ANZCA
FPM

Academic Enhancement Grant Application Guide

2025

- To be used in conjunction with the Academic Enhancement Grant Application form.
- Please read and follow the guidelines for grant applications carefully. Applications that do not follow the guidelines will not be accepted.
- Applications must be received by 5 PM AEDT 2 April 2024.

Email applications to:

ANZCA Research and Administration Coordinator
research@anzca.edu.au

IMPORTANT POINTS FOR COMPLETING ANZCA ACADEMIC ENHANCEMENT GRANT APPLICATIONS

- Please read the ANZCA Research Policy before completing the application form
- An ANZCA REGKEY must be obtained and included in the header of the application form. Double-click on the header to add your REGKEY. Contact Susan Collins (email: research@anzca.edu.au) to obtain your REGKEY.
- Do not include or copy the cover sheet. Start your application with the page headed "In Confidence".
- Ensure **all** chief investigators are fellows of ANZCA or FPM.
- Ensure the research plan is no more than six (6) pages, excluding references with a font size no smaller than 10 point. The minimum margin is 2cm.
- Ensure the budget is in line with the maximum amount allowed.
- Rows may be added to tables where this is allowed in these guidelines (e.g. list of chief investigators, list of current research grants). Do not exceed prescribed word/page counts. Text that exceeds prescribed word counts will not be considered
- Ensure that each page is numbered consecutively in the application.
- A written quotation for equipment/consumables costing $A5,000 or more, as requested in the budget section, must be attached to each copy of the application.
- The application must be submitted **electronically via email** to research@anzca.edu.au. Only files of 6MB or less will be accepted. The electronic copy may include the signature pages within the application form or these may be sent via email as a separate document with scanned or electronic signatures.
- Electronic copies must be in PDF format (converted word files only, not scanned documents) or Microsoft word format. Note for older versions on Microsoft Word please install the official update from https://www.microsoft.com/en-au/download/details.aspx?id=7.
  This update will allow Microsoft office 2007 save documents to .PDF format.
- The complete application must be received by the Research and Administration Coordinator by 5PM AEDT on the closing date for applications. Late applications WILL NOT BE ACCEPTED.
- Incomplete applications or those that do not follow these guidelines WILL NOT BE ACCEPTED.
- ANZCA cannot amend an application once it has been submitted.

A. CONDITIONS OF ANZCA ACADEMIC ENHANCEMENT GRANT

1 General

The Academic Enhancement Grant helps to establish, enhance or sustain a research program. The salary and position of the responsible investigator ("chief investigator A" [CIA]) should be reasonably assured for the duration of the grant.

2 Payment

Sums awarded will be paid upon request after **January 1** each year for the duration of the grant. All payments will be made in Australian dollars, upon receipt of a fully correct tax invoice from the administering institution.

3 Conditions of research personnel

The conditions for research personnel requested in the budget shall be those of the institution in which the work is carried out or as the college may determine in particular circumstances. This includes annual leave and sick leave. However, the college does not provide for long service leave.

4 Alterations in research program budget

The CIA is expected to adhere to the approved research program or budget, and to notify any absences other than for short periods (e.g. three to four weeks). Full details of any proposed major alterations to either program or budget, or of any absences during the course of the grant, should be submitted in advance by the CIA to the Research and Administration Coordinator for approval by the chair of the Research Committee (or his or her delegate).

5 Reporting requirements

Eligibility to apply for future funding will be contingent on complying with the reporting requirements of the ANZCA Grant Agreement Terms and Conditions. Unless otherwise specified, grants are awarded for the period of two calendar years following the year of the grant decision. The CIA may request in writing a time-only extension or roll-over of funds if the project is not completed at the end of the two-year period.

5.1 Progress report

The CIA is required to forward a progress report on the approved form to the college, by **September 1** in each year of the award. This form can be found on the ANZCA website. If a progress report is not received by the due date, any funding for multi-year projects may be withheld and/or any future funding requested in subsequent years by the CIA may not be considered.

5.2 Final report

The CIA is required to forward a final report on the approved form to the college, within three months of the completion of the project. This form can be found on the ANZCA website. The final report must include a statement of expenditure charged to the grant. Any unexpended balance of the grant should be returned to the college and must not be used on other projects.

6 Publications and presentations

The college requires that its contribution be acknowledged in all publications and presentations of the research project, for example *"This study was supported by a Grant from the ANZCA Foundation, Australian and New Zealand College of Anaesthetists"* and that a presentation relating to the project be made at a major college meeting. A hard copy or pdf of the reprint should be sent to the Research and Administration Coordinator. If the protocol is registered with a journal or other relevant organisation, the college must receive a copy of the registration certificate.

7 Patents

Any discovery arising out of work supported by the college must not be the subject of application for patent except with the written approval of the college and the agreement of the institution in which the work is carried out.

8 Audit of research projects

In accordance with the ANZCA Academic Integrity Policy, ANZCA reserves the right to conduct a random audit of ANZCA-funded research through the administering institution's research office.

9 Termination of grant

A grant may be terminated if the conditions of the grant are not observed. A grant will terminate, unless other arrangements satisfactory to the college are made, if the chief investigator leaves the institution before the expiry of the grant. In such an eventuality, the recipient and the head of the department are expected to notify the college CEO. When a grant terminates any unexpended balance must be returned to the college.

B. GENERAL INFORMATION FOR APPLICANTS

1 Introduction

Funding for medical research in Australia, New Zealand, Hong Kong, Malaysia and Singapore is necessary if medical science is to maintain a high international standing. The most important single national source of funding for medical research in Australia is provided by the Commonwealth government through the Medical Research Endowment Fund, which is administered by the National Health and Medical Research Council (NHMRC). In New Zealand, funding is administered by the Health Research Council (HRC).

