



WARWICK
THE UNIVERSITY OF WARWICK

INNOVATIONS

Innovation @ The Junction

IPR and how not to disclose

Dr Shum Prakash MBA

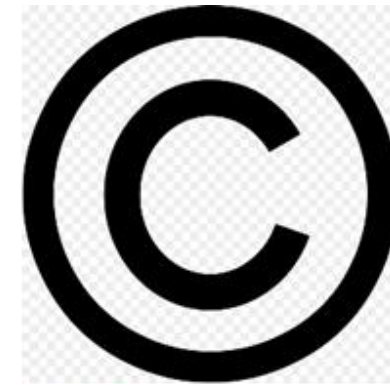
*Business Development Manager,
Warwick Innovations*

Thursday 23 May 2024



If you have an idea - where to start?

- ▶ Talk to Warwick Innovations, the Technology Transfer Office
- ▶ Have you disclosed it?
- ▶ What is unique about the technology?
- ▶ Do we own it?
- ▶ Can we protect what is unique?



IP: a definition

“Intellectual property (IP) refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce.”

World Intellectual Property Organisation (WIPO)

Who owns IP?



Who owns IP from University research?

- The University claims ownership of IP if created
 - By University employees
 - By students participating in research or research-based courses
 - By third parties acting on behalf of the University
 - With University resources
- The University's ownership and ability to commercialise depends on the Collaboration/funding contract.
- Researchers complete and sign a '**Record of Invention**' and a '**Statement of Invention & Division of Proceeds**' form - list of all inventors/ creators/ contributors
- For promising opportunities, the University funds IP protection, proof of concept and provides Warwick Innovations' services to commercialise
- Any proceeds are split between inventors and the University according to [Regulation 28, FP13- Exploitation of IP](#)

IP Protection?



Many forms of IP rights

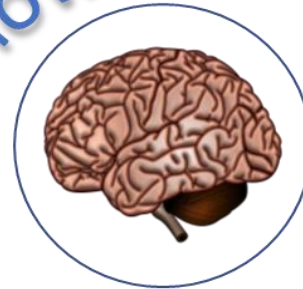
Patents



Copyright



Knowhow



Trademarks



Design right



Plant breeders' right



Database right



Why are IP Rights useful?

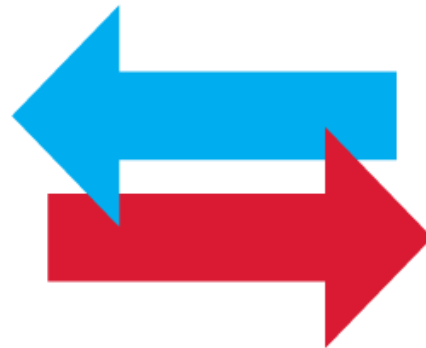
1.

Legally establish the creator and owner



2.

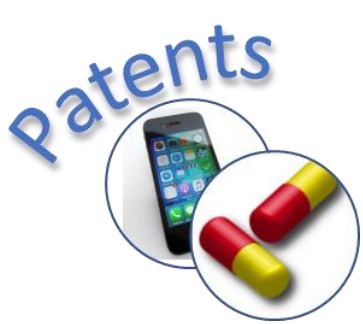
They can be traded
(buy, sell, license,
mortgage...)



3.

Defendable
competitive
advantage





What can be patented? (Europe)

*“...patents shall be granted for **any inventions** which are susceptible of **industrial application**, which are **new** and which involve an **inventive step**.”*

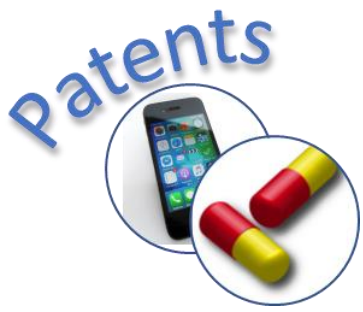
European Patent Office (EPO)

New or Novel:

- Not disclosed publicly, anywhere in the world before the filing date
- “State of the art”: everything available to the public before filing date (priority date)

Inventive Step:

- Has to be non-obvious to someone ‘skilled in the art’
- Beware of hindsight analysis



What is a patent?

