

Clunies Ross Awards

CLUNIES ROSS AWARDS 2019

Information and Nomination Guide

The Clunies Ross Awards have a proud 27-year tradition of recognising contributions by dedicated individuals who have shared their vision and knowledge with others to apply technology for the benefit of Australia.

Building Australia's future industries will depend on discovering, driving and adopting technological innovation to develop high-value products and services for a global market. Vision, tenacity and most importantly collaboration, are essential pre-requisites for success. Partnering and collaboration, both domestically and internationally, is central to positioning Australia as a nation with a competitive technological industry capability. Collaboration between and within businesses, and between business and publically funded research agencies, is at the core of a collaborative culture and significantly enhances innovation.

In recognition of the complex nature of such activities, the Clunies Ross Awards are awarded in three categories with a single winner in each category.

Clunies Ross Awardees provide outstanding examples of the huge challenges but enormous benefits implicit in turning science and technology discoveries into usable products or services.

The Australian Academy of Technology and Engineering (ATSE) administers the awards via an *online nomination process*. The Awards will be presented at the annual ATSE Innovation Dinner held in Sydney on **13 June 2019**.

Award Categories

CLUNIES ROSS ENTREPRENEUR OF THE YEAR AWARD

Open to an individual winner only.

A typical awardee will have played an integral role in the discovery and translation of a major technology-based product or service that has led to financial success and demonstrated impact for Australia, and in which they have personally had a significant input in the inventorship and/or development of the technology. Such a person would typically have business responsibility as a CEO or a senior manager and may be working in either an early stage SME or a mature company environment. The individual will have been associated with the development of the technology and have overseen its deployment into commercial use with economic returns to Australia. Such individuals display long-term commitment to achieve the successful end use of the technology they invent or develop.

Typically, this would be an entrepreneurial person leading an activity that is disrupting well-established vendors or commercialising new opportunities through innovative use of new technologies.

EXAMPLE PROFILE: 2018 ENTREPRENEUR OF THE YEAR AWARDEE:

DR EROL HARVEY FTSE: *Translating Micro And Nano Technology*

Scientist, educator and entrepreneur Dr Erol Harvey has made outstanding contributions to Australia as CEO of the world-leading microfluidic engineering company MiniFAB, his distinguished academic career and his unwavering support for research commercialisation and entrepreneurship.

He co-founded in 2002 the export-oriented business MiniFAB, now a world-leading provider of custom-designed and manufactured microfluidic and medical devices. Capable of rapid prototyping and product commercialisation, MiniFAB delivers custom solutions into diverse markets, including medical devices, diagnostics, food packaging and aerospace. The products of MiniFAB are based on the discoveries and inventions of Dr Harvey. Its client base includes multinational companies, venture capital-funded start-ups, international medical device companies, and university spin-offs from around the world.

Dr Harvey formed the Small Technologies Cluster, an incubator supporting researcher access to MiniFAB's facilities and providing dedicated infrastructure to accelerate the commercialisation of new high-value medical device technology.

MiniFAB was awarded (2011) the inaugural "*Enabling Technology Company of the Year* and Dr Harvey was named *Enabling Technology Entrepreneur of the Year* by the Victorian Manufacturing Hall of Fame.

CLUNIES ROSS KNOWLEDGE COMMERCIALISATION AWARD

Open to an individual or a small team (normally of up to 3 people)

For those who have been responsible for the discovery, development and adoption of a technology and for sharing their knowledge leading to commercialisation, for example by licensing, with a significant financially successful outcome.

Typically, this could be a researcher and/or developer (or research or development team) in a Public Funded Research Organisation, university and/or a private company who has successfully passed a product/invention/service to a third party to commercialise and has generated significant revenue to the person and /or organisation(s) they are associated with.

EXAMPLE PROFILE: 2018 KNOWLEDGE COMMERCIALISATION AWARDEES

PROFESSOR DAVID HUANG, ASSOCIATE PROFESSOR PETER CZABOTAR, ASSOCIATE PROFESSOR GUILLAUME LESSENE AND PROFESSOR ANDREW ROBERTS. *Development of lifesaving leukaemia drug*

The Awardees are recognised for their role in the discovery and development of a novel, potent anti-cancer drug called venetoclax. The drug, discovered in collaboration with Genentech, a member of the Roche Group, and AbbVie, was recently approved for use in the US, Europe and Australia to treat certain forms of chronic lymphocytic leukaemia (CLL).