The NHMRC provides the opportunity for individuals or research teams to obtain support for research projects in all fields of public health, medicine and dentistry in Australia, through the Project Grant and Fellowship schemes. In New Zealand the HRC serves an equivalent role. The award of a project grant is ANZCA's main avenue for the support of projects in biomedical research in universities, medical schools, hospitals and other research institutions. The purpose of such schemes is to provide support for work on problems which are capable of solution in a relatively short period of time. ANZCA aims to supplement, complement, and in some cases act as an alternative to NHMRC/HRC. *Wherever possible and appropriate ANZCA encourages applicants to also apply to HRC or NHMRC, or to the appropriate body in their home country.*

2 Academic Enhancement Grants

The Academic Enhancement Grant is an award to an individual with an academic appointment, or an academic institution, for the support of a program of scientific investigation proposed by one of the academic staff at that institution. The academic title-holders and department must be located in Australia, New Zealand, Hong Kong, Malaysia or Singapore.

The investigation will have objectives of mutual interest to ANZCA, the recipient institution, and the investigator. Whilst the grants may specify financial support for individual professional research personnel, the institutions are responsible for administration of the award. The maximum amount available for the Academic Enhancement Grant is **$A100,000**. This amount will be made available in one year, but may be apportioned in the budget over more than one year.

An individual may only be named as a chief investigator on a **maximum of TWO active grants and/or applications** in any one year. This maximum includes any grant which was approved for multi-year funding in previous grant rounds and is still current – a multi-year grant will count as one active grant in each year that it is paid. This provision includes Project Grants, Novice Investigator Grants, Professional Practice Research Grants, the Patrons Emerging Investigator Grant, the Environment and Sustainability Research Grant, the Skantha Vallipuram ANZCA Research Scholarship and the Academic Enhancement Grant. It does NOT include the Douglas Joseph and Lennard Travers Professorships which may be considered and awarded in addition to two active grants or applications. If, however, an applicant wishes an unsuccessful professorship application to be considered for a project grant and has indicated this by ticking the box on the professorship application form then when this occurs it will count as one of the two allowed active grants or applications for that round. Fellows and registered trainees must be financial and in good standing with ANZCA or FPM.

3 Other funding agencies

Liaison between ANZCA and other major funding bodies, both government and private, has been established to preclude duplication of support for identical proposals, as far as possible.

4 Eligibility

Applications for Academic Enhancement grants are accepted from chief investigators, who are resident in Australia, New Zealand, Hong Kong, Malaysia and/or Singapore, and who hold ANZCA or FPM Fellowships **ONLY**.

The following academic title-holders in anaesthesia and/or pain medicine and related disciplines will be eligible for receipt of the grant based on the merit of the application.

The following definitions apply: A "*professor*" is a member of the academic staff of a university. A professor may be paid or honorary; a full professor or associate professor, or a clinical professor or clinical associate professor. A "*chair*" is either the head of an academic department of a university, or the holder a personal chair within a department. An "*academic department*" is a department within the faculty of medicine (however titled) of a university; a department within a hospital headed by a member of the academic staff of a university; or department within a hospital that includes members of the academic staff of a university who lead the academic work of the department. All other things being equal, grants will be awarded in the following order:

- Occupants of newly established chairs
- New occupants of established chairs
- Chairs commencing new initiatives
- Professors
- Associate Professors
- Clinical Professors
- Clinical Associate Professors

Reapplication by an applicant who has received this grant within the five previous years would normally not be considered unless exceptional circumstances exist.

The criteria for the award of the Academic Enhancement grant are:

- Research merit of the program.
- Track record of the applicant(s) and their ability to carry out the proposed research.
- Potential long-term benefits of the research program to academic endeavour of the research group and the specialty, including its ability to promote fellows and trainees pursuing higher degrees.

5 Procedure for evaluation of grant applications

The procedure for the evaluation of ANZCA grant applications is modelled on the NHMRC review process. Each application is assessed by three reviewers, one of whom is a spokesperson appointed from the Research Committee, and who have been carefully chosen for their relevance to the particular grant application.

To assess the scientific merit of the project and to determine the ability of the investigators to carry out the research, reviewers are requested to (i) rate the grant application and (ii) provide a written report.

Applications are rated on a seven-point scale (ranging from "outstanding" through to "poor") along a set of five criteria (track record, scientific merit of program, feasibility, international competitiveness, and benefit to the development of the research group and to the specialty in Australia, New Zealand, Hong Kong, Malaysia or Singapore).

The written report addresses the scientific merit of the application (originality of hypothesis, substantiation of objective, soundness of research plan and methodology, and feasibility of the project), the track record of the applicant, the budget and raises questions on areas of the research which require clarification, including problems and limitations likely to be encountered. The written report is forwarded to the

applicant for comment. **The applicant response is limited to three pages only with a minimum 12pt font and 1.5cm margin. Pages in excess of the three page limit will not be considered.** Applicants may make minor amendments to their protocol provided these do not constitute substantive revisions to the entire protocol and study design. These amendments should be noted in the three page applicant response, but does not require an amended copy of the protocol or study design to be resubmitted with the three page applicant response. If major changes are made, they will not be considered by the Research Committee, and the applicant will be advised that their study should be resubmitted as a new project in the following year's grant round. If the applicant responses are not received by the due date, they will not be considered in the ranking of the application.

The Research Committee then meets and considers all the materials, as presented by the spokesperson. At this time, the spokesperson will highlight and comment on any discrepancies between reviewers' numerical rankings and any inadequacies or inconsistencies in the reviewers written reports that should be considered. Such reports are then considered further by committee members before a final ranking is determined. Using a blinded voting system, each member allocates a score out of seven to the grant. The committee support officer tallies these scores and the final ranking of each grant application is determined. The Research Committee determines a rating score as a cut-off point, below which funding is not available. Those applications that are close to the cut-off score are considered in more detail. The application identified to receive the academic enhancement grant is then further considered.

Awards of grants will be announced by early October each year. No payment of the grant will be made until written communication accepting the offer and agreeing to the conditions, and a fully correct tax invoice, are received by the college, and all necessary clearances have been obtained.

Successful grant applicants will be expected to participate in reviewing ANZCA grant applications in future years as a condition of accepting the grant.

6 Confidentiality

Applications for grants are received by ANZCA on an "IN CONFIDENCE" basis. This means that the application document will not be released other than in compliance with any waiver or consent given by the applicant.