- Up to 20 years' exclusivity to commercialise
- Keep the idea secret until the patent application has been filed
- Keep the idea documented with data ('**Record of Invention**' signed document is used to report inventions to Warwick Innovations)
- Speak with Warwick Innovations. We'll help to frame the invention
- Publicly disclose **AFTER** the patent has been filed





Keeping your idea confidential

Confidential

- Keep secret
- Do not publish
- Speak to WI
- Use CDAs



Patent Application

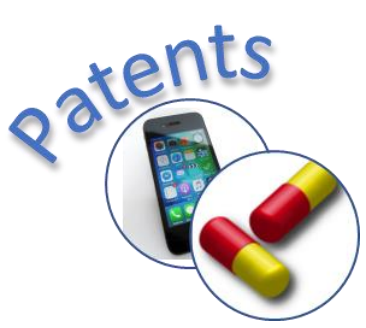
- 20 years' exclusivity
- Europe is 'first to file'



Publication

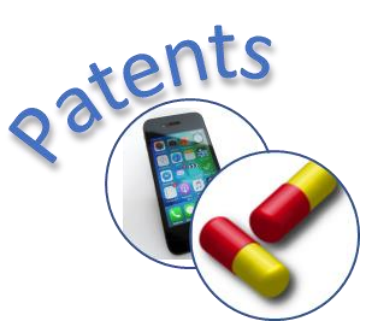
- Patent application published at 18 months
- Journals/ Conferences





What is NOT patentable? (Europe)

- Methods of medical treatment
- Presentation of information
- Discoveries, scientific theories, mathematical models
- Business models
- Software (except where technical effect)
- Plant and animal varieties or any essential biological processes for the production of animals and plants (excluding microbiological processes)
- Technologies contrary to national security



Granted patents ≠ Freedom to Operate

Patents are a negative right



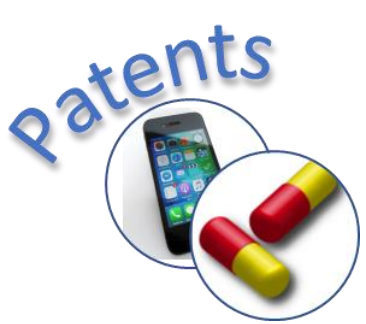
US Patent No. 293545 “Fountain Pen.”

“a writing device capable of containing ink and applying said ink to a substrate”



US Patent No. 2390636 “Writing Instrument.”

“a pen with a spheroidal marking point capable of revolving in all directions for applying ink”



Know your IP landscape

- Consider prior art – what has been done before?
- Do you have freedom to operate - does someone else have protected IP you are infringing?
- Do you have any IP obstacles in the way?
- What are the industry IP trends?
- Who is generating the IP? Identify companies and other universities working in the area



Public patent database, use **Espacenet** advanced search
<https://worldwide.espacenet.com/advancedSearch?locale=en> EP





Process for obtaining a patent

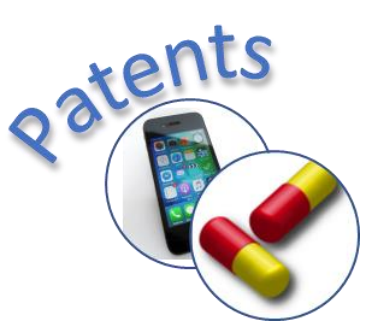
Day 1 – File GB application (Priority date) **£4-6k**

12 months – File international PCT application **£5-7k**

18 months – Publication **< £0.5k**

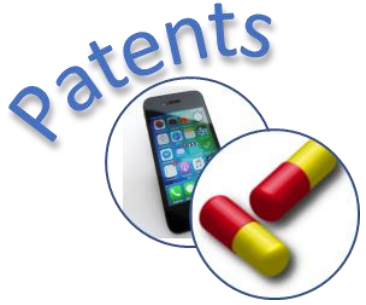
**** 30 months **** – File national application in every country where you need protection: Develop; Manufacture; Export; Sell. **£3-8k per territory**

Approx 4 - 6 years – patent granted (if the examinations with each national patent office are successful). **£3-5k per Office Action /Grant per territory**



“To patent or not to patent...?”

- Is it less than 10 years from market?
- Is it possible for other companies to reverse engineer it?
- Is the invention detectable and embedded in the product itself or is it part of an internal manufacturing process?
- Is the invention likely to be independently discovered in the near future?
- Will the invention be useful beyond 20 years?
- Is the product lifecycle so short that it will be obsolete before the patent can earn its money back?
- Would a trade secret, copyright, another type of IP, be preferable?



Patent inventorship

- Legal responsibility is to list ALL the inventors on a patent application
- Those that have contributed to the claims of the patent application
- Not an inventor - those exercising a skill, but are not making an inventive contribution i.e. doing something as part of their normal work, have been given explicit instruction e.g. technicians
- The list of inventors can be different to the list of contributors in the '**Statement of Invention & Division of Proceeds**' document



Knowhow & Trade Secret “confidential information”

- Specialist knowledge can be valuable... especially if:
 - The knowledge is not widely known (e.g. confidential information)
 - It solves a big problem for somebody
 - It would take a long time to recreate/ discover the knowledge independently
 - The knowledge is needed urgently
- **Know-how** – knowledge acquired through experience of how to perform an action
 - Tacit knowledge, tips & tricks
- **Trade secrets** - protects technical know-how
 - Manufacturing methods, commercial plans etc.