Based on a basic research discovery in the late 1980s at the Walter and Eliza Hall Institute of Medical Research (WEHI), the team's findings helped to solve a problem that eluded international research efforts: inhibiting a family of pro-survival proteins called BCL-2. The new class of drug was patented and each of the awardees were named inventors and contributed significantly to its

development. In 2017, WEHI completed a landmark deal, selling a part of its royalty rights in the resulting new drug venetoclax for up to US\$250M. The drug is undergoing clinical trials to test its effectiveness in treating other types of cancer, with the hope it will benefit more patients in the future.

CLUNIES ROSS INNOVATION AWARD

Open to an individual or a small team (normally of up to 3 people)

For those who have been responsible for the discovery, development and adoption of a technology that has significantly improved societal and/or industry capabilities. In this case, the primary outcome is not a direct financial benefit but has measurable broad community or industry impact.

Typically, this could be a researcher or developer (or team) in a Public Funded Research Organisation, university or a private company, where the outcome is in the form of industry development, or measureable improvement in community well-being or sustainability measures. Examples could include technologies that improve remote monitoring of agriculture/ecosystems, or improved access to remote learning and health care.

EXAMPLE PROFILE: 2018 INNOVATION AWARDEE

DR JIM AYLWARD : A Folklore Remedy for Skin Cancer

Dr James Aylward is the inventor of Picato, a novel anti-skin cancer drug developed from a folklore remedy that has been used to treat more than one million patients. Picato is a prescription drug with worldwide sales and major competitive advantages, and has become part of the arsenal for dermatology clinics.

Dr Aylward discovered the drug after observing how sap from a weed successfully treated sunspots and subsequently isolated the active ingredients: an ingenane diterpene family of molecules, including ingenol mebutate. The patented drug requires only two to three days of treatment and no disfiguring surgery, protracted therapy or damage to DNA.

The ex-CSIRO research scientist and entrepreneur co-founded Peplin Pty Ltd in 1998 to commercialise his invention, Peplin was later sold to Leo Pharma A/S for around \$306 million in 2009. Leo Pharma has set up an Australian operation, employing more than 100 Australians, at which the active ingredient is extracted from locally grown milkweed, expanding the number of Australians skilled in pharmaceutical manufacture and clinical trial management.

Overriding Characteristics of a successful awardee for all three award

types: NOMINEES MUST meet the following 3 criteria

1. has made an identifiably significant contribution to the advancement of industry and/or the community through the application of science and technology for the economic, social and environmental benefit of Australia; and
2. is able to demonstrate the impact or potential impact of the technological based innovation; and
3. has advanced the promotion of innovators and community awareness of technological innovation.

Nomination and Assessment

NOMINATION ON LINE LODGEMENT

NOMINATION CLOSING DATE: 2.00 PM AEDT FRIDAY 26 OCTOBER 2018.

Nominations must be made using the **Clunies Ross ON LINE NOMINATION PORTAL** at www.atse.org.au/CluniesRossAwards

Nominations received after the closing time will **NOT** be considered.

The on-line Nomination Portal provides prompts and guidance:

- You can answer your questions in any order and all answers need to be completed to ensure your nomination is considered valid.
- The section you are filling in will be clearly highlighted and a tick will appear when the section is completed successfully.
- You will know how much of the entry has been completed, indicated on the summary page.
- Each page will save when you click the 'NEXT', 'PREVIOUS' or 'SAVE & RETURN' buttons at the bottom of the entry page but will not save if you leave the page mid progress without clicking 'SAVE & RETURN'.

Note: All attachments should be named clearly, for example: CITIZEN_Bob_Referee_Report

Only submissions and attachments received using the official online Nomination Portal will be accepted.

Team Nomination

Where the nominator believes the candidate for the Knowledge Commercialisation Award or the Innovation Award should be shared by a team (normally no more than three individuals), this must be fully justified, including demonstrating why the outcome could not have been achieved without each of the nominees being associated for the majority of the total time involved. Simply including the name of a co-inventor on a patent application is not sufficient.

Award category

Please note that the Academy reserves the right to reclassify a nomination into a different Award Category if it sees this as a better “fit” for the nominee. The Nominator of such an application will be advised of this decision.

Assessment Criteria

In assessing the nominees, the following Criterion will be taken into account for each award. The Nominator should specifically address these criteria towards the Award Category being applied for and provide specific examples and data as necessary.