7 Applications to Philanthropic trusts and foundations for research grants

Through the ANZCA Foundation, submissions will be made to the philanthropic sector from successful and highly ranked grant applications awarded through the ANZCA peer-reviewed grant process. It should be noted that approved grant funding through the peer-review process is not dependent on an application to the philanthropic sector. Final confirmation of ANZCA funding is subject to completion of any external funding applications for this project that are in progress. The aim of the Foundation submitting applications to the philanthropic sector is to continue to increase the pool of available funds for future ANZCA research projects. If an ANZCA grant application is deemed a suitable match to the specific interests of a particular trust or foundation, approval of the CIA will be sought for a submission to be made. The CIA's input and advice would be sought during the application process. Acceptance of a philanthropic trust or foundation support will usually require acknowledgement of that support in publication or presentation of research. This is in addition to the requirement to acknowledge any support provided by ANZCA.

C. INSTRUCTIONS TO APPLICANTS FOR COMPLETING FORM

1 Scientific project title

The scientific title will be used to identify the application at all times and should accurately describe the nature of the project. Use no more than 120 characters, including spaces. Additional characters will not be recorded.

2 (a) Chief investigators

Chief investigators **MUST** be fellows of ANZCA or FPM and **MUST** hold an academic title (see above). Investigators who are not fellows or academic title-holders may be named as associate investigators or (see below). The CIA will be regarded as the contact person for the application and will, in all instances, be assumed to be acting on behalf of, and with the concurrence of, all chief investigators named in this section.
All chief investigators must include their contribution and time commitment to the project.

An individual may only be named as a chief investigator on a **maximum of TWO active grants and/or applications** in any one year. This maximum will include any grant which was approved for multi-year funding in previous grant rounds and is still current – a multi-year grant will count as one active grant in each year that it is paid. This provision includes Project Grants, Novice Investigator Grants, Professional Practice Research Grants, the Patrons Emerging Investigator Grant, the Environment and Sustainability Research Grant, the Skantha Vallipuram ANZCA Research Scholarship and the Academic Enhancement Grant. It does NOT include the Douglas Joseph and Lennard Travers Professorships, which may be considered and awarded in addition to two active grants or applications. If, however, an applicant wishes an unsuccessful professorship application to be considered for a project grant and has indicated this by ticking the box on the professorship application form then when this occurs it will count as one of the two allowed active grants or applications for that round. Add more rows if necessary. Fellows must be financial and in good standing with ANZCA or FPM.

2 (b) Associate investigators

Associate investigators may be fellows, trainees, students or research personnel, who assist with the research or bring a particular skill (e.g. statistics, assays) to the team. They may or may not be fully conversant with all aspects of the work. The role, contribution and time commitment to the project must be completed for each associate investigator. Associate investigators do not receive salary support from ANZCA.
Add rows to any of the items if necessary.

3 Administering institution

The full name and full address of the institution responsible for administering the grant must appear here (e.g. Royal Prince Alfred Hospital, Missenden Road, Camperdown NSW 2030). While there may be instances where a program of research is carried out in more than one location, there can be only one administering institution for each grant.

4 Institution(s) where research will be carried out

The name(s) of the department and name(s) and address(es) of the institution(s) where the proposed research will actually be undertaken is (are) required (e.g. Department of Anaesthesia, Royal Melbourne Hospital VIC 3050). Add more rows if necessary.

5 Area of research

Specify anaesthesia (01), intensive care medicine (02), pain medicine (03), perioperative medicine (04).

6 Keywords

Select up to five keywords or phrases from the list at the end of this guide. If appropriate words are not found in the list, applicants may add their own keywords in this section. The keywords will be used to identify suitable reviewers.

7 Submission of AEG-related project grant

It is permissible for an applicant to also submit a project grant application that is similar to that included in the AEG application. If the academic enhancement grant is unsuccessful, the Research Committee will consider the related project grant application. Applicants should tick the box in the application form to indicate a related project grant has been submitted which will allow the Research Committee to note the provisional nature of the submission. Applicants are also asked to include the Regkey number of the related project.

8 Consideration of application for Project Grant

Applicants may elect to tick the box in the application form to have the project component of their Academic Enhancement Grant considered for a project grant, in the event that the AEG application is not successful in that category.

However, applicants are reminded that an individual may only be named as a chief investigator on a **maximum of TWO** active grants and/or applications in any one year. This maximum includes any grant which was approved for multi-year funding in previous grant rounds and is still current – a multi-year grant will count as one active grant in each year that it is paid. This provision includes Project Grants, Novice Investigator Grants, Professional Practice Research Grants, the Patrons Emerging Investigator Grant, the Environment and Sustainability Research Grant, the Skantha Vallipuram ANZCA Research Scholarship and the Academic Enhancement Grant. It does NOT include the Douglas Joseph and Lennard Travers Professorships, which may be considered and awarded in addition to two active grants or applications. If, however, an applicant wishes an unsuccessful professorship application to be considered for a project grant and has indicated this by ticking the box on the professorship application form then when this occurs it will count as one of the two allowed active grants or applications for that round.

9 Lay description of research

Provide a brief description of the department and/or chief investigator(s), the achievements of the department and/or chief investigator(s), and the proposed research and its significance [suitable for a media release]. No more than one page is allowed. Please include a lay title.

10 Grant synopsis

This information is used primarily to assign the application for review. This one page synopsis should describe the project and including a description of the aims, significance, context, objectives, methods and likely benefits of the research plan to the research group and the specialty. If applicable, applicants are requested to include a statement if the project includes: a) Aboriginal, Torres Strait Islander, Māori or other under-represented groups, b) consumer engagement.

Requested non-reviewers: Applicants preferring particular reviewers NOT to be approached to assess their application should attach a letter containing details of up to two non-requested non-reviewers. This letter should be attached to the original application only. These requests will be considered by the ANZCA Research Committee.

11 Research plan

Describe your program of research in this section. You must describe the overall program as well as the details of an initial project. Do not use more than six (6) pages in total, excluding references. Note that the minimum page margin is 2cm and the minimum font size is 10pt. Any additional pages will be removed prior to review.

You ***must*** use the headings listed below to describe your research.

11.1 Aims and significance*:** Use this space exclusively to describe the broad aims and potential significance of the program of research. Hypotheses to be tested ***must be clearly stated.

11.2 ***Background*****:** Describe the significance of the broad area of research, the objectives of the research and the background including scientific aspects and how the proposal will benefit the development of your research group and/or the specialty.