**TRADE
SECRET**

Copyright

Right for commercial exploitation of "a work"

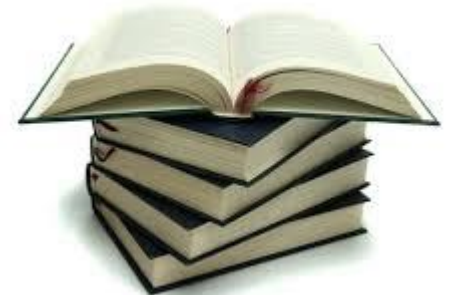
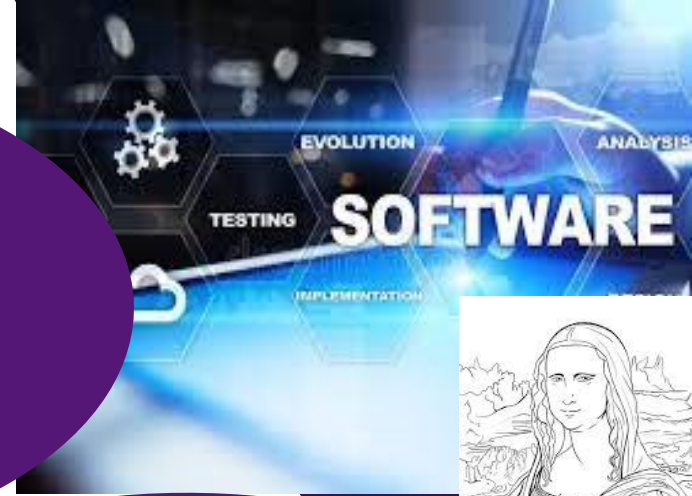
Protects the literal expression, not the idea itself

© symbol, the name of the copyright owner and the year of publication (not essential)



Internationally recognised. Generally, lasts 70 years after author's death

Automatic, comes into existence the moment a work is created





Copyright ownership

- Confers exclusive right to exploit the work (e.g. sell, reproduce, give permission for others to use...)
- Moral rights
- Performance rights
- Copyright is owned by the creator UNLESS...
 - Created during the course of employment (owned by employer)
 - *** There is a signed contract in place that says otherwise ***

How not to disclose?



What is a disclosure?

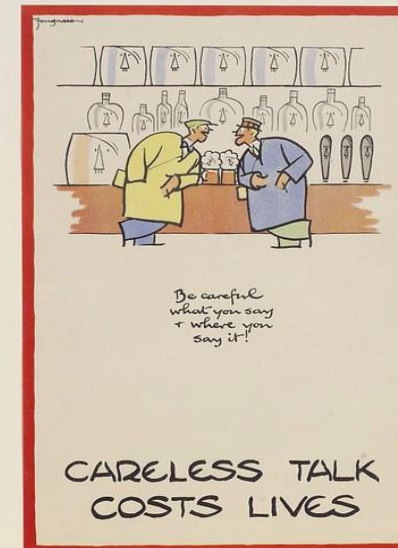
- Abstracts – often distributed before the conference
- Online and journal publications, poster /oral presentations at conferences and Q&A, and PhD theses, poster display on the corridor outside your laboratory, photos, hardware on show
- Teaching materials/lectures
- Winning a grant – title and grant abstract
- Oral and casual disclosure – discussions with collaborators, potential investors, licensing partners, third parties, general public e.g. pubs, cafés, bus, hotel lobby
- Press releases, social media, tweets...



INNOVATIONS



PATENTS



Internal meetings

- Internal lab meetings are okay to disclose confidential information

But..

- internal department seminars, exhibitions, poster displays?
- discussion around coffee machine?

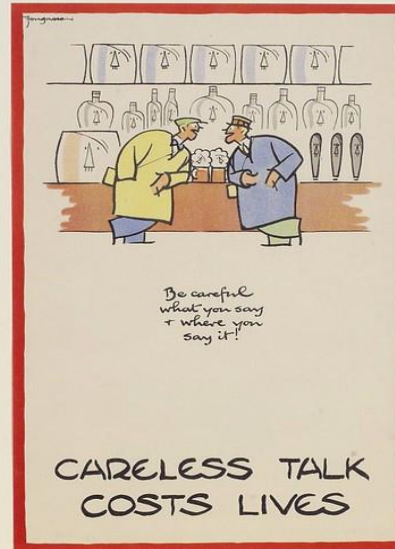
Provided that...

