IP may be involved:

- writing an article for a publisher.
- franchising out a set of teaching materials for use by another university or company.
- permitting another to use equipment or a specific technique you have developed.
- permitting another access to your results and other data for the purposes of further development/experimentation.
- permitting another to incorporate a product you have developed into another product

Check that any material used via an 'open licence' complies with any terms and conditions of that licence, for example any obligations and restrictions.

If IP has been developed with a lot of potential for commercialisation, it may be appropriate to transfer the IP into a separate company which is dedicated to its commercialisation. These are commonly referred to as 'spin-out companies' (or occasionally 'spin-offs' or 'start-ups').

Your IP commercialisation organisation is experienced in identifying and putting in place appropriate arrangements and agreements. They have many contacts and access to professional support. It is not always straightforward and there are many things to consider. If you think you have IP which can be commercialised or you are approached by any outside organisation, you should first contact your supervisor and/or your relevant IP commercialisation organisation to discuss the options.

Case Study

Arnold has just been contacted by an editor from Semi-Conductors Monthly asking whether he would write an article on his conclusions from a project he has recently been involved in with his supervisor. Arnold is asked to sign an agreement before writing the article. Arnold notices one clause which states “I hereby assign all intellectual property rights in or relating to the Article”. What should Arnold do?

First Arnold should speak with his supervisor.

Arnold and his supervisor should consider whether there are any results, conclusions or other information which could be patentable or valuable to readers for use or further development. Disclosure and publication would prevent any patent being granted.

Once Arnold has written the article, provided it is Arnold’s own work, Arnold will be the author of the copyright in the written article. Arnold should also consider his moral rights in connection with the article (see Section 1). However, Arnold will not necessarily own the copyright in the article and should check whether he or his university/institution is the owner, referring to any relevant IP Policy and the IP commercialisation organisation. It may be that his university/institution has to sign the agreement rather than Arnold.

Check if an assignment to Semi-Conductors Monthly could be avoided. A licence should be sufficient for Semi-Conductors Monthly to use the article for the purposes of publishing it in a specific edition. An assignment of all intellectual property rights in or relating to the article would mean that Semi-Conductors Monthly would become the owner of the copyright in the article and the university/institution or Arnold would be unable to reproduce the Article again, even internally, without asking for consent and possibly having to pay a licence fee.

- Your Library Information Service (for literature and patent database searches)
- Your employer's intranet for its IP and various related policies as well as priorities and guidance notes regarding working with other organisations, agencies and companies
- Higher Education Funding Councils for good practice IP reports and guidance on relevant issues (www.hefce.ac.uk) (www.sfc.ac.uk) (www.hefcw.ac.uk)
- Your Research Office and IP commercialisation organisation
- UK Intellectual Property Office website (www.ipo.gov.uk)
- Esp@cenet Patent website (<http://gb.espacenet.com>)
- European Patent Office website (www.epo.org)
- European IP Helpdesk(www.ipr-helpdesk.org)
- Community Trade Mark Searches
(www.oami.europa.eu/CTMOnline/RequestManager/en-SearchBasic_NoReg)
- US Patent and Trademark Office (www.uspto.gov)
- UK Company Searches (www.companies-house.gov.uk)

IP and Confidentiality Checklist

TYPES OF INTELLECTUAL PROPERTY	Copyright	<ul style="list-style-type: none"> • Protects items such as writing, music, and software • Protects the expression of an idea, not the idea itself • Protects original work • Arises automatically without registration • Duration mainly life of creator +70 years
	Patents	<ul style="list-style-type: none"> • Protects inventions • Needs registering • Must be new, inventive and capable of industrial application • Don't disclose pre-application • Duration 20 years
	UK Unregistered Design Right	<ul style="list-style-type: none"> • Designs must be original and not commonplace • Not protected if surface decoration, dictated by the way it's made, made to fit/match another object • Arises automatically without registration • Duration 10 years from first marketing/15 years from date of design document
	UK/Community Registered Designs	<ul style="list-style-type: none"> • Design has individual character • Not protected if dictated by function • Don't disclose more than 12 months pre-application • Duration 25 years
	Community Unregistered Design Right	<ul style="list-style-type: none"> • Criteria same as for registered design • Arises automatically without registration • Duration 3 years
	Database Rights	<ul style="list-style-type: none"> • Protects collection of independent works, data or other materials arranged systematically or methodically arranged • Arises automatically without registration • Duration 15 years
	Trade Marks	<ul style="list-style-type: none"> • Denote origin and quality of goods • Not descriptive/must be distinctive • Not identical or similar to an existing mark for similar or identical goods • Duration 10 years (renewable)

OWNERSHIP	Ownership	<ul style="list-style-type: none"> • IP is generally owned by its creator • Employer usually owns IP created by an employee • Consultants generally own the IP they create • Student IP depends on the student contract • Ownership can be varied by contract • IP created jointly may be owned jointly • Commissioned designs are owned by commissioner
	Copyright/Designs/Database Rights	<ul style="list-style-type: none"> • Keep originals of works in a secure place • Record all dates of creation • Place a copyright notice on each copyright work • Insert irrelevant but intentional mistakes or anomalies in your work • Don't publish on the internet what you don't want copied
PROTECTION	Patents	<ul style="list-style-type: none"> • Check if your invention is new • Keep lab notebooks (signed and dated) and other notes secure • Keep invention confidential until filing at least
	Trade Marks	<ul style="list-style-type: none"> • Use the ™ symbol for unregistered trade mark • Use the ® symbol for registered trade mark • Set up a watching service
	Trade Secrets, Confidential Information, Know-how	<ul style="list-style-type: none"> • Use written confidentiality agreements • File an application before publishing • Lock information away • Keep notes of meetings • Mark information as confidential • Disclose as little as is possible
USING IP	Using Others' IP	<ul style="list-style-type: none"> • Can be a source of information • Has the period/benefit of protection expired? • Do you have a licence? • One item can comprise more than one IP right • Does an exception apply? • Are you copying a substantial (qualitative) part? • Have you given appropriate acknowledgement?
COMMERCIALISATION	Commercialisation IP	<ul style="list-style-type: none"> • IP is used or disposed of for payment • IP can be bought and sold (assigned) • IP can be licensed (like a lease) • Assignment transfers IP ownership; with licensing IP owner remains the same • Once assigned, original owner loses all rights in IP • Copyright can be assigned in part • Licensing allows someone to use IP, often for a royalty payment • Licence can be limited in length, scope and use