11.3 ***Methods*****:** Include, where appropriate, details of the experimental design at least for an initial project or projects in the area of research, and statistical methods to be used. Include sample size estimations.

11.4 ***Feasibility*****:** You must provide evidence that the proposed study can proceed in a timely fashion (i.e. recruitment of participants is assured, instruments have been developed and piloted).

11.5 ***References*****:** References are in addition to the six (6) pages. Do not attach copies of any references. Include the title of the paper when citing references to other work.

Explanatory appendices are not permissible, nor is it appropriate to use such phrases as "refer to last year's application".

12 Budget Items

Please note that applications for more than the maximum amount will be returned.

The budget must be constructed in Australian dollars. The maximum amount available for the Academic Enhancement grant is **$A100,000**. This amount will be made available in one year, but may be apportioned in the budget over more than one year. Please note that institutional infrastructure costs are not paid by the college and should be included as a budget item. Applicants are requested to provide the entire budget for the project, including, if applicable, budget items funded by other sources and provide details.

All items, listed in the space provided, are to be classified under these headings:

12.1 ***Personnel:*** Chief investigators (who are all fellows of ANZCA or FPM) and associate investigators may not receive salary from the Academic Enhancement grant. Requests for professional salaries including initial, promotion and renewal requests, should be in accordance with the official NHMRC or MRC designations and salary scales, or appropriate nursing awards. Include provision for payroll tax, workers' compensation insurance, superannuation or other institutional legal liabilities and on-costs. **State if the personnel position is new or existing.**

12.2 ***Equipment*****:** Equipment requests should not include the type of apparatus normally provided from institutional funds (such as equipment used in the normal course of patient care); requests should cover only those items individually costing over $A800, which are essential to the project. Where the cost of a specific item of equipment/consumables, plus related accessories, is in excess of $A5,000, a firm written quotation based on current prices, not incorporating any component for customs duty, must be submitted. Applicants should ensure that the institution is prepared to meet all service costs in relation to equipment awarded.

12.3 ***Maintenance*****:** Enter those items not included within other categories, i.e. such items as equipment costing less than $A800, consumables (under major headings), printed materials, microfilms, survey or field expenses and computing charges.

12.4 ***Other items:*** Include all other budget items here. Funding for travel or accommodation related to the presentation of study findings will not normally be paid. Fees for manuscript publication or on-line access will not be paid. ANZCA will consider requests for funding for computer programming, preparation and storage of data, but will not normally provide funds for the hire of computer time on a computer within the applicant's institution. Requests for funds for programming, preparation and data storage or the hire of external computer time must be fully justified. Funds for purchase of computer equipment and hire of computer personnel should be itemised under 'Equipment' and 'Personnel' respectively.

12.5 ***Justification of budget:*** It is important to note that realistic budgetary details for the whole period are provided, as no supplementary requests will be granted. A genuine assessment is therefore required for funding of the grant. Detailed calculation and justification for staff FTE, their role and responsibilities, staff costs separated into base cost and on costs, itemisation and justification of consumables / equipment as well as any other costs. Please provide the entire budget for the project, including, if applicable, budget items funded by other sources and provide details to each.
Detail any potential funding shortfalls and how these are going to be met, detail other funding applications for project (already awarded, applied for or intent to apply).

13 Chief investigators

The chief investigator(s) is (are) pivotal to the concept, design and conduct of the research, analysis of the data and/or preparation of the manuscripts. The chief investigator(s) is (are) fully conversant with all aspects of the research. Chief investigators **DO NOT** receive salary support from the Academic Enhancement grant. Salary support may only be obtained from ANZCA through scholarships.

Copy and complete item 13 for each named chief investigator on this application. Start each chief investigator on a new page. Add rows to any of the items if necessary.

13.1 ***Contact details*****:** Please ensure that the details provided are complete and accurate, as this information will be used to communicate with the applicants.

13.2 ***Academic qualifications/awards*****:** Provide details of academic qualifications including university degrees, specialist college diplomas, research or other awards or honours, the institution or body awarding the qualification and the year it was awarded.

13.3 ***Current appointments*****:** List all current positions with the location (institution). Any changes during the lifetime of the grant relating require notification to ANZCA.

13.4 ***Sources of current salary*****:** Include sources of salary earned during normal working hours in current academic/clinical appointments. ***DO NOT*** include sources of salary from private clinical work or other work performed out of hours. ***DO NOT*** include monetary amounts.

13.5 ***Previous appointments*****:** Please list relevant previous positions held in the last five years.

13.6 ***Other research outcomes, professional, academic or related activity*****:** Provide any relevant information in relation to patents, commercialisation (including industry funding or IP), industry involvement etc. Briefly list any other responsibilities that will be undertaken in addition to your responsibility as a chief investigator on this grant (other research activities, peer review, research committee work, teaching, clinical practice, administration, industry consultation etc).

13.7 ***Time allocation to research*****:** Within the current appointments and during the normal working week. Provide details of estimated percentage of working time in each category.

13.8 ***Anticipated absences during grant period*****:** Should an investigator be absent during the project grant for a period in excess of two months, specify period of absence and give reason.

13.**9 Demographics**
This question is designed to help inform future demographic analysis. It is *optional*.

14 Department details

14.1 ***Background of academic department:*** Briefly provide details about the establishment of your academic department or the establishment of the academic appointment that you hold. List the previous incumbents in your position, if appropriate.

14.2 ***Current academic appointments:*** Summarise the current academic appointments of the chief investigators.

***14.3 Academic activities of the department*:** Describe the academic activities of the department or chief investigator(s), in terms of collaborating with other departments, supervising research students, managing research staff, and other research activities in the university and/or institution.

15 Research support

The information sought on past and present support will assist ANZCA in determining the relationship between various projects and the personnel involved in them, including their time commitment. For this reason, applicants should list ALL projects for which their name is recorded as a chief investigator in each category.

Add more rows to each table if necessary.

***15.1 Completed grants*:** Details of past research grant support should encompass all projects or part projects funded over the previous three year period by all sources of grants (not including the year of application), itemising the level of support for each year. Include project grants, program grants, scholarships etc. Exclude any projects which hold a current commitment (e.g. a three year project currently in its second year), to be itemised under 15.2.

