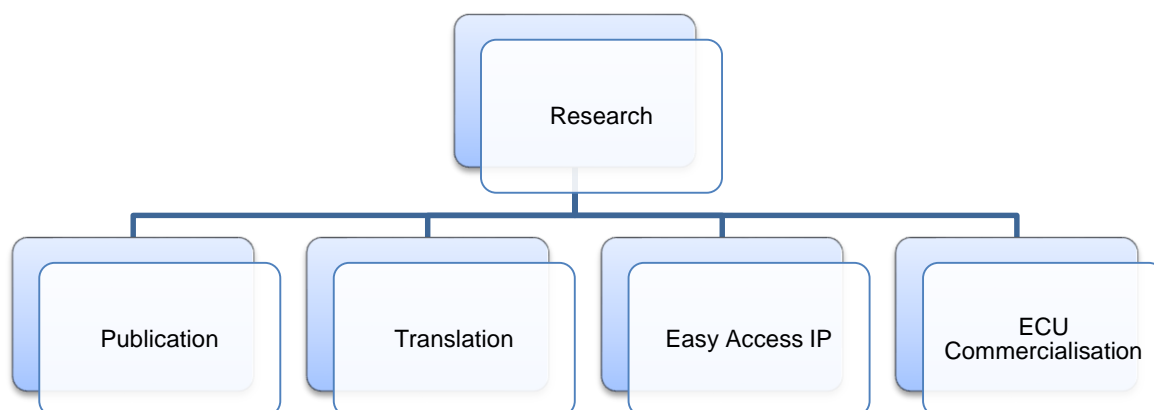


ECU Research Commercialisation

So you believe you've made a significant research discovery..... Now what?

One of ECU's strategic priorities is to strengthen research capability, capacity, translation and impact and the University's overarching research goal is to contribute to the creation and use of knowledge through relevant research and creative activity.

Research outcomes can take many forms and the following diagram illustrates the various pathways that can be taken within ECU:



- | | | | |
|--|--|---|--|
| <ul style="list-style-type: none"> • No commercial value • Engagement is discipline specific • Targets generation of new knowledge, principles or theories • Specific application, product or service may be identified, public domain • No invention or innovation created, no disclosure required • IP is not patentable or licensable | <ul style="list-style-type: none"> • Low / no commercial value • Community engagement • Targets a commercial or non-commercial problem • May use an application, product or service to facilitate translation • Innovation created but unlikely a patentable invention created, requires disclosure • Does not warrant patenting | <ul style="list-style-type: none"> • Low / no commercial value • Transferred to industry for further development • Targets a commercial problem • Identifies a specified application, product or service • An invention or innovation is created which requires disclosure • Is licensable and potentially patentable | <ul style="list-style-type: none"> • High potential for commercial value • Developed within ECU • Solves a commercial problem • Has a specified application, product or service • An invention or innovation is created which requires disclosure • Is licensable and potentially patentable |
|--|--|---|--|

ECU Research Commercialisation

As you can see, commercialisation is not the only way that research outcomes can be translated into practice in support of ECU's goals. Commercialisation is a complex, resource intensive, time-consuming and risky process. For this reason one of the key criteria within ECU's research commercialisation pathway is alignment with ECU's areas of research activity and strength and the likelihood of commercial benefits accruing to the University.

In order to determine the most appropriate means of achieving benefits from research the first step is to understand the subject of what is being dealt with. By reading and answering the questions below, this document might help you to decide what to do next.

What type of research were you doing?

Basic research (also called pure research or fundamental research) is a systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena without specific applications or products in mind. Basic research generates new ideas, principles and theories. While these outputs may not be immediately utilised, often they are the foundations for progress and development in different fields. For example, today's computers could not exist without the pure research in mathematics conducted over a century ago. Those mathematicians had no practical use for their discoveries and arguably could never have predicted what would come of them.

Applied research is a form of systematic inquiry involving the practical application of science (which has come about as a result of basic research). It accesses and uses some part of the research communities' (the academia's) accumulated theories, knowledge, methods, and techniques, for a specific, often state, business, or client-driven purpose. Often this purpose is stated as a research problem and the research is aimed at finding a solution.

A note on Intellectual Property (IP)

It is important to note that all new knowledge generated by research inherently comprises intellectual property (IP). IP refers to creations of the mind, which may take various forms. Knowledge or know-how is but one form of intellectual property. Others include inventions; literary and artistic works; designs; and symbols, names and images used in commerce. IP is protected in law by, for example, patents, copyright and trademarks, which enable people to earn recognition or financial benefit from what they invent or create. Each form of IP has its own particular means for protection, rights that accrue from that protection and ways in which those rights can be exploited. ECU has developed principles, policies and processes for dealing in its IP including this document. In accordance with ECU's IP Policy, all IP created by ECU employees and affiliates is owned by ECU. Students may be required to assign their rights to IP in certain circumstances. Given the legal meaning and implications of dealing in intellectual property care must be taken in its management from the creation of research projects through to their conclusion.

What are the options?