Whilst quantitative data is an essential element to be provided to assist in the assessment of nominees, qualitative data is also critical in balancing out any application.

Criterion 1: Contribution and Application

- A description of the product or licence or technology involved, its nature, its name or designation and whether patents or other means protects it. The description should include details of the beneficial owner and the relationship to the nominee(s) if they are not the same.

- A description of the outcome and the impact the contribution has made and in what field.
- Evidence of the nature of the contribution within the proposed award category demonstrating the role in one of; as an entrepreneur or in knowledge commercialisation or as an innovator. Clear outline of the personal involvement of the nominee(s) through all stages from discovery to commercial application.
- If patents protect the invention, evidence should be provided to show that the nominee(s) had a dominant role. The history and status of the contribution from the date it was first defined to the present, including the date when it became a commercial reality, achieved broad market acceptance or was widely used in the community, should be included.
- Persistence needs to be demonstrated (this may be over a considerable period). We would describe this as 'going the extra mile' – evidence of the continuity of involvement of the nominee(s) from discovery through the creation of the product and its successful and sustainable commercial application. It is recognised that others will have been involved during this process as specialists but the nominee(s) must have had the leading and decisive role throughout.

Criterion 2: Demonstration of Impact

- Where the outcome has been the commercialisation of a product(s) or technology into a defined market place: Details of sales, impact of technology on the market and relevance to competitive position.
- Where the outcome has been the licensing of technology into the market place: Financial details of the licence plus details on the uptake of the technology as a result of the licence.
- Where the outcome is measured as significant social or environmental benefit to Australia: The estimated magnitude of that benefit in terms of cost savings or other tangible and measureable outcomes, including the extent to which the contribution has been taken up by the community.
- *Financial*: Details of sales, financial details of licenses, financial impact as a result of uptake of the technology.
- *Jobs*: Jobs created, transformed (Up skilled) or secured (avoided job loss), with preference to Australian jobs.
- *Productivity*: productivity improvement, evidence of added value to product or process.
- *Competitiveness*: improved position in global supply chain, evidence of impact on the market.
- *Sustainability*: Evidence of long-term impact to an industry, user service or product that is transformative to existing processes.
- *Social Impact*: Evidence that the impact is sustainable including evidence of impact in the areas of health, safety, environment, compliance and community impact; improvement for an identified subset of the community, or a previously unmet need.

Criterion 3: Advancement of Technology

- Evidence of the nominee's outstanding record of commitment to successful innovation involving the application of science and technology to the economic, and social or environmental benefit of Australia. Excellence in research or science in itself is not sufficient.
- Evidence that the nominee/initiative has had a profound impact on the cultural environment within organisations such as public funded research bodies/universities or industry.

Supporting Documentation

Note: A maximum of 5 supporting documents (including a CV document) are permitted per nomination

Nominator can upload into the Nomination Portal supporting quantitative documents such as:

- Quantitative documentation for Criteria 1 and 2, e.g. company Annual Report
- Referee Reports (completed on the official Referee Report Form)
- nominee's CV (no more than two pages)
- patents
- any acknowledgement of inventorship, such as patent authoring
- Financial: Details of sales, financial details of licenses, financial impact as a result of uptake of the technology
- Jobs: Jobs created, transformed (up-skilled) or secured (avoided job loss), with preference to Australian jobs
- Productivity: productivity improvement, evidence of added value to product or process
- Competitiveness: improved position in global supply chain, evidence of impact on the market
- Sustainability: Evidence that the impact is sustainable and transformative.
- Social Impact: evidence of impact in the areas of health, safety, environment, compliance and community impact; improvement for an identified subset of the community; or a previously unmet need.

Nominators are also encouraged to upload into the Nomination Portal any supporting documentation relevant to the application for the **specific Clunies Ross Award Category**.

For example:

Clunies Ross Entrepreneur of the Year Award:

- The Company's Annual Report detailing:
- Product Description Info
- Current Financial Summary

Clunies Ross Knowledge Commercialisation Award

- Details of Licensing Agreements and Value
- Progress of Licensor in exploiting Licensed Technology

Clunies Ross Innovation Award

- Economic assessment of public good outcome or any economic assessment of outreach benefits i.e. where the technology has been developed by others.

Past Recipients

Past Recipients of the Clunies Ross Awards will not be considered for further award of the Clunies Ross Awards.