***15.2 Current grants*:** Include details of all currently held grants, including those that have been awarded but have not yet commenced. Indicate the year of application, ANZCA Regkey, NHMRC ID etc, title of grant, chief investigators, time commitment of each named investigator to each grant, period of support and amount funded.

16 Track Record

16.1 Publications of chief investigators

List, and number consecutively, papers published, in press or finally accepted for publication in refereed journals, by any of the chief investigators (CIA, CIB, CIC, CID etc), in the five years prior to the year of application and in the year of application. The listing must indicate titles of papers, sequence of authors as shown in the paper, first and last pages, name, volume and date of journal; for recent papers not yet published, the date of final acceptance by the journal's editor is required. Quality as well as quantity of publications will be considered in the assessment of grant applications. Papers in refereed journals in which the chief investigator was not co-author, but which resulted from previous grants, should be listed at the end of that chief investigator's publications under the title "non-chief investigator papers" (e.g. papers with scientists or PhDs supported by the grant but in which the chief investigator was not an author). Documentary evidence of final acceptance by editors must be made available to ANZCA. **Do not include abstracts or papers in preparation or submitted for publication but not yet finally accepted.**

Each chief investigator must nominate their best five publications using an asterisk (*) and briefly add a statement of impact and their role in the project including the writing of the manuscript (no more than 6 lines per publication). Only include publications that have been published or are in press (include the date of acceptance).

16.2 Diminished relative opportunity / career disruption

The career circumstances for the principal investigator (chief investigator A) will be considered during the track record assessment by peer-reviewers and the Research Committee. This will take into account significant and notable disruption of research opportunity over the course of the research career to date. This is not intended to include minor changes to life circumstances.

- Career disruption is a prolonged interruption in the ability to work due to pregnancy, illness/injury and/or carer responsibilities.
- Relative to opportunity is any other personal or professional circumstances affecting research productivity. This may, for example, include circumstances associated with the Covid-19 pandemic.

16.3 Other items

The chief investigators may list other items for track record consideration. For participation in multi-centre trials, the chief investigator must be the named principal site investigator. The name of the trial, the chief investigator(s) of the trial and the number of patients enrolled at the time of application must be included. For ongoing study in statistics/epidemiology/research methods, please state the institution, name and duration of the course. Other items may include membership of research ethics committees or grant committees, supervision of research students and the like. A maximum of one page for all investigators combined is permitted.

17 Clearance requirements

The Research Committee strongly encourages investigators to apply for ethics committee approval for the initial project of the Academic Enhancement Grant and submit the approvals to the college by **September 1**. If a grant is awarded, funding will not be released until all relevant clearances for the initial project have been received by ANZCA. ANZCA reserves the right to request full ethics committee submissions and correspondence as part of the granting process. In addition, ANZCA requires that clinical trials are pre-registered with the appropriate agency (e.g. NHMRC).

17.1 Research involving humans

(i) Approval of the human research ethics committee should be sought for ALL projects in humans. In the case of audit or routine testing, the ethics committee may not require a formal application, but will provide a covering letter that must be submitted to the college. Human research, in this context, includes research involving any human tissue, no matter what the source, and also includes research in which there is any intervention (physical or psychological) in the normal lives of humans. Projects supported by ANZCA are expected to conform with the general principles outlined in the NHMRC document *National statement on ethical conduct in human research 2023*. (see NHMRC website)

(ii) Under the various privacy laws, any form of experimentation involving humans (including epidemiological research) which uses personal information that is obtained from a national or state department or agency must be considered by a human research ethics committee.

(iii) All projects involving the administration to humans of drugs, chemical agents or vaccines need to be considered by the relevant human research ethics committee (HREC) to assess the appropriateness of their use. Clearance by the HREC is not only required for projects involving the use of imported substances, but also for projects involving the experimental use of locally produced therapeutic substances. ANZCA funds will not be provided unless appropriate clearance for the use of such substances is given. In the case of multi-centred trials, approval must be obtained from the HREC of each institution involved. In the case of drugs that are not approved for use in Australia, New Zealand, Hong Kong, Malaysia and/or Singapore, approval of the appropriate authority must be obtained before funds can be released.

(iv) The official letter or statement of approval from the ethics committee must be forwarded to ANZCA no later than **September 1** each year, or before a tax invoice for funds is sent to the college.

(v) ANZCA should have access, if required, to all information relating to ethical decisions arising from an application and the institutional response to the application. Provisional clearances will not be accepted.

(vi) Under item 17.4, please summarise all the ethical implications of your research program. Do not use more than one page. Include the issues of privacy, and male-female ratios, and the cultural implications of your research (i.e. as they relate to aboriginal populations). Please refer to the NHMRC "National Statement on Ethical Conduct in Human Research". Note that it is not sufficient to state that "the NHMRC Statement on Ethical Conduct in Human Research will be observed". The Research Plan must include sufficient detail to enable the project to be fully assessed with respect to ethical issues by an independent ethics committee.

17.2 Research involving animals

(i) Projects supported by ANZCA are expected to conform with the provisions of the *NHMRC Australian code for the care and use of animals for scientific purposes 8th Ed 2013*, and with its general principles outlined in the Council's document 'Statement on Animal Experimentation' or the New Zealand equivalent.

(ii) ANZCA requires a statement from the relevant Institutional animal ethics committee that any project involving animal experimentation has been reviewed and is approved by the Committee as complying with the Code of Practice. It is the applicant's responsibility to ensure that a copy of his or her project application is referred to the relevant institutional animal ethics committee; it also his or her responsibility to ensure that the completed approval form is forwarded to ANZCA, no later than **September 1** each year, or before the tax invoice for funds is sent to ANZCA.

(iii) ANZCA should have access, if required, to all information relating to ethical decisions arising from an application and the institutional response to that application. Please identify the institutional animal experimentation ethics committee to which the application has been or will be referred. Provisional clearances will not be accepted.

(iv) Applicants whose projects involve inbred strains of animals must take action to confirm that the genetic authenticity of the colony has been checked at appropriate intervals.

(v) Ideally the health status of animals should be known and the colony regularly monitored for pathogens which may influence results in the investigator's particular area of research.