Basic research lends itself to disseminating the findings with the view of furthering that particular field. Typically in this case the IP created is know-how and copyright (but not patentable inventions, designs, etc.). By sharing their basic research findings, researchers hope to stimulate further thinking or new ideas that might take the knowledge in that area even further. Sharing results may encourage peers to want to collaborate. It may attract industry to contract researchers to undertake specific basic or applied research or seek a consultancy arrangement to utilise the new knowledge. As mentioned above, basic research does not have specific applications in mind so it is unlikely to result

ECU Research Commercialisation

in intellectual property that can be registered for protection, i.e. a patentable invention, design, etc. (see below for more detail).

For **applied research**, if the problem to be solved is a commercially relevant one, i.e. one that someone is prepared to pay for a solution, then it may be appropriate to explore ways to commercially exploit the intellectual property that has been created. Problem solving is often a source of invention, which may be patentable or there may be other forms of intellectual property available to assist commercial exploitation. If you believe you have solved a commercially relevant problem and/or your research represents a significant discovery, innovation and/or invention then please read on.

Technology Transfer and Research Commercialisation

Where research has potentially created IP that represents a solution for a commercially relevant problem, ECU will make an assessment of whether it is possible to commercialise the IP. Research commercialisation is essentially the monetisation of IP. Research commercialisation may take many forms, but ultimately it is achieved through trading in goods and services or the licensing of IP (possibly before final products or services are developed). ECU will always explore the prospect of licensing ahead of embarking upon further development of the IP and/or fully commercialising the IP.

Licensing is the predominant activity of traditional technology transfer. Given the relatively low level of resources required, licensing offers the lowest risk commercialisation approach. The challenge is to find a third-party that is sufficiently interested in the IP in its current state to negotiate a licence with ECU for the rights to further develop the IP (where necessary) and take it to market, either via sub-licensing or through a direct sale of products or services. The first step in the assessment of the IP's licensing potential is for researchers to complete a Self-Assessment Form.

In some cases, if licensing the IP in its current state on reasonable terms is not possible, then ECU may consider developing and validating the IP further. This may be necessary to bridge the gap between the point where competitive grant schemes cease to fund research and where industry is prepared to licence technologies and/or investors are prepared to invest in research commercialisation. In order to do so, ECU will always look at securing appropriate grants or external investment ahead of investing its own resources in isolation.

Before support is provided for any opportunity, researchers must satisfy ECU that they can meet the eligibility and merit criteria for the commercialisation process. ECU makes its assessment over a number of stages based on information provided by researchers in a series of forms, as follows:

1. Self-Assessment Form;
2. Invention Disclosure Form; and
3. Commercial Potential and IP Protection Form.

Why so many forms?

As noted earlier, research commercialisation is a complex, resource intensive, time-consuming and risky process. As with most commercial activities it requires investment of resources ahead of any certainty of the outcome. Good practice encourages a staged approach to assessing commercialisation potential.

As mentioned previously, ECU must first determine whether licensing the IP in its current form is feasible. At any stage during the assessment process, information may come to hand that indicates that commercialisation will not be successful and rather than have researchers attempt a lengthy business planning process, the assessment process addresses the most pressing issues in order of priority and establish the fundamental building blocks for research commercialisation.

ECU Research Commercialisation

What does ECU need/want to know?

Initially ECU will be trying to establish that the basic requirements for research commercialisation are present in your given opportunity. These requirements include:

- i) a commercially relevant problem appears to have been solved;
- ii) the research has resulted in the creation of IP that appears protectable;
- iii) the IP has come about as a result of research that is in a current area of strategic activity and/or strength;
- iv) a clear line of ownership of the IP and one that is free of encumbrances can be established;
- v) some evidence of identifiable customers prepared to pay fair value for the IP or the product or service that might be developed;
- vi) some evidence of a sizeable market comprising customers who share a similar perception of value; and
- vii) a realistic path to achieving monetisation of the IP.

How do I decide?

Ultimately the final decision to publish, patent, license, commercialise or otherwise rests with ECU. What you need to do is decide if your research was directed at solving a commercially relevant problem. If so, visit the ECU research commercialisation website where you will be prompted to download the appropriate documentation and provide the information that ECU needs to make its decision. Don't worry, ECU doesn't expect you to have all the answers, but there is a lot you can do to assist the process. The more entrepreneurial your attitude, whilst working within the parameters of ECU policy and process, the greater the prospects will be for a successful commercialisation outcome. If it is clear that commercialisation is not the most appropriate path for your research-based opportunity then contact the Office of Research and Innovation to discuss other pathways, such as publication or research translation.

Who can help me?

Your first contact is always your Associate Dean (Research) or your Institute Director in the case of Institute personnel. The first point of contact for Associate Deans (Research) and Institute Directors is their respective Dean.

The ECU research commercialisation website will also provide further information to assist researchers who have completed applied research and are considering commercialisation. A range of ECU offices and service centres will be available to provide support later in the commercialisation process, particularly during the assessment of the opportunities commercial potential and IP protection strategy.