Previous Nominees

Previous nominees are eligible for renomination and to be considered for a Clunies Ross Award. New documentation must be submitted.

Presentation of Awards

All winners of a Clunies Ross Award will receive a Medal at the presentation function.

Should a team nomination win a Clunies Ross Award the person the nominator has identified as the "team leader" will be the designated spokesperson at the presentation function.

Obligations of Awardees

Awardees will be expected to:

- attend the presentation of the Clunies Ross Awards at the ATSE Innovation Dinner in Sydney on 13 June 2019;
- be available for filming of a promotional video for the duration of half/full day;
- participate in associated media activity prior and post the award ceremony; and

- engage in ATSE presentations over 12 months, which may be interstate.

Referee Information

Referees should be knowledgeable of the Nominee's achievements but independent of the innovation/commercialisation activity of the nominee.

Referees **MUST** submit their supporting documentation using the official **REFEREE REPORT FORM** and return their completed form to the Nominator for uploading into the Nomination Portal by **2.00 pm AEDT Friday 26 October 2018**.

Nominations

Note the following:

- Nominations must be submitted by one party (nominator), supported by two independent referees (referees) on behalf of another party (nominee).
- Note: nominator and nominee may be called upon by the Selection Panel to provide evidence of claims made within submitted documentation.
- Referee Reports must be uploaded by the Nominator onto the Nomination Portal.
- Incomplete Nominations will **NOT** be considered.
- Late submissions will **NOT** be accepted
- The nomination process is not confidential to the nominee and the nominator may seek assistance from the nominee for the application. Self-nominations will not be considered.
- The Academy may decide not to make an Award in any year if we are of the view that the nominating process has not identified an appropriate recipient.
- The Academy reserves the right to reclassify a nomination into a different Award Category if it sees this as a better "fit" for the nominee. The Nominator will be advised of this decision.
- All decisions taken by the Academy shall be final and no correspondence will be entered into.

Confidentiality & Privacy

Confidentiality of information exchanges will be strictly observed.

In accordance with the Privacy Act, ATSE protects the privacy and security of information provided by you. By completing this form, you agree to the use of your personal information by ATSE for purposes related to the Clunies Ross Awards program; that ATSE may contact you about our products and services; and that ATSE may use this information for internal purposes.

If you do not wish to receive further information, please email clunies.ross@atse.org.au or call 03 9864 0900.

Nomination Checklist

The following information constitutes a complete online nomination:

- Part A: Nominator and Nominee details
- Part B: Application Overview (summary in 100 words or less)
 - Award Category selected.
- Part C: Selection Criteria
 - Criterion 1: Contribution and Application (*500-word limit*)
 - Criterion 2: Demonstration of Impact (*500-word limit*)
 - Criterion 3: Advancement of Technology (*500-word limit*)
- Part D: Nominator Overview (500-word limit)
- Part E: Referee Information
- Part F: Nominee Supporting Quantitative Documents (upload a maximum of 5 Documents):
 - Documents must be less than 1MB in size;
 - Accepted formats include PDF, Word or graphical formats including JPG, PNG, and GIF

Nomination should have the following supporting documents

 - Nominee CV (no more than **two pages**)
 - Proof of inventorship e.g. Patent, Plant breeder rights, copyright etc.
 - Marketing documents that clearly describe what the invention is. A small AV file is acceptable.

Further supporting documents may include:

Entrepreneur of The Year Award

 - Company Financials where not confidential
 - Company Annual Report

Knowledge Commercialisation Award

 - Evidence of the commercial deal that generates income such as royalty

Innovation Award

 - Data on the benefits of the innovation in the broad sense. Industry expansion, cost benefit, environmental studies etc.

Other documents may address one or more of the following as appropriate:

 - FINANCIAL*: Details of sales, financial details of licenses, financial impact as a result of uptake of the technology
 - JOBS*: Jobs created, transformed (up-skilled) or secured (avoided job loss), with preference to Australian jobs
 - PRODUCTIVITY*: productivity improvement, evidence of added value to product or process
 - COMPETITIVENESS*: improved position in global supply chain, evidence of impact on the market
 - SUSTAINABILITY*: Evidence that the impact is sustainable
 - SOCIAL IMPACT*: improvement for a subset of the community, or a previously unmet need
- Part G: Referee Reports (must use the official Referee Report Form. **(Limit of 2)**)

Nominations close 2pm AEDT Friday 26 October 2018