(vi) Under item 17.5, please summarise all the ethical implications of your research program. Do not use more than one page. Include the issues related to the care and welfare of animals. Please refer to the "Statement on Animal Experimentation". Note that it is not sufficient to state that "the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes will be observed". The research plan must include sufficient detail to enable the project to be fully assessed with respect to ethical issues by an independent animal ethics committee.

Applications involving animals must contain adequate information to allow assessment of the ethical implications of experiments, particularly where significant pain and/or distress may be caused, where death is likely to occur, or where experiments in category four are to be carried out.

17.3 Other Clearances

17.3.1 Genetic manipulation of organisms: Applicants proposing to undertake research involving genetically modified organisms (GMO) must ensure that all the requirements of the Gene Technology Act 2000 and the Gene Technology Regulations 2014 have been met. Information on the Act and Regulations can be found on the Office of the Gene Technology Regulator website. Applicants should seek advice from their institutional biosafety committee (or equivalent) on the level of authorisation needed for any proposed GMO research. Clearances from an institutional biosafety committee (or equivalent) must be forwarded to ANZCA prior to release of grant monies.

17.3.2 Use of carcinogenic or highly toxic chemicals: Applicants whose projects involve the use and disposal of potent carcinogenic or other highly toxic chemicals must adhere to the National Occupational Health and Safety Commission guidelines, National Code of Practice for the Preparation of Material Safety Data Sheets 2nd edition. Further information is available from the Safe Work Australian website or equivalent. Such applicants must seek clearance to be forwarded to ANZCA prior to release of grant monies.

17.4 Ethical implications of the research on humans

If applicable, provide details of the ethical implications of the research project on humans.

17.5 Ethical implications of the research on animals

If applicable, provide details of the ethical implications of the research project on animals.

17.6 Conflict of Interest: Applicants are NOT required to complete the questionnaire but rather are requested to read and understand the ANZCA conflict of interest policy, declare any conflicts, and state how such conflicts will be managed.

18 Progress report on ANZCA grant(s)

A progress report must be provided for each grant being supported by ANZCA at the time of preparing this application and which has listed, as one of the chief investigators, any of the chief investigators of this application. A separate report form should be used for each progress report. It is understood that current projects may not relate to the project proposed in this application. Failure to submit all progress reports may jeopardise its outcome. Note: progress reports are NOT required for grants commencing in the year of submission of the current proposal.

At the conclusion of support for each grant, a final report must be submitted to ANZCA. The deadline for this report is **within three months of the completion of the project.** Each applicant listed on Page two of this application who was listed as a chief investigator on any project that terminated in the December prior to submission of this application, MUST obtain copies of the terminating project's summary report and it to this application. Failure to comply with this request may jeopardise the outcome of this application. The final report must include a statement of the expenditure charged to the grant. Unused funds may not be expended on other activities and must be returned to the college.

20 Certification by chief investigators, head of department and of institution

The application is invalid without the signature(s) of all the chief investigator(s). Academic Enhancement Grants will only be considered for support if the head of department/head of research committee certifies that the facilities available are appropriate to meet the needs of the application (e.g. adequately staffed and equipped laboratories/workshops, secretarial assistance, library resources, research/maintenance support including equipment maintenance, animal housing facilities etc).

When applicants are not formally attached to institutions, they should indicate whether they have access to appropriate facilities to undertake the research proposed.

ANZCA accepts as the head of institutions: the registrars of universities, the directors of independent institutes, and the managers/secretaries or medical superintendents of hospitals.

The head of the institution should note that Statements of Compliance with the *NHMRC Australian code for the care and use of animals for scientific purposes* 8th (Ed) (2013) and the *NHMRC statement on ethical conduct in human research 2023* are required to be completed and submitted to ANZCA on request. The head of the institution is also required to certify that the institution has established administrative processes for assuring sound scientific practice in accordance with the *NHMRC Australian code for the responsible conduct of research (2018)*.

Checklist

Complete checklist and add to original application.

APPENDIX: KEY WORDS AND PHRASES FOR USE IN ANZCA GRANT APPLICATIONS

These key words are phrases are modified from those used by the journal Anesthesiology. If the key word or phrase that describes your work is not listed here, please list in the key word section of your application.

STEMS	**Key words/phrases**
ACID-BASE CHEMISTRY	
ADDICTION AND DRUG ABUSE	Alcohol and alcoholism
AIRWAY and AIRWAY MANAGEMENT	Airway and ETT assessment Cervical spine movement Endotracheal tubes LMA, ILMA and other supraglottic airways Laryngeal and pharyngeal function and anatomy Aspiration Laryngoscopy, direct Laryngoscopy, flexible and rigid fiberoptic Lightwands and other Indirect methods Lung isolation devices Tracheostomy and cricothyroidotomy
AMBULATORY CARE	Anaesthesia ventilators
ANAESTHESIA MACHINES and CIRCUITS	Circuits and vaporizers CO_2 absorbants and humidification Waste gases and scavenging
ANAESTHETICS, GASES	Nitrous oxide Xenon
ANAESTHETICS, INHALATION	Halothane, enflurane and isoflurane Desflurane Sevoflurane Non-Immobilizers Other inhalation anaesthetics Anaesthetic metabolism and degradation Carbon monoxide Compound A and fluoride MAC Uptake and Distribution
ANAESTHETICS, INTRAVENOUS	Barbiturates Benzodiazepines (and antagonists) Etomidate Ketamine (and related drugs) Butyrophenones Alpha2 agonists (as sedatives) Propofol Computer controlled infusions Opioids (as anaesthetic supplements)

ANAESTHETICS, LOCAL	Bupivacaine, lignocaine or mepivacaine Levobupivacaine Ropivacaine Encapsulated agents Other local anaesthetics Cardiotoxicity Seizures
AUTONOMIC NERVOUS SYSTEM	Baroreflexes Catecholamines Heart rate variability Microneurography Parasympathetic nervous system Sympathetic nervous system
AWARENESS and RECALL	Enoxaparin and LMWH
BLOOD COAGULATION	Heparin and protamine Hirudin Fibrinolytics Coagulation testing DIC and other coagulopathies Platelets and platelet function Aminocaproic and tranexamic acid Aprotinin Recombinant factor VIIa
BLOOD TRANSFUSION, CONSERVATION and SUBSTITUTES	Acute normovolemic hemodilution Cell saver and other salvage methods Controlled hypotension Haemoglobin-based oxygen carriers Perfluorocarbons
CANCER and MALIGNANCY	Mutation and mutagenesis
CARDIOVASCULAR FUNCTION, DISEASE AND MANAGEMENT	Cardiac electrophysiology and conduction Cardiac rhythm and dysrhythmias Cardiac smooth muscle and myocyte function (in vitro) Cardiopulmonary bypass Circulatory arrest Circulatory physiology and hemodynamics Congenital heart disease and surgery Coronary circulation, myocardial ischemia and infarction Cardiac revascularization surgery (CABG etc) Myocardial preconditioning and protection Reperfusion injury Valvular heart disease and surgery Ventricular function

	Hypertension
	Pacing, pacemakers and defibrillators
CARDIOVASCULAR DRUGS	ACE inhibitors
	Alpha2 agonists (CV Actions)
	Angiotensin receptor blockers
	Beta-Adrenergic blockers
	Beta-Agonists
	Calcium channel blockers
	Other antiarrythmics
	Norepinephrine and epinephrine (vasopressors)
	Dopamine
	Dobutamine
	Fenoldepam
	Phosphodiesterase inhibitors
	Amrinone and milrinone
	Nitroprusside and nitroglycerin
	Other vasopressors
	Vasopressin
	Statins
CELL BIOLOGY AND PHYSIOLOGY	Apoptosis
	ATP and electron transport
	Calcium and calcium signaling
	Calcium dinding proteins
	Gene expression
	Mitochondria
CHEMISTRY, BIOPHYSICS AND PHYSICS	Drug related
COMPLICATIONS	Equipment related
	Procedure related
	Compartment syndromes
	Other
CRITICAL CARE	Burns
	Trauma care
DERMATOLOGY	
ECONOMICS, OR MANAGEMENT and MANPOWER	Trainee evaluation
EDUCATION	Simulators
EMBOLI and EMBOLIC DISORDERS	Amniotic fluid emboli
	Fat and particulate emboli
	Pulmonary thromboembolism
	Venous and arterial gas emboli

ENDOCRINOLOGY	Diabetes mellitus and insulin Oestrogen Pheochromocytoma Renin and angiotensin Atrial and brain natriuretic peptides
EPIDURAL and SPINAL	Dural-puncture headache and blood patch Neurologic symptoms and injury Balance, posture and position sense
EQUIPMENT, TECHNOLOGY AND BIOENGINEERING ETHICS	Animal care Brain death and organ harvest Do Not Resuscitate orders Human studies and consent
EYE	Eye injuries and blindness Eye surgery Intraocular pressure
FLUIDS, ELECTROLYTES and PLASMA SUBSTITUTES	Hetastarch and pentastarch Hypertonic saline Osmolality and oncotic pressure Serum sodium, potassium and other electrolytes Lipid and intralipid
GASTROINTESTINAL PHYSIOLOGY and PATHOPHYSIOLOGY	Gastric reflux and emptying Intestinal motility Intestinal permeability Splanchnic circulation
GENDER GENETICS and GENETIC DISORDERS	Sickle cell disease Genetic testing Gene therapy
GERIATRICS HISTORY and HUMOR IMAGING	CT scanning Magnetic Resonance Imaging and fMRI PET scanning Ultrasound Xray
IMMUNOLOGY, INFLAMMATION and INFECTION	Allergy and snaphylaxis Latex allergy Histamine and antihistamines Steroid therapy (systemic) Antibiotics Systemic inflammatory response/disease Cytokines and interleukins

	Tumour Necrosis Factor Endotoxin and lipopolysaccarides Free radicals and scavengers Leukocytes, lymphocytes and macrophages Phagocytosis Wound infection Infection control (hand washing, antiseptics etc)
IONS AND ION CHANNELS	Calcium and calcium channels Potassium and potassium channels Sodium and sodium channels Ion transport
KIDNEY and BLADDER PATHOPHYSIOLOGY	Bladder function and urinary retention Renal function testing Renal failure and dialysis
LIVER PHYSIOLOGY and PATHOPHYSIOLOGY	Liver blood flow Liver function tests
MALIGNANT HYPERTHERMIA	Diagnostic testing Genetics and genotyping
METABOLISM and NUTRITION	Glucose and carbohydrate metabolism Whole body metabolic rate Obesity Protein metabolism
MONITORING (CARDIORESPIRATORY)	Arterial catheters and pressure measurement Blood volume, systemic Systolic pressure variation Cardiac output measurement Central venous catheterization Doppler, other Doppler, precordial Echocardiography, transoesophageal Echocardiography, other Electrocardiography Expired gas analysis Gastric tonometry Oximetry, pulse Oximetry, mixed venous Oximetry, other Pulmonary artery catheterization
MONITORING (CNS)	BIS and similar techniques Electroencephalography (EEG) Evoked potentials, auditory

	Evoked potentials, motor
	Evoked potentials, other
	Evoked potentials, somatosensory
	Oximetry, jugular venous
	Oximetry, transcranial
	Transcranial Doppler
	Depth of Anaesthesia Assessment
NAUSEA and VOMITING	Antiemetics
NERVE BLOCKS	Brachial and cervical plexus blocks
	Celiac plexus block
	Lower extremity blocks
	Intravenous regional anaesthesia
	Other regional techniques
	Nerve localization methods
	Nerve injury and other complications
	Neostigmine and anticholinesterases
	Neuromuscular junction
	Neuromuscular monitoring
	Nondepolarizing agents
	Succinylcholine
	Myaesthenia Gravis
NEUROPHYSIOLOGY, BRAIN	Blood brain barrier
	Cerebral blood flow and volume
	Cerebral oedema and intracranial hypertension
	Cerebral ischemia and anoxia
	Cerebral metabolism
	Cerebral protection and preconditioning
	Clinical neuroanaesthesia
	Clinical neurology and neurologic examination
	Head injury
	Hippocampus and hppocampal electrophysiology
	Intracranial pressure and intracranial hypertension
	Neuronal electrophysiology, other
NEUROPHYSIOLOGY, SPINAL CORD	Dorsal root ganglia
	Spinal cord electrophysiology
	Spinal cord injury
	Spinal cord ischemia
	Spinal cord anatomy
	Spinal cord protection and preconditioning
NEUROPHYSIOLOGY, PERIPHERAL NERVE	Peripheral nerve injuries
	Growth factors
	Nerve conduction and EMG
	Peripheral nerve electrophysiology

NEUROTRANSMISSION, TRANSMITTERS AND RECEPTORS	Acetylcholine and receptors Adenosine and receptors Adrenergic agents and receptors Cannabis and cannabinoid Receptors Capsaicin and thermal receptors Dopamine and receptors GABA and receptors Glutamate and receptors Glycine and receptors Neurokinins and receptors Nitric oxide and nitric oxide Synthase Opioids and opioid receptors Serotonin and serotonergic receptors Neurotransmitter release and reuptake
NEUROTRANSMISSION and SIGNAL TRANSDUCTION	G-proteins cAMP and cGMP Protein kinases
OBSTETRICAL ANESTHESIA	Caesarean section Eclampsia and preeclampsia Foetal monitoring and pathophysiology Labour and delivery Uterine and placental function Uterine smooth muscle
OXYGEN and OXYGEN TRANSPORT	Hypoxia Hemodilution (physiology) Tissue oxygen tension (PtO2) Hyperbaric oxygen
PAIN MANAGEMENT, CLINICAL	Acupuncture and accupressure Chronic pain Epidural and other steroid injections Neuropathic pain and CRP Stellate ganglion blocks Lumbar sympathectomy Pain assessment techniques Patient controlled analgesia Postoperative pain Headache (NOT PLPH) Herpes zoster Intraarticular analgesia Intrapleural and intraperitoneal local snaesthetics Phantom limb pain Preemptive analgesia (clinical) TENS and related methods

	Spinal cord stimulation Epiduroscopy Radiofrequency lesions and neurolysis
PAIN-RELATED PHARMACOLOGY	Alpha 2 Agonists (analgesics) Aspirin and Acetominophen Baclofen COX2 antagonists Gabapentin Neostigmine NMDA antagonists NSAIDs Opioids Opioid antagonists Opioid tolerance Tramadol Nitric oxide
PAIN PHYSIOLOGY, EXPERIMENTAL	Incisional pain Neuropathic pain Inflammatory pain Pain assessment techniques Pain mechanisms, central Pain mechanisms, peripheral Pain mechanisms, spinal Pain models Preemptive analgesia (experimental) Visceral pain
PATIENT SAFETY and MEDICOLEGAL ISSUES	Closed claims studies Electrical and fire safety Medicolegal matters
PAEDIATRIC ANESTHESIA and PAEDIATRICS	Neonatology
PHARMACOKINETICS and PHARMACODYNAMICS	Pharmacogenetics
PHARMACOLOGY (GENERAL)	Chronopharmacology/Chronobiology Drug interactions Drug metabolism Cytochromes P450 Drug toxicity Liposomes and microcapsule delivery systems Osmotic pumps Stereoisomers Transcutaneous delivery systems Transmucosal delivery systems

PHYSICIAN SAFETY	
POSITIONING	Antidepressants
POSTOPERATIVE CARE	Anxiety and anxiolysis
PREOPERATIVE ASSESSMENT and CARE	Psychologic, psychometric and behavioural
PROSTAGLANDINS and RELATED COMPOUNDS	Testing
PSYCHOLOGY, PSYCHIATRY and BEHAVIOR	Electroconvulsive Therapy (ECT)
RESPIRATORY DISORDERS and MANAGEMENT	ARDS and lung injury
	Aspiration pneumonia
	Asthma and bronchospasm
	Barotrauma
	COPD
	Extracorporeal membrane oxygenation
	High frequency ventilation
	Mechanical ventilation
	Nitric oxide inhalation
	Pneumonia and lung infections
	PEEP and CPAP
	Pulmonary oedema
	Pulmonary function testing
	Smoking
RESPIRATORY PHYSIOLOGY	Alveolar macrophage function
	Control of respiration
	Gas exchange
	Pulmonary blood flow
	Respiratory mechanics
	Surfactant
	Tracheal and bronchial smooth muscle
	Ventilation-perfusion matching
RISK, OUTCOME and QUALITY MANAGEMENT	Patient safety and satisfaction
	Quality assurance and management
	Morbidity and mortality
	Perioperative risk factors
	Automated record keeping
SEIZURES and ANTICONVULSANTS	Cardiac arrest and CPR
SHOCK AND RESUSCITATION	Sepsis and septic shock
	Haemorrhagic and hypovolemic shock
SKELETAL MUSCLE	Circadian rhythm
SLEEP and SLEEP DISORDERS	Sleep apnoea
	Sleep deprivation
STUDY DESIGN AND TECHNIQUES, LABORATORY	Autoradiography
	Brain slices
	Histopathology and histochemistry

	Cultured cells and tissues
	Laser Doppler Flowmetry
	Microdialysis
	Patch clamping
	PCR
	Receptor binding
	Recombinant methods
	Transgenic and knockout animals
	Isobolographic analysis
	Analytic chemistry (chromatography etc)
	Molecular modeling
STUDY DESIGN AND TECHNIQUES, CLINICAL	Clinical trial
	Epidemiology
	Mathematical modeling
	Metaanalysis
	Statistics
	Survey
SURGERY, MISCELLANEOUS	Laparoscopy
	Neurosurgery
	Oral surgery
	Orthopaedic surgery
	Joint Replacement surgery
	Otolaryngology
	Plastic surgery
	Aortic aneurysm (abdominal and thoracic)
	Carotid endarterectomy
	Thoracic anaesthesia and surgery
	Vascular surgery
	Other surgical procedures
TEMPERATURE REGULATION and MANAGEMENT	Hypothermia
	Hyperthermia and fever
	Shivering
TRANSPLANTATION	Heart transplantation
	Liver transplantation
	Lung transplantation
	Immunosuppressants
VASCULAR PHYSIOLOGY	Rheology and viscosity
	Endothelium
	Endothelin
	Leukocyte adhesion
	Nitric oxide, nitric oxide synthase and EDRF
	Selectins
	Vascular smooth muscle

Vascular growth factors
Vascular electrophysiology
Microcirculation