- There are no externals e.g. sponsors, collaborators
- They know NOT to pass the information on. Mark or say it is confidential.

If a secret is known by many others active in that technical field, it may not be considered a secret at all!



PATENTS



Consider your journal publications

- Journal articles submissions
 - May be confidential prior to publication
 - Early online publication?
 - Early publication of abstract?
- Avoid premature disclosure! Your own work is often cited as prior art
- Beware of making comments relating to the future direction of your work; often written in the 'last paragraph' of publications
 - Comments about crystal-ball gazing could make a future patent application obvious (non-inventive).
 - Need to explain to patent examiners why it is not a straightforward step



Beware of writing about future directions

[Clin Exp Immunol](#). 2007 Jan; 147(1): 1–10.

doi: [10.1111/j.1365-2249.2006.03234.x](https://doi.org/10.1111/j.1365-2249.2006.03234.x)

PMCID: PMC1810455

PMID: [17177957](https://pubmed.ncbi.nlm.nih.gov/17177957/)

Crystal-ball gazing – the future of immunological research viewed from the cutting edge

[L Brent](#),* [I R Cohen](#),† [P C Doherty](#),‡ [M Feldmann](#),§ [P Matzinger](#), For the Ghost Lab,^{¶,1} [S T Holgate](#),** [P Lachmann](#),††
[N A Mitchison](#),‡‡ [G Nossal](#),§§ [N R Rose](#),¶¶ and [R Zinkernagel](#)***

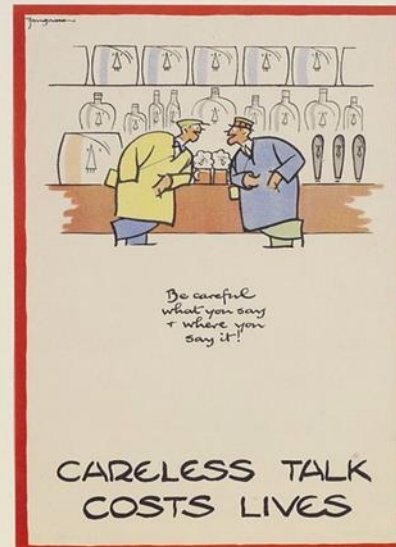
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INTRODUCTION

[Go to:](#) ►

The concept of gazing into crystal balls to view the future is not something immunologists are particularly prone to do; it is better left to psychics, quacks and astrologers. We are more likely to spend our time looking back, scouring the literature for precedents or clues to explain our latest findings. Yet the 50th Anniversary of the British Society for Immunology (BSI) offers an opportunity to both reflect and look forward. As a means of achieving this we asked leading immunologists, each of whom made their mark in this field in the preceding half-century, to speculate on what the next 10, 20 or 50 years might hold. As you will read for yourself, their attempts at clairvoyance provoke considerable thought and controversy.

PATENTS



How NOT to disclose confidential information?

- **Don't disclose** and speak with Warwick Innovations
- Understand what is confidential / non-confidential about your invention
- **Be pragmatic.** Do you need to describe the crux of the invention? You may NOT need to describe the invention in detail. Can describe the benefits, not how you do it. Describe it at a high level.
- Be careful who you talk to, even internally! Mark it confidential for internal meetings
- Embargo on your PhD submission
- **Use of CDA/ NDA** ('Confidential Disclosure Agreements' / 'Non-Disclosure Agreements') for externals. Support from WI, RIS, Legal departments.



Further Information

- Handout: Intellectual Property
- Intellectual Property Office UK – videos on youtube
<https://www.youtube.com/@IntellectualPropertyOfficeUK>
 - IP Basics; Is Intellectual Property important to my business?
 - IP Basics: Is copyright important to my business?
 - IP Basics: Should I get a patent?
- Public patent database, use Espacenet advanced search
<https://worldwide.espacenet.com/advancedSearch?locale=en> EP

Take away messages

- Knowledge and creative outputs (“Intangible Assets”) can be extremely valuable. Consider the commercial application of your results
- IP Rights give creators/owners legal protection and enable them to benefit from the value (e.g. through licensing)
- Granted patents protect you, but don’t necessarily give you FTO
- Timing is critical when it comes to patents – if you think you have invented something useful, **keep it confidential**, get advice from Warwick Innovations before publishing
- Warwick Innovations help to develop an IP strategy to patent and publish. Help frame the invention and the potential impact.

THANK YOU

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KAHOOT QR code

NEXT Seminar:

Options to Commercialisation

Francesco Maria Colacino

Thursday 6 